

Online Learning: A Step Forward for 21st Century Education?

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Abstract: *Nowadays in modern society, globalization and advanced technologies seem to have led to new ways of learning. Indeed, in the past, the learning process mostly occurred at school, where students would be in class lectured by a teacher. But today, it seems that globalization has affected education in the sense that new learning opportunities have emerged including online learning, enabling anyone to learn at home at their own rhythm. The purpose of this paper is therefore to analyze the effectiveness of online learning as an emerging educational method by measuring its advantages against its disadvantages. The rise in popularity of online learning will be therefore discussed in this paper as well as the difficulties faced by online learning users. Finally, this paper will show that the 'newness' of online learning seems shaping both its success and its unpopularity: online learning is indeed convenient for learners, which is why it should be developed further as a fully-recognized educational method; but at the same time, the lack of direct face-to-face contact between online teachers and students seems to widen the gap between online learning and traditional in-class learning in terms of effectiveness, success and popularity.*

Keywords: *online learning, online teachers and student, educational method.*

1. Introduction

A new way of learning seems to have emerged with the modernization and globalization of the world which is called “e-learning”, standing for online learning. As opposed to traditional in-class learning, where teachers and students meet at school in order to respectively teach and learn, online learning suggests a completely different way of learning: instead of attending class and study in the classroom with other students, online learners can in fact study at home. Indeed, there is no class to attend, no timetable to follow, and no classmates to study with. The main tool needed for this type of learning is a computer with an internet connection. Online learners include therefore those who may not have the time (or the financial means) to study in an educational institution and attend class due to their busy personal and/or professional life, such as parents or employees for example. As a result, in order to reach their educational goals, they would choose online learning as a convenient option to study and learn at home. As a consequence of its convenience, online learning is considered by many as an easy – maybe one of the easiest – ways to learn thanks to its accessibility, flexibility and all time availability. Indeed, it seems that in the 21st century, where technology is being more important than ever, online learning is becoming the most accessible way of learning, surpassing any other traditional education method. Nevertheless, online learning has also its lot of disadvantages, one of them being the clear lack of face-to-face interaction between the learner and his/her online teacher. One may wonder: is online education really effective? Do the advantages of e-learning outweigh its disadvantages? These questions will be dealt with in this academic article as follows: part 1) 21st century education: from traditional classroom learning to online learning; part 2) the rise of online learning; conclusion: what future for online learning?

Part I - 21st Century Education: from Traditional Classroom Learning to Online Learning

Globalization have brought new teaching and learning methods thanks to the emergence of computers and the internet towards the end of the 20th Century, leaving space for a more virtual way of learning in the beginning of this century. Online learning seems to gain in popularity since its rise, but can it truly replace the traditional classroom teaching and learning method in terms of educational effectiveness? Let's take a look at each of them and analyze their strengths and weaknesses.

The Traditional Classroom Learning

According to Kubo (2008), the traditional classroom method refers to the teaching and learning process occurring “face-to-face in the classroom” between the teacher and the students, and where “no course content is [being] administered online” at all. In this traditional classroom method, there is the obligation for all students to attend class in an educational institution in all levels, be it in school or university. The students are therefore required to attend class (where attendance will be checked by the teacher on a daily basis), to complete home or in-class assignments to be submitted to the teacher, and lastly to participate actively in the classroom to ensure effective learning. These are the most common requirements usually expected from students learning in a classroom.

This educational method has been indeed the most famous method commonly used around the world for ages until now, though nowadays being challenged by many educational leaders and learners considering it as too “traditional”, too rigid and too old-fashioned. These criticisms regarding this traditional teaching and learning method criticize mostly the large number of students present in the classroom, which seems to widen the gap between the teacher and the students in terms of authority, creating therefore a hierarchy between them (Ni, 2012). This hierarchy seems eventually to lead to the students' lack of interest and interaction, increasing the risk of ineffective communication resulting to ineffective teaching and learning. (Reynolds, Miller, and Weiner, 2003).

But at the same time, the traditional classroom learning can also be very much appreciated by students, teachers or parents thanks to its socializing advantages: by attending class and learning in a classroom with other students and different teachers, students learn to socialize and adapt to other ways of thinking. This learning approach, being based on real-life face-to-face communication, seems to create students' “openness” and “open-mindedness”, resulting from classroom interactions (Patrick and Powell, 2009).

The Blended Learning

As explained by Barbour (2012), the blended learning is an educational learning method that “combines two models of instruction: online and face-to-face”. In other words, the blended learning method institution users provide to their students both methods, traditional classroom learning and online learning, in order to increase students' effective learning and educational achievements. The combination of these two methods aims at, on the one hand, to provide students with traditional classroom learning to ensure interaction, participation and communication with the teacher in class; and on the other hand, it aims at enabling all students to adapt to the 21st century technology skills using online tools. This combined teaching-learning method can be very attractive for the students as it is creative, innovative and up to date. This combined technique pushes their creativity, as well as increases their attention and their interest in learning. However, for a course to be called ‘*blended*’ or ‘*hybrid*’, 30% to 79% of its content must be delivered through the web according to Kubo, (2008).

Part II- The Rise of Online Learning

According to Kubo (2008), “online learning first emerged over a decade ago in the form of corporate training courses. In the mid-1990s, software developers created programs such as WebCT, Mallard, and Pioneer to make course information more accessible to students.” it is then clear that online learning history has not been

very ancient but showed, though, a rapid growth since the late 1990s early 2000s. Higher learning institutions including colleges and universities have become more interested in using online learning such as web-based learning programs. The success of these web-based programs eventually led to adding online learning into the learning curriculum, courses and degree programs in Western countries such as the US or Scandinavian countries.

Kubo (2008) stated that “most higher education institutions have already integrated online learning into their curricula. Statistics from 2003 showed that over 75% of colleges and universities offer online learning.” This rise of online learning can clearly be noticed in table 1 research data explanation.

TABLE 1: Research Data to Explain the Rise of Online Learning

Author	Research Data
Kubo (2008)	2003 = 75 % of colleges and university offered online learning. 2007 = more than 4,000,000 students enrolled in at least one online course.
Cavanaugh (2001)	1998 = studied of 929 students found that online learning rise 200% from 1989 to 1996
O’Dwyer, Carey and Kleiner (2007)	Schools are increasing enroll to K-12 online study from only 50,000 students during 2001-2002 school year to more than 520,000 in 2004-2005 school year
Barbour (2012)	Increase in primary and secondary schools enrolled in online learning from 40,000 (2001) to 182,096 (2011) in just 10 years

The Positive Aspects of Online Learning

Let’s first look at the positive aspects of online learning. Ni (2012) stated that “Web-based technology has noticeably transformed the learning and teaching environment”. Indeed, the emergence of technology and internet has enabled educational leaders to “improve” the image of education as the traditional classroom teaching and learning tends to widen the gap between teachers and students in the classroom – resulting from hierarchy—preventing some students from participating or communicating openly. This gap seems to lead sometimes – not to say most of the time – to a lack of interaction or interest from the students, which is a clear consequence of their “fear” imposed by the hierarchy, this “higher position” conferred to teachers over the students. This hierarchy is considered by Ni (2012) as a barrier to learning in the sense that the students may not all be always able to learn at their full capacity. As a result, online learning would eliminate these barriers as there would be no or little hierarchy imposed between online teachers and their students: in fact, online teachers would refer to the group they teach as “learners” and not “students”, eliminating then the hierarchical barrier imposed by their respective positions.

Consequently, online learners would feel more comfortable to open up and communicate with their teachers, improving and optimizing their learning process. Furthermore, the learning process of online learners seems also to be optimized thanks to online learning flexibility. It is mentioned above that online learners tend to feel freer to communicate online thanks to the absence of hierarchical barriers; in fact, this lack of hierarchy is part of online flexibility which advocates a learning process that goes beyond walls and strict rules. In other words, online teachers would ensure teaching their learners not only knowledge and ready-made answers but more importantly responsible behavior. Consequently, online learners would learn to be responsible and to consider time as a resource in order to learn and keep improving themselves on the educational and personal levels. There would indeed be no particular fear of late submissions as online learning focuses on a free and open communication between teachers and learners – which is not always the case in classroom teaching and learning.

The Negative Aspects of Online Learning

However, online learning seems to show some weaknesses as well. Indeed, in spite of its modernity and recent rising popularity, online learning does not seem to provide online learners with a complete educational support due to one main factor, the latter being the lack of face-to-face interactions between the learner and the

teacher, while this interaction is needed to ensure an effective learning process in the long term. The main problem resulting from this lack of direct communication is the absence of direct social, emotional and psychological support to the learner. This support tends however to occur regularly in the traditional classroom teaching : indeed, the interactions between the teacher and the students in the traditional classroom teaching method occur naturally on a daily or weekly basis. More often than not, the students are given the opportunity to ask questions, feedback, help or advice from their teacher very regularly in class. This constant communication – although not always being 100 percent active – ensures over time the students content understanding as well as their self-confidence.

Online learning is shown in Ni’s study (2012) as a contributing factor for the learners’ isolation in the sense that it tends to break real life face-to-face communication both learners and students having to constantly interact online through a screen, creating a virtual and “empty” student-teacher relationships. Although it is understood that online learning does promote a free and open communication, it unfortunately remains a “through-the-screen-communication” that isolates and disconnects the learner from real life interactions. Table 2 below shows a summary of positive and negative aspects of online learning.

TABLE 2.Positive and Negative Aspects of Online Learning

Positive aspects of Online Learning	Negative aspects of Online Learning
1.Teachers create a learner-centered environments (Grogan, 2013) 2.Teachers meet the students’ needs of all kinds of mind (McCombs, 2003) 3.Online learning focuses on students’ strengths and passion (Glickman, Gordan, and Ross-Gordan, 2013) 4.Online learning reduces gaps and advocates more interaction, motivation and involvement (Reynolds, Miller and Weiner 2003)	1.Danger of isolation from the real life environment due to a through-the-screen-communication (Ni, 2012) 2.Take time for teachers and students to adapt to online learning (Roblyer, Porter, Bielefeldt, and Donaldson, 2009 and O’Dwyer, Carey and Kleiman, 2007)

2. Conclusion: What Future for Online Learning?

The reason there is a need for change in the 21st century education is best explained by Henry Steele Commager: “change does not necessarily assure progress, but progress implacably requires change. Education is essential to change, for education creates both: new wants and ability to satisfy them”. Ungerleider and Burns (2003) explained that modern day society needs online learning, as the need of people to learn more skills outside the traditional classroom becomes more significant than ever as the 21st century education development shows a higher degree of student-teacher interactions, including frequent feedback and summaries provided to the students.

Also, the rise of online learning will – if not already have – changed the role of teachers in education. This point of view is supported by Tapscott (1999), Cook (2008) and Grogan (2013): ‘a whole generation of teachers needs to learn new tools, new approaches, and new skills’. This statement clearly shows that teachers will have to adapt their teaching to meet the needs and expectations of the 21st century learners. The future of instruction will shift from teacher-centered to student-centered due to the change in education system and society demands. The need to address younger generations through online learning has become a significant change in society, modifying the role of both teachers and students. Online learning is helping people to be more productive and competitive in the knowledge-based economy, thus improving the standard of living quality. Development of education (knowledge-based economy) must be a creative and a sharing environment; therefore lifelong education is a key ingredient to ensure knowledgeable and productive citizens.

Online learning environment enables students or learners to do their work more freely and willingly, rather than feeling forced to work and participate in class. Weiner (2003) has pointed that one of the key ingredients to the success of online learning comes from the fact that online learning provides learners with the freedom to work; this helps them to become creative and more effective workers in the future.

However, there are still many aspects of online learning that are still considered as being sensitive topics, especially when it comes to the relationship between Human and technology: indeed, before e-learning can become truly be implemented and effective for education in the future, a generalized acceptance of technologized education must occur in order to recognize online learning as a fully recognized method of providing education... For this, only time can tell.

Eventually, enhancing online learning for the 21st century education development can only be done through proper strategies as it remains a new concept for educational leaders and learners. Also the key to a student's success does not lay with technology, but with teacher/instructors' capability to instruct learners the 21st century skills, which is something technology won't be able to ever replace.

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