

# MOOCs: DESIGN OF A TEACHING METHODOLOGY FROM A HUMANIST UNDERSTANDING

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**Abstract:** This paper outlines the characteristics of MOOCs (Masive Open Online Courses) and their development and tendencies that seem to indicate a process of dehumanization. This could be considered the basis of problems that this teaching modality is demonstrating. Firstly with the achievement of their stated objective of being a solution to the problem of mass training for life, as the potential beneficiaries of MOOCs are abandoning this type of course massively. Taking this point as the background issue, the central objective of this paper is to research a group of factors which, in the opinion of the authors, contribute to the humanizing of MOOCs, and to infer from them principles which it is considered must be applied to support a humanizing methodology to be developed, one which in turn motivates and helps the students in their purpose to achieve the training and knowledge they need to survive in this and a future knowledge based society.

**Keywords:** Massive open online courses; MOOCs; social learning, humanized learning; teaching methodology

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## Introduction

The development of technology has revolutionized the educational environment, modifying face-to-face teaching and revolutionizing distance learning to such an extent that, for countless institutions, education has become an area focused on technology, as is the case with MOOCs (Massive Open Online Courses). This has given rise to an "open pedagogy" without a human element (with or without the often poor accompaniment of a teacher-tutor), aimed at attracting thousands of students. Several authors point out that these courses are sets of programmed algorithms, which try to replace the teachers-tutors, and that many institutions see these courses as a product that can be commercialized and industrialized.

Feenberg (2003), convincingly argued that online education was effectively an adoption of corporate strategists, the main administrators of the university and "futurologists", motivated by the automation of teaching as a means to achieve greater efficiency in the "business" of education; that is to say, something very similar to what has been happening with MOOCs.

Currently, there are several prestigious universities throughout world (Harvard, MIT, Stanford etc.), which, in alliance with important companies or organizations (Coursera, Edx, Udacity etc.), offer MOOCs in different subjects, turning education into a business model viewing it as a commercialized and industrialized option for education. It is with regards to this point that the observations made by Feenberg (2003) have particular relevance, as an infinitely reproducible product at a decreasing unit cost becomes available, and it is perhaps this, which is the reason why more and more educational institutions are joining in the adoption of MOOCs as a business strategy.

According to Chaippe et al. (2015), MOOCs have gone from being a novel model to becoming a mechanical method without creativity and focused on adding audiences; dominated by technology (MOOC platforms), where the student is diminished by relying almost exclusively on rote-conceptual learning and a mechanical trial-error assessment (Aguaded et al., 2013); while Morris, S. M., & Stommel, J. (2017), emphasize that in most

MOOCs, the content replaces the teacher, making the ability to exchange the roles of the teacher and students impossible; that is to say that learning is entirely teacher centered.

Possibly these are the reasons why these courses throughout their lifespan have faced a series of criticisms and questions such as the following: the systematic error in the access profile of the participants, lack of pedagogical rigor, low quality of instructional design, lack of updating, lack of attention to individual differences, lack of interaction between teacher and student, (MOOC platforms do not have enough technological tools to allow for a synchronous and immediate interaction yet students require motivation and meaningful interaction) little feedback, lack of standards to evaluate their pedagogical quality, work overload, (the estimated load time for each student is not realistic to finish the course), their model of monetization, the level of student learning, the massive abandonment of students, their teaching-learning mechanisms or absence of them, the dilemma between learning or certifying and finally their evaluation (Bernal, Molina y Pérez; 2013, Vardi; 2012, Zapata-Ros; 2013, Bartolomé, 2014, Cormier, 2010; Conole, 2013; Durall, Gros, Maina, Johnson y Adams, 2012; Martín, 2013; Prendes y Sánchez, 2014b; Prendes y Sánchez, 2015, Atiaja & Guerrero, 2016, Margaryan, Bianco y Littlejohn, 2014). To all of these criticisms should also be added that MOOCs are based on a learning model entirely focused on the teacher and technology.

It appears that for many educational institutions, which offer MOOCs, technology is the epicenter of the (business) educational model, dehumanizing the learning process, and pushing aside pedagogy. Morris, SM, & Stommel, J. (2017) point out, on the page on Hybrid Pedagogy, in the digital magazine on Teaching, Learning and Technology, co-directed by these authors, that they feel increasingly confident that the word "pedagogy" has been misinterpreted or poorly executed in these types of educational projects. Both educators and students have been increasingly baffled by a system that values evaluation rather than the commitment to managing learning about discovery, where content becomes a space to ask questions, a space of cognition and not simply receiving information.

Undoubtedly, the bewilderment of MOOC participants is reflected in their high dropout rates. It is necessary to rethink this type of project, through strategies and pedagogical mechanisms that motivate the participants, so that in this way they are able to complete the courses. Considering that the content and learning should focus on the student; since, the subject (students) who learn knowledge, competences, abilities and reasons for action, takes place in conditions of social interaction, in a concrete socio-historic environment, based on individual and group experiences of the participants, and leading to their personal development.

MOOCs therefore demand a humanized approach. That is to say, a process that evidences the virtual presence of the human being (tutors or mentors), in such a way that the participants can perceive the value placed on rhythm and learning styles. A development of learning which allows to encourage and support intrinsic motivations, which encompasses everything recreational-cognitive (curiosity and the need for competition) and socially realistic (need for affiliation and need for achievement, Bianchi and Di Giovanni (2007)). Taking into account the fact that participants of a MOOC, apart from wanting to obtain a certificate or winning credits, are registered mainly motivated by self-interest dedicated to interaction (intrinsic motivation - curiosity) and to prove themselves (intrinsic motivation, need for affiliation), to be successful and carry out their projects (intrinsic motivation, need for achievement).

With this in mind, the proposal for the design of a teaching methodology that humanizes the learning process in MOOCs is presented, based on pedagogical, psycho-pedagogical and Information and Communication Technologies (ICT) theories, with emphasis on a socio-cultural perspective of cognition, considering that learning processes have an eminently social character, and ICT are mediating tools that will enrich the creation of interpersonal learning contexts and allow the integral development of the participants of a MOOC.

## **The dehumanization of MOOCs**

Technology has changed the way of life of human beings, as well as changing the world, essentially for the better. Regarding the field of education, in particular massive open online courses, teachers have been replaced by videos, texts, presentations, programming codes, i.e. by machines, dehumanizing education and this may well be a factor in the high dropout rates of participants.

One study carried out by a team of multidisciplinary professionals from the University of Edinburgh aimed to provide a level of co-teaching in a MOOC on "E-learning and digital cultures", in which thousands of students participated (around 60% of the participants possessed postgraduate degrees, the vast majority in disciplines related to education). The design of this experimental course emphasized the construction of a critical understanding of "e-learning", positioning it within the context of digital culture. Therefore large numbers of courses, widely distributed, where participants created a challenge in terms of capability of the team to "expand" the teaching, it was found that while participants themselves were generally receptive and understood the critical motivations, many students stated that they felt foolish or somewhat crazy, that they were talking (writing) with a robot (Teacherbot: intervention in automated teaching - Bayne, S. (2015)) because they tried to have a philosophical conversation with a machine, while ignoring the existence of real people. It seems that no matter how 'expert' such systems are (non-human), they have not been able to meet all educational needs in an automated manner

This reaffirms the revelation made several decades ago by Jerome Bruner, regarding education and the programmed teaching machine: "... it is clear that the machine is not intended to replace the teacher, in fact it can lead to the request for a greater number of teachers and better teachers, when the main bulk of teaching is entrusted to mechanical means. Nor does it seem a justified fear that the machine can dehumanize the educational process more than books do: the program for such machines can be educational like a book, can be spirited or stupid, and can be fun or a boring exercise".

Dehumanization is more evident in the lack of interaction between students and the teacher, lack of feedback, lack of motivation, etc. This being a factor that represents one of the main challenges faced by MOOCs; that is, a challenge of a sociological nature, as revealed in the report prepared by Telefonica (2015), that the possible dehumanization of the educational process is due to the lack of personal interaction between the teacher and the student, as well as the massive character of the courses.

Within this context, it is tempting to criticize massive open online courses as dehumanizing, because it implies a reductionism of teachers, a decline in students and therefore a drop in the quality of education. On the other hand, David Wiley, promoter of open educational resources, in an interview conducted on July 18, 2016 by the open journal for new researchers in educational technology (RIITE), "believes that fundamental ethics in education are based on sharing, worry, trust, support and passion. You cannot get to this from the artificial intelligence of the robot. We need to create educational technologies that make us more human and thereby abandon the design of machines whose sole purpose is dehumanization. "That is to say, one must become aware of the use of technology as a means to improve or innovate educational processes.

As we can see, in the current knowledge society, there cannot be an ontological dissociation between the (human) subject and the object that would be represented by technology and as David Wiley points out, it is necessary to create educational technologies that make us more human; outlining the necessity to create critical pedagogies. The key question is how this can contribute, because according to Nikolakaki (2012), critical pedagogy can contribute to the construction of a social bond and a collective learning that allows fighting against the dehumanization in progress, knowing that from pedagogy we can contribute to the creation of a human being who advocates a community ethic.

Faced with this panorama, the design of a development methodology for the teaching-learning process is essential. One which humanizes the massive open online courses, based on the main pedagogical theories and psycho-pedagogies, working harmoniously with technology. A teaching methodology that humanizes and motivates the participants, where the interaction and participation of teachers and students are a key and necessary factor; taking into account that in an online system, motivation is crucial, as shown by many studies and research in the field (Salvatori R., 2017). In such a way, that an active, dynamic and participatory learning process is generated. One that leads to critical reflection on the practice and acquisition of new skills, transfer of skills to personal, social, academic and professional contexts and thus creating the basis for lifelong learning (Atiaja & Guerrero, 2016).

### **Factors that affect the realization of a humanized teaching-learning process in MOOCs**

In the design of a teaching methodology for MOOCs, besides building knowledge, competences and abilities, certain other factors must be considered which include values, stimulating creativity, fostering confidence, changing attitudes, promoting participation and motivation to ensure the integral development of the student. Therefore, the methodology must consider as relevant the following factors for the creation of a teaching-learning process:

- Aim towards the aspects pointed out by Bianchi and Di Giovanni (2007), a methodology for online learning should: keep curiosity alive (through unusual information), provide feedback to students, set goals (guide the student towards the calibrated objectives pursued), verify the attributions of success and failure and verify implicit theories of intelligence (to increase the pressure to study).
- Be oriented towards a learning that contributes to the integral education of the students, and satisfies their needs and cultural, social, humanistic, artistic and recreational restlessness so that they can develop in the society of knowledge, where both the teacher and the student have an active and dynamic role, and develop their aptitudes to learn through the guidance of a facilitator (the teacher).
- Generate a learning based on communication (teacher-student), as through this medium, students are free to be curious, voice concerns, interact, etc., taking into account that Alexei Alexeivich Leontiev says that communication is that which creates the best conditions to develop the motivations of the students, the creative character of the activity molding the personality of the student.
- Foster conditions and create learning situations in which MOOC participants are empowered by knowledge and form the skills and motivation that allows them to act in responsible and creative ways.
- The teacher assumes the role of counselor, facilitator, motivator of learning, and becomes a guide who leads the student along the path of knowledge without imposition but with sufficient authority due to his or her experience and above all from the trust placed in them by the students. Thus allowing for the creation of affective relationships based on acceptance, mutual respect and understanding.
- It must be structured based on the four fundamental learnings, which will be during the course of human life, the pillars of knowledge: learn to know, learn to do, learn to live together, and learn to be according to Jacques Delors.

### ***Pedagogical requirements of the teaching-learning methodology under a humanistic conception***

As previously mentioned, the dehumanization of MOOCs is due to the lack of accompaniment and orientation of the teacher-tutors during the development of the course, so that they proceed in the absence of motivation, loneliness, lack of interaction, feedback and follow-up of the participants etc. This is a problem of didactic, methodological and social nature, which demands the design of a didactic method that humanizes the learning of MOOCs, depending on what the society of knowledge demands of a pedagogy for diversity (culture, languages, etc.). This necessarily forces the new teaching methodology to create new possibilities to plan, guide, direct, control and evaluate the teaching process (Kasabube & Hernández, 2017); that is to say, that it enriches the teaching, taking full advantage of information and communication technologies and allowing for the integral development of the personality of the students. For this, it is necessary that the participants and the teacher-tutor

assume an active and dynamic role, participate in the process and fully develop their potential (Castellanos, 2001; Castellanos, Castellanos, Llivina, y Silverio, 2001).

In this sense, the teaching methodology would be oriented towards developmental learning, because when considering a developmental education, four complex characteristics highlighted by Fermoso (1985) should be considered, being: Education is an eminent human process, it is an intentional process, it is a cultural necessity and it is a social function; in this way it would be possible to humanize the learning in MOOCs and to emphasize what Popenici, SA, & Kerr, S. (2017) stress that education is eminently a human-centered effort rather than a technology-centered solution.

This methodology, therefore, will be based on the psychological foundation of Vygotsky, who starts from the idea that the cognitive process has its origin in the interaction of man with his culture and in society (first in the social and then individual). Further to this is the sociological foundation of Vygotsky, which refers to the fact that human development is a product of interaction on the social plane (joint work between parents and teachers allows the children to be guided in an integral way, since the entire responsibility can not fall on the teachers). Interaction, would be one of the essential foundations for this teaching methodology with a development concept that would favor and enhance the learning of the participants for an integral development and allow the enjoyment of diversity as something habitual that is expressed in the being, and doing (Lizarazo, 2010).

With this methodology under a developing concept a movement towards knowledge will be achieved, guiding the participants towards a meaningful, collaborative, communicative and interactive learning mediated by a virtual learning environment; where the students feel motivated, and both the teacher and the students will be the protagonists of the educational process. They will assume an active and dynamic role with regards how the school should organize, guide and control the teaching-learning process and it has its origin in the Vygotskian conception about the relationship between teaching and development, with the purpose of minimizing, above all, the problem of the high dropout rates of the participants in MOOCs.

### ***Theoretical foundations of the teaching-learning methodology for MOOCs with a humanistic approach***

#### ***1. Educational and developmental character of teaching***

Vygotsky pointed out that "good learning is only that which precedes development", emphasizing that the character of the teaching and the guiding role of the teacher in the design of social learning situations, lead the student to his growth as a human being; the teaching must seek the integral development of the students and the satisfaction of their cultural, social, humanistic, artistic and recreational needs, based on help and guidance, not only from the teacher, but also the classmates, the family, and other sources such as the teaching medium.

Multiple authors point out that the developmental learning is that process that allows the student the appropriation of the human knowledge, in constant orientation and social interaction (Alfonso Easy, Arisyennys Yakelin Easy, y Yelena Selva, 2011; Alina Padrón, Lázaro Cruz, y Anabel Vizcaino, 2011; Portelles, González, y Leyva, 2013; Quiala, 2013; Rico Montero, Palma, y Cuervo, 2004). For this appropriation of human knowledge, the process must be active, reflective, meaningful, motivated and self-regulated. For this, the teacher needs to assume the active and transforming role of facilitator-mediator; while the students in their active role, develop aptitudes to learn with the help and guidance of the teacher.

With a process with these features, the student manages to learn, gradually, within its context, how to perform various actions, how to act in certain situations and how to interact with others. The student is able to reach his potential through the support of one or more experts, classmates or a teacher-tutor. All of this is achieved, of course, in the historical social context in which it is found, with a fundamental objective: the development of the student's personality.

The application of this principle in massive open online courses places students in situations of learning that require the help of others (tutors, peers) using various means, such as discussion forums and groups, chats and social networks; that is to say spaces that generate the motivation, reflection and awaken the interest of the students, so that in this way, they attain significant learning through a shared knowledge (Kasabube & Hernández, 2017).

## **2. Activity-communication unit**

Learning, the construction of knowledge, skills, competencies, values, feelings and motivation of students to develop personality, occurs, also in terms of social interactions, within a socio-historical context. The bidirectional communication (teacher-student), will allow that the students can learn from the individual and group experience, to satisfy their curiosities, questions, to interact, etc. It is with this perspective that A. A. Leontiev (1979) says that communication that which creates the best conditions to develop the motivations of students, the creative character of the activity and properly form the personality of the student. Similarly, L. S. Vigotsky (1964) considers communication as an indispensable element in human activity, through which the development of psychic processes and the consequent appropriation of culture by individuals takes place.

The Brazilian Paulo Freire (2000) mentions, "education is communication, it is dialogue to the extent that it is not the transfer of knowledge, but a meeting of interlocutors, who seek the meaning of meanings". Which implies that the student learns through the activity he performs in communication with others.

In a MOOC course, students must perform various activities, both individually and in groups. The objectives of each topic, being the governing factor of the teaching-learning process, must be expressed through the concrete action or task carried out by the student, with the conditions in which that action takes place and the methods of assessment for the action.

In addition, as a complement to the asynchronous interactions, other synchronous interactions could be included programmed into the course (through chat or videoconference). However, the use of forums assisted by tutors, mail and collaborative work through social networks, will be the most essential means for the teaching-learning process.

An automatic tool of the learning platform reviews these participations and the tutor(s) with the aim of moderating the forum, randomly reviewing these participations and clarifying in cases in which it deems doing so to be necessary.

In this case, the use of technology as the mediating cultural resource becomes the linking element that fosters communication and interaction. Thus, social interactions allow for better individual coordination, which in turn allows for more active participation in other social interactions. In this way, it generates a more active participation in other social interactions, leading to the social construction of knowledge, where knowledge management is an integral part of the relationship between activity and communication.

## **3. Unity of the affective and the cognitive**

The teaching and learning process is mediated by the social interaction of the principal participants, from the zone of further development and based on the cognitive-affective unity favoring that learning develops from intersubjectivity to intrasubjectivity.

It is for this reason that the facilitator-counselor, in addition to sharing their knowledge and experiences must inspire empathy and trust based on acceptance and respect; factors which motivate learning and improve student outcomes, taking into account motivation as a variable that contributes to increasing student participation and success (Milligan, Littlejohn, Margaryan; 2013).

It should be considered that the student is an integrated being, whose affective part and cognitive or learning part can not be separated, so their motivations, interests and learning preferences must be taken into account. In MOOCs this is achieved with flexibility in the activities that are scheduled, so that students can select them. In addition, tutors should try to maintain the motivation of the participants and give them attention wherever possible; however, communication among the participants could have a more powerful influence on the creation of empathy in MOOCs (Tumino, Bournissen, & Carrión, 2017).

The activities must take into account the functional components of the activity, as proposed by Galperin in his theory of the stages of the formation of mental actions, where he expressed his understanding of internalization, as postulated in the Theory of Activity (Leontiev, 1983):

- Orientation: This is achieved with videoconferences and the orientation of the search, and study of the bibliography of the subject and others that the student locates. In addition, the forum for discussion and concerns (of doubts) allows to clarify doubts and to orient the student effectively in the essential contents of each topic.
- Execution: The student performs the activities and tasks planned individually, in pairs, in small groups and in the plenary, using discussion forums and discussion groups, synchronous communication (email) and asynchronous communication (chat and social networks).
- Control: The execution of the tasks on the part of the students must be controlled; this work is carried out by the tutor, and in turn aids other participants of the course, by means of discussion forums, discussion groups and also of other people who collaborate via social networks.
- Feedback: The participants themselves collaborate in the feedback of their classmates and help them correct errors. Only in cases where the above is not achieved does the tutor intervene.

## **Conclusions**

- The dehumanization of MOOCs is reflected in the lack of interaction between tutors (mentors) and students, during the educational process, leading to a rote, mechanical and artificial manner of learning.
- MOOCs demand a teaching methodology that humanizes and motivates the participants, in which the interaction and participation of teachers and students are a key factor of a didactic and social nature; thus making necessary the design of methodological strategies to address the pedagogy for diversity.
- The design of a methodological strategy for MOOCs will favor the cognitive process, which has its origin in the interaction of man with his culture and in society, and whose product is human development.
- With the perspective of a development concept, it will be possible to humanize the learning process of MOOCs, because the teacher-tutor assumes an active and dynamic role, generating a movement towards knowledge, guiding the participants towards meaningful, socio-constructive, collaborative, communicative and interactive learning. This is mediated by a virtual learning environment, where students will feel motivated, revealing the significance of learning and its developing character.

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