The Future of Eeducation in a Continuously Evolving Environment. Clarifications for the Impasses and Directions of Education in the Digital Society

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Abstract

Education from the period of its institutionalization through the structure of the University, in the 13th century, and the establishment of knowledge as social power through the diploma, the masters and doctorate, is directly connected with both the technology of each era and the socio-political events. From its first steps the university is associated with the production of paper, the translations of Aristotle's manuscripts, the development of the national languages and the geopolitical revolutions which affect its structure and social and technical existence. The exploratory and experimental structure of the university develops and gets completed in the 20th century where the phenomenon of its status as a product is intensified. Based on the latter the Countries can be divided into those Countries which provide free education and the ones in which the education is paid.
In the digital era the university contributes to the development of the society of information by developing a powerful technology that has a social influence at work, in education and the free time of an individual. The University no longer relies on the paper substrate but in the digital ground. On the other hand, a series of events directly affect the structure and function of the university causing a new stage of its status. Those events hierarchical are: A) in relation to technological development: the distance education, the free distance education, self-education through smart machines but also through search engines and social networks and B) in relation to the geopolitical events: the development of competitive, regarding its excellence, universities of different countries the such called rising new powers such as China, Hong Kong, Singapore, South Korea, Taiwan and India. Unquestionably the conditions are exceptionally strong and capable to cause a completely new form of the University. In this research the possible directions of the University will be formulated and analyzed as well as its implications to the society.

1. Introduction, The study of the evolution of education in times of crisis

During a "World disorder" [1] period, can we isolate and study a phenomenon as an autonomous system? Or, do we have to study it, as a symptom of times? In any case, with which criteria will the degree of its evolution be measured? Education is inextricably connected with contemporary universal advances, it affects and is affected by all drastic changes, therefore it is futile to examine it without examining the environment in which it develops. The goal of this research is to investigate and record the different tendencies of globalized education and connect them with worldwide phenomena.

2. The evolution of education as a result of crisis and as a pressure point to evolution itself

During eras of major change, education plays an important role. It serves as a mechanism for the creation of the theories and tools needed, while almost simultaneously the innovations in every field affect or contribute to the evolution of its structure. Since the beginning of its existence, the European University (11th - 13th century) is connected to the independency of knowledge, the consolidation of new professions, the structure of new languages, constituting the basic elements for the development of the states as known today. During the 12th century, to construct the cities, the merchants establish secondary educational institutions, which gradually pave the way for University. It is the era of development and organization of professions in corporations. Education follows the same process: the name "universitas", which appeared for the first time in Paris in 1221 means exactly "corporation" and defines the community of teachers and students in the city, while posing a legal structure, that

incorporates both the organization of teaching and the knowledge system [2]. As Le Goff states "in Europe of the 13th century the university teacher appears at the same time as the merchant". [3] The technology of that time, the development of paper, is directly connected to the development and the establishment of the University, and both their first steps occur simultaneously. At that time the translations of Ancient Greeks and most importantly of the works of Aristoteles, create the theoretical background on which the new educational structure will be based. [4] Since education played a significant role in the development of the city and the modern state and took today's form, it participated in every historical evolutionary moment. What needs does it have to cover today? What will be the result of this evolution?

3. The geopolitical conditions in which the research is conducted

The era in which the research is conducted is characterized by the following: global economy crisis, development of religious absolutism, intense population migration, production of ultra-developed products in a society losing its consuming power, developing countries evolving economically and demographically attracting art, education and commerce. University research, especially on matters of biotechnology and informatics, creates new conditions in terms of virtual life which is ready to change the rules of production and consumption (e-life), and the structure of life itself (biotechnology) [1].

4. The basic directions of today's education

Despite its standardization, education is not one-sided: depending on the perspective it is examined with and the geopolitical area where the research object is sited (educational organization), it takes a completely different form.

4.1 Education as an enterprise and the influence of MOOC (Massive Open Online Courses)

A vast percentage of universities constitute economical enterprises as well. These universities are forced to face the global economic crisis by upgrading themselves. They create, by taking advantage of technology, an "expansion" at a global scale. The international press [5] finally admits the existence of a serious problem: it depicts the decadence of average universities, while portrays the development of a new "challenging higher education's business model" in relation to digital education. This coincides with an increase in interest in higher education and lifelong learning. Education follows progress, having as a core characteristic the influence of "disruptive Innovation". A characteristic example is HarvardX [6]. In this case "X" (Extension), is the virtual addition of spaces to the Second Best University, with 600 full semester courses options.

4.2 Education platform Vs University

As education during the Middle Ages, which was a privilege of the church, was transferred to the university, it equally gets transferred from university to the virtual education platform, in the 21st century. Therefore, nowadays there is a similar phenomenon where the authorization of universities passes to the new education platforms. The initiative of the Harvard University with that "Extension" is crucial, since everyone that pays 2000 dollars for every course can get graduate credit. The new educational platforms, with the support of traditional and significant universities, create a new reality where this condition is combined with a new way of living. It is one of the basic directions of the education system, whose conclusion still remains unknown. The basic characteristic of this movement is connectivity with the best university institutions, research centers, the market and anyone having the institutional diploma, like at the very beginning of its existence.

4.3 Education as a characteristic of the developing countries

The old Western civilization system is not often mentioned in the dynamic development of developing countries. In the field of education it is easier to make an effort to predict, which, to begin with, is suggested by statistics: in the developing countries appears a significant raise in the quality of universities. From the top 100 of 2014, 11 now belong to developing countries [7]. Another phenomenon is the growth of high level education in illiterate countries. The low cost labor of the new generation of these countries will get higher education, which might be of lower quality as the article on India [8] states, but it nevertheless changes the situation quantitatively. This affects living standards and production. An autonomous production and design is starting to develop, opposing the

contemporary standardized production. An autonomous production that will have access in the scientific research and to a worldwide public with the help of e-Commerce.

4.4 Education as a political proposal. The European position
In the universities of the European Union [9] the basic concern is to create platforms of collaboration inside and outside Europe, aiming to upgrade the education structure, connect research and production in order to acquire higher competitiveness and, at the same time, collaborate with the other third countries. Europe allows for the identification of studies (ECTS) and the mobility of new students and scientists (Erasmus). Europe has the most universities (39) on the top 100 list, and is thus trying to acquire a place in global progress by keeping education free or low-cost, with the exception of England. It tries, with its cultural distinctiveness, to acquire a decent share in the global market. This has been one of the few efforts to have had a successful result regarding the substantial goals for the union of Europe.

4.5 Education as a necessity and the influence of MOOC
From Plato's definition that presents the whole chain: (parent, nurse, educator, teacher), having as a goal the "fair and the unfair, the beautiful and the ugly" [10], to Rousseau who for the first time addresses the subject of the child as an adult under development [11], and Kant who compares the cultivation of plants to the cultivation of people [12] or the innovating education proposals of Russell [13], indisputably the concept of education is everyone's primary concern, starting with the family and ending with the state. The pure concept of education as a necessity comes back, with lifelong education, to free offered education, from MOOC to major advice and discussion on forums, and open source software groups. These activities free education from its institutional role, and they reposition it in its original place, the education as a necessity. This movement includes efforts from significant universities for free education: the non-profit Coursera based in Stanford, proposes an "education platform that partners will top universities and organizations worldwide". MIT with the non-profit online school EdX in collaboration with Harvard, propose "to transform themselves through cutting-edge technologies, innovative pedagogy, and rigorous courses". The educational platform "udacity" goes the extra mile declaring "We are building an online university, by Silicon Valley, that: teaches the skills that industry employers need today delivers credentials endorsed by employers educates at a fraction of the cost of traditional schools". Udacity in collaboration with tomorrow's employers, such as Google, AT&T, Facebook, etc. and with specialized studies in advanced technologies, create a new education structure setting off with necessities and moving towards education. A concept reminiscing of the utopian science fiction novel by Edward Bellamy "Looking Backward: 2000-1887", published in 1888, where the people choose their field of employment and study in the field that interests them. Finally, Google with the distinctive name "Making Sense of Data" starts its own MOOC, concerning information and evaluation data, and calls "students, educators, researchers, journalists, and small business owners" to follow it without cost, thus creating a large research platform that studies, at a certain extent, itself.

5. The concept of self-learning and independency
Self-learning is one of the basic characteristics of digital culture. The digital system has the possibility to correct itself or correct the errors of the user. This characteristic is introduced to the Internet culture as well. Young people work in groups, produce open software platforms, and end up not taking the university diploma due to their ideological point of view. A distinctive example is the trend of the Indies (independent creators) that appear in many production departments. The indies are found inside and outside of traditional education (graduates that excel or self-taught talents). An important example is the game industry, where strong indie RPG communities have developed among others The Forge, discussion forum: Free RPG Community, special festivals: Indie RPG Awards, and also business promotion with organizations such as The Indie Fund and The Indie RPGs Un-Store. What will the evolution of this digital promised land of commerce and free result in? Taking into account that gradually it gains every institutional contract, such as the diploma, its own currency (Bitcoin), will it make the next empire?

6. Conclusions: Will the form of education be an indicator of the new form of the globe?

Is it possible that education and research in general, as fundamental characteristics of contemporary society, in an era of changes, represent a crucial indicator for the new form that the globe will take, much like navigation did in the times of transatlantic discoveries, or mechanical engineering and steam during the industrial revolution? In this case, should research acquire greater importance? Especially if the symptoms presented above are taken into account as evolution indicators? Shouldn't human sciences be given more attention, since they have always analyzed these matters? A humanitarian philosophical proposal doesn't only correspond to a proposal whose priority is the well-being of society, an idea resisted by the institutions with technocratic direction, but simultaneously is a viable solution for the proper functioning of the system.

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