

Traditional teaching methods vs. teaching through the application of information and communication technologies in the classroom: a new approach in lifelong learning?

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Abstract

The use of internet technology has resulted in the ability of the learner to learn in his own personal way, in environments called Personal Learning Environments. Many of them support the learning and teaching of Web 2.0 practices. However, this is a pretty recent trend that there has not been lot of research. Hence, this paper comes to filling this gap by analyzing the related theory and to prepare the ground for future research. The outcome is that the educators and the students are familiar with the use of ICT. However, it is very important to stress the fact that ICT has produced many innovations and new educating techniques for students, including MOOC which empower lifelong learning's since they allow everyone to have access in education. Therefore, ICT has a positive impact on lifelong learning, since more and more individuals are attracted from this kind of learning, proven from the high popularity of MOOC programs.

Keywords: Life Long Learning, Methods and Tools, Information and Communication Technology

Introduction

Lifelong education examines adult education from the perspective of both formal and non-formal learning. From the perspective of formal learning including continuing vocational education, continuing education and recurrent education during the past years there has been an emergency of new approaches on life long learning which rely on the use of ICT. For example, the use of social networks can enhance the educational experience of distance education in many ways, as we can find in many case studies (case studies) by studying the literature (Watters, 2012).

The use of internet technology has resulted in the ability of the learner to learn in his own personal way, in environments called Personal Learning Environments. Many of them support the learning and teaching of Web 2.0 practices. However, this is a pretty recent trend that there has not been lot of research. Hence, this paper comes to fill in this gap by analyzing the related theory and to prepare the ground for future research.

Methodology

This is a secondary research. More precisely, it constitutes a research which will rely solely on the analysis of the existing literature. For this reason, the authors have gathered a variety of related papers so to analyses them from a critical perspective.

Literature review

Lifelong learning definition

Lifelong learning can be defined as the learning does not stop when someone stops school. The appetite for learning is the best product of schooling.

According to another definition, adult education should not be regarded as a luxury for a few outstanding individuals, but should be a permanent national necessity, and therefore should involve the element of universality and character of lifelong education

According to Unesco, lifelong learning is to provide conditions to ensure the development or the adequacy of life, irrespective of age. Lifelong learning starts from the assumption that it is not feasible to equip learners in school, college or university with all the knowledge and skills they need to have completed professional training throughout their lifetime.

For this reason, people should constantly improve their knowledge and skills in order to have sufficient knowledge and engage in a continuous professional development process (Welsh, Wanberg, Brown, & Simmerin, 2003).

The learner is not limited to a specific location. He can be trained on the job, at home, in a library or in a shopping center, in the same way it was trained at a university or a college. People have the opportunity to be trained remotely using multimedia and connection to the internet. The aim of lifelong learning is to allow people to learn in any location and be on any subject they want. Lifelong learning aims to develop the capacities that enable people to constantly learn for the rest of their lives. Plus, it is not practical to consider education as a mere transmission of knowledge. We must believe it to be an ongoing, lifelong continuous research and improvement process. And the most important knowledge-whether we are talking about children or adults is to learn how to learn (Holberg, 1986).

At this point it is necessary to make the distinction between the education of children and adult education. Adult education has different methods of teaching children (Holberg, 1986).

The science of education has been trying to understand how adults learn from 1920, the time when the area of adult education was created as scientific research. About ninety years later, we still have not unified and integrated response. There is no theory or model of adult education that explains everything we know about adult learners, the different environments in which learning takes place, and the same process of learning. What we have is a patchwork of theories, models, principles and explanations. The combination of all these creates the base of adult education.

The two most important pieces of this mosaic is the andragogy model and self-directed learning, which we present in the following paragraphs (Merriam, 2007).

Comparison between conventional education and life long education

It is important to move forward on a comparison between the elements that characterize the conventional education and those characterizing the lifelong education will reach the conclusion that apart from the news that make up the second, many of them are common with some minor variations (Lee, Hsieh, & Ma, 2011). These differences subject and customized according to the needs of the education process to meet the requirements of an education system. The effectiveness of distance education lies in

the appropriate use of technology in teaching, the interaction between trainees and timely feedback from the teacher to the student (Kim, Bonk, & Zeng, 2005).

The variations generated in distance education already existing elements aimed at their adaptation and appropriate design so as to contribute to its efficiency as an educational method. Here are some common elements with the conventional distance education in order to identify the differences in some of them:

- The educational materials. In the case of distance learning must be specially designed to guide the student to have clear wording, provides exercises and frequent examples, to help him to monitor progress and to encourage him to continue his training. Simultaneously must give the student the opportunity to choose and arrange the place and time of the study. The quality of teaching materials contributes an important role in the effectiveness of distance education because many times called partially fulfill the role of the teacher.
- Communication. The communication of the trainee to trainer, given the fact that we do not meet every day in a room, it should be qualitative. The trainer should encourage and support the student to solve the questions, but also to guide him in his study every possible way (e mail, phone, ACS).
- Evaluation and feedback. The evaluation of the student's work (work, exercises) helps to identify any errors in order to deepen more in some places possible from the outset, did not understand.
- The place, time and study pace in remote systems characterized by elasticity element that operates for the benefit of the student because it has the ability to form them as he wishes with the needs and obligations, without any commitments or limitations. In a traditional educational system, the educational environment is fixed almost entirely by the training provider in charge of the organization of courses. In distance learning education environment is selected to a considerable extent at least by the student.
- The teaching, which basically is a common element in distance education to be constructive and effective, must be accompanied by continuous support and encouragement of the student. The learner must be able, where deemed necessary, ask for help from the trainer, in order to derive new information that would enable it to accomplish its objectives.
- In distance education courses are organized in blocks with predetermined objectives and the student has the opportunity to choose those modules corre-

sponding to their own needs, in contrast to conventional systems where courses are predetermined. Good organization of the modules directly meets the training needs of students (Rogers, 1999).

The application of distance learning requires specialized organization of the educational institution to implement. The organization must be based on the learner who should be the center of the educational process and surrounded by trainers, learning resources, tools and services facilitating learning.

The role of ICT

Regarding the role of ICT, the rapid development of Information and Communication Technology (ICT) has led to a new reality all areas of life. The educational process needs to adapt to the requirements of this new reality, require the integration of ICTs in all stages of educational system to meet the modern requirements education and training and the rapid developments in the labor market. The introduction and use of ICT in modern school has brought catalyst changes in the educational system. The traditional school based on educator who held the information and knowledge and conveyed to the student, converted into a new type of school, where the role of the teacher is guiding and counseling and the student acquires the information and knowledge through the computer and new technologies, acting as a researcher, guided by the teacher and nurturing the skills and particular characteristics (Khan, 2005).

The property of interactivity, on which the New based Technologies, offers the student the opportunity to participate with the teacher in planning learning activities and express freely perceptions and feelings. It also provides the appropriate classroom climate and communication between members, as part of a trend for an equal relationship, interaction and feedback.

The rapid development of ICT leads society changes very fast rates and the school must be able to monitor this development and adapt to these rates. To achieve this, it is necessary support from all stakeholders, so that ICT can be used in an appropriate and improve the educational process. The Today's pupils in primary education should be trained properly and methodically in order to be able to respond to modern requirements of society (Day, 2005).

According to a survey by Eurydice (2015) on the use of ICT in Primary education, ICTs are part of the students' curriculum almost everywhere in Europe. The use of new technologies by introducing active methods learning, promote discovery learning, highlighting the development internal learning motivation and also introduces

more and more flexible procedures in the teaching of each subject in school. So the opportunity given to students is to broaden their horizons at all levels of learning.

Nevertheless, there is a slowdown in the implementation and development of new methods with the use and exploitation of new technologies. This slowdown mainly due to lack of knowledge of the majority of teachers of Primary education for New Technologies, and what can these offer in the process of teaching and learning. It is worth noting that there is a large portion of teachers of primary education, who do not feel comfortable with ICT, though this is a number that decreases (Pei, 2008). They complain because the use of school laboratory is not allowed to educational process. The reason cited by school principals these are usually the fear of a possible malfunction of the computer equipment. Also, some of the managers ask the teacher to It has passed certification exams for teachers in the use of ICT for to allow their use in the school laboratory. There is also a set of teachers who strongly react to use and exploitation of ICT at all levels of education, either because possessed of futile conservatism and belief that ICT can stand obstacle to the "authentic" or book through education mainly in humanitarian courses, either because they are not familiar with ICT and have no mood and the time to enter the process for a continuous education and training, considering that ICT is suitable only for administrative matters. Additionally, it has been observed that some of the teachers, mainly generation who have never used a computer for personal or professional reasons, while admitting the advantages of ICT use in educational process, are reluctant to change or diversify properly the traditional way of teaching, because they feel powerless and most vulnerable in front to their students, fearing that so maybe lose the control of the classroom (Eurydice, 2015).

The introduction and use of new technologies in today's lifelong learning environment, is supported basically from the mood for cooperation between teachers and learners in learning process. Of course, an important condition for the proper use of New Technologies and Media in the educational process, is proper and methodical preparation of the entire educational community in all areas. Also, it is necessary continuous, administrative and technical support of the educational community, since new technologies are a sector that develops and progresses rapidly. This parameter courses entails analog economic costs. The attempt the State to equip all schools with computer laboratories have be used positively by the entire educational community and in no case should not create inequalities between pupils of different schools, possibly due to the inability of some teachers in the use of this infrastructure. It is imperative for continuous education and training of all teachers in new technologies and

the creation of new educational activities which will utilize effectively, to improve the quality of teaching and knowledge transfer. Moreover, all University pedagogical departments should offer more IT courses and new technologies in the curriculum, so that tomorrow's teachers have the ability and experience to use new technologies and to leverage teaching in as possible more subjects (Day, 2005).

MOOC education

At this case it is important to mention that there is a new wave of educational ICT-based education which relies on the use of social media. This is the MOOC approach.

organizations, as well as exploring new growth areas for online teaching and learning and in particular access to education and the expansion of «brands» (Educause, 2012). This means that MOOCs can help everyone access to higher education and also to expand the global reputation of an institution, as worldwide MOOCs open and available to all aspiring students. It is important to mention in particular models representing MOOCs recent years to become distinct differences and similarities between them. The main models are the ones that will be discussed below, this does not mean that the list is complete, and constantly displayed new participants in the race MOOCs include well known learning platforms such as Coursera, Udacity, edX, Khan Academy, P2PU and others. Coursera and Udacity handle MOOCs as a new technology that will revolutionize the business world by creating new business models and new markets. Unlike the MIT and Harvard use edX platform as an experiment, to students attending those universities not remotely be trained more effectively (Bates, 2013). Similarly, universities such as San Jose use MOOCs in traditional teaching as homework (Jarrett, 2012).

Discussion

Traditional teaching has relied on the teaching provided from the educator. However, this has changed (Khan, 2005). Today, this has changed as a result of the new technologies. Especially after 2010 we have seen the rapid expansion of social media that have changed the way that education can take place with a high involvement of the students but also with a high use of many innovative and fresh ideas (Eurydice, 2015).

Indeed, the use of new technology has changed many things including the interaction between the students and how they acquire the knowledge. At this case, the knowledge is not delivered solely from the educator but there is a whole process

where the knowledge is mostly discovered from the students rather than given ready from the teacher (Mooij, 2007). Hence, the use of ICT increases the critical reflection of students and it appears to strengthen their critical thinking.

Conclusions

During the past years there has been a high level of ICT penetration. The outcome is that the educators and the students are familiar with the use of ICT. However, it is very important to stress the fact that ICT has produced many innovations and new educational techniques for students, including MOOC which empower lifelong learning, since they allow everyone to have access in education. Therefore, ICT has a positive impact on lifelong learning, since more and more individuals are attracted from this kind of learning, proven from the high popularity of MOOC programs.

Suggestions for Further Research

The social media are an increasingly important part of everyday life of people and hence they can be subject of future research (Watters, 2012). The most significant effect of the social impact of media in education is completely different physiognomy trainees, and especially young students entering higher education. The applications of social media allow for much greater connectivity, collectivity and creativity. These features make the lifestyle of learners to be more flexible and faster (Jarrett, 2012). People now tend to do several things at once (multitasking) and have daily many new activities and obligations. The use of social media leads young people to have much greater social autonomy, having much more control over what they do, how they do it and they do. Additionally, users of social networks become more ability to self-organize and make better choices for themselves. Stop being passive consumers and ensure more and more to satisfy their desire for better products, more reliable and more tailored to their individual needs (Bates, 2013). Therefore, there is a need to examine the use of MOOC on education and especially in relation with lifelong learning. This will help the academia to better understand how social media contribute on lifelong education.

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Περίληψη

Σημαντικό κομμάτι της δια βίου μάθησης είναι η κατανόηση του τρόπου που οι θεσμοί της μπορεί να παρέχουν εκπαιδευτικές υπηρεσίες. Πιο συγκεκριμένα, τα τελευταία χρόνια δίνεται ιδιαίτερη έμφαση στην καινοτομία και την χρήση των νέων τεχνολογιών, ιδιαίτερα του διαδικτύου. Η παρούσα μελέτη είναι μια βιβλιογραφική ανασκόπηση ως προς το πώς οι ΤΠΕ έχουν επηρεάσει τις μεθόδους διδασκαλίας και να γίνει μια σύγκριση με το παραδοσιακά μοντέλα διδασκαλίας στην δια βίου μάθηση. Η έρευνα δείχνει ότι αν και υπάρχουν πολλές νέες καινοτομίες, οι σπουδαστές εξακολουθούν να θέλουν πιο συμβατικές μεθόδους αν και σίγουρα οι νέες τεχνολογίες έχουν σημαντική επίδραση. Για μια μελλοντική έρευνα θα ήταν ιδιαίτερα σημαντικό να εξεταστεί η επίδραση των μέσων κοινωνικής δικτύωσης και κυρίως των ΜΟΟC στο σύγχρονο περιβάλλον μάθησης αλλά και το πώς θα επηρεαστεί στο μέλλον το αναλυτικό πρόγραμμα στα προγράμματα δια βίου μάθησης προσθέτοντας νέες γνώσεις στις ήδη υφιστάμενες.

Λέξεις Κλειδιά: Διά βίου μάθηση, Μέθοδοι και εργαλεία μάθησης, Τεχνολογίες Πληροφορίας και Επικοινωνίας