NET Generation.
Thinking outside the box by using online learning methods

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Abstract

The main feature of the NET Generation is the fact that it is the first generation which "grew up digitally". Young adults today are so immersed in bits that they perceive them as an integral part of their natural environment, thus developing and imposing their culture and beliefs to the rest of the society, specifically by using digital media. Objectives: The purpose of this article is to show the framework on which young people develop a creative and innovative thinking by using online methods of obtaining and sharing information. Approach: It shows the literature that focuses on online learning, with priority to the generations' updated skills and abilities. Results: With their reflexes adjusted to today's speed and freedom, these resourceful young persons are starting to transform all institutions of modern life, replacing a culture of control with one based on performance. Value: In this paper, we will see that technology has started to play a main role in the social evolution, but this fact will not necessarily lead to a better society. This does not mean that technology should be blamed, but the other way around – in the digital world, there are sketched many developments that raise legit hopes in regard to the existence of new forms of human cohabitation and social interaction. It is required however, in this context, to place technology in a new economic, political and social framework.

Keywords: e-communication; online learning; digital generation; education; technology

1. Introduction

Information and communications technology (ICT) is seen as a "savior" that, along with genetic technology and nanotechnology, has decisively marked the 21st century society (Löpfe & Vontobel,

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2013). With its development, ICT has provided cultural and communication processes with great opportunities for change, thus having an impact on both the educational system and the social environment (Capogna, 2015). These types of technologies bring with them a major inclination towards change – this being a core element in obtaining more motivated citizens which will, thus, live in a better organized society.

It is becoming increasingly obvious that, in today's society, people can no longer properly face reality without having the power to understand and use technology (Baltac, 2011). As for everything happens for a reason, we believe that receiving and sharing information has nowadays become a very important way of living. Therefore, we can easily understand the fact that generations must be in accordance with the rapid ways in which a society is facing changes, they should adapt to these changes and become even better informational hosts than the previous ones.

In a world in which information has to be processed extremely fast, the ability of learning new things is more important than ever (Castells, 2010). In order to become responsible citizens and efficient contributors to a complex world economy, the younger persons must expand their horizon of interest beyond the limits of the community they live in. Here comes into play the so-called "NET Generation", its main characteristic being the fact that it is the first to "grow up digitally". The representatives of this generation are starting to transform the institutions of modern life by using their reflexes adjusted to the current freedom and speed of information, elements that are quite normal to them – in this context, innovation being a part of their lives (Tapscott, 2011).

2. Theoretical background

ICT has specific characteristics of innovative potential and one example in this regard could be given by the capacity to process a great amount of data and also to share this information regardless of the functional, temporal and geographic limitations. In this context, it is important to take into consideration the lifelong learning, the transfer of knowledge and the implementation of new technologies (Matei, Săvulescu, 2014) – these being elements of great importance in the process of innovative use of digital media.

The NET Generation is developing and imposing its culture on the rest of the society just by using digital media, these young people representing the power through which society is changing (Tapscott, 2011).

When referring to the educational sector, we can see that the young adults of today make use of social media to receive and spread information, not only about themselves, but also when it comes to manuals as well as printed or on-line courses. However, being present on an online environment can be not only beneficial, but also risky – cost of privacy and intimacy for example. To counteract this risk, schools play a very important role, especially because the education that they conduct can have a positive influence on students, thus making them aware of privacy matters, this fact having – as an effect – less risky behaviors conducted on sites of social network (Vanderhoven, Schellens & Valcke, 2013).

The NET Generation students are looking to gain e-learning experiences. The spread of mobile devices is helping them in this regard, by providing them with "anytime, anywhere" access to information (Dahlstrom, diFilipo, 2013). Due to the fact that educational institutions are starting to understand the ways in which this type of students prefer to take part in the learning process, it must be understood the fact that it is of great importance to find ways of intensifying online course offerings as to make them more attractive to post-traditional learners (Bichsel, 2013).

Some authors believe that higher education students use social media for two purposes, namely social and academic (Junco, Loken & Heiberger, 2011). Social identity, racial identity and social capital are three elements considered as being the main reasons for which students use social media with

such high regularity (Kirschner, Karpinski, 2010). Moreover, experts in the field have shown that social communication can develop itself into a key contributor for university students in order to help them go through an effective learning process (Junco, Loken, Heiberger, 2011). By this, we can understand that social networking sites have started to become of great importance, not only regarding the possibility of sharing information, but also related to educational processes. However, despite their growing importance, the social networks are nowadays more used for social engagement rather than for academic purposes. This fact is raising questions on whether young adults use social media for social or education and / or research purposes.

However, innovation is a practice that can be made possible through the process of creation. In this respect, we believe that digital media is very useful in making the young generation "think outside the box" and come up with ideas that can revolutionize their world. By that, they can be even more creative and they will become responsible citizens, that will be able to find solutions for the problems of the society they live in.

Modern society is based on the widespread use of ICT. These technologies are used by a large number of people and no longer represent just the domain of professionals. Therefore, skills in using ICT have become a challenge for the modern society (Baltac, 2011). Moreover, the evolution of modern society has brought with it many changes regarding the cultural and communicative processes, having effects on both the educational system and academic models that manage this relationship. Thanks to ICT's progress over time, these processes have become more and more flexible, low-priced and easy to use, thus the distance learning systems are assimilating them very quickly (Capogna, 2015).

Technology influences the way in which young adults think and behave, but it is a two-way street – the way in which people think and behave influences and shapes the Internet itself. In the 21st century, knowledge is more accessible precisely because of the Internet (Tapscott, 2011). The transmission of information via electronic means not only helps to protect the environment, but the digital economy will initiate a new era regarding the relations between people. An "empathic civilization" is thus born thanks to social media such as Facebook and Twitter, and also thanks to new models of open source, such as Wikipedia (Rifkin, 2009).

It is obvious that computers and the Internet have significantly changed the way in which people can access public services. The information society is more and more present in all the public administration's activities – such as e-participation and e-learning, including through complex applications of electronic government (Vrabie, 2015). This way of "dealing" with technology involves also the NET Generation, making its representatives more concerned about the problems that the society they live in is facing and also about the changes that are occurring and/or must take place in order for their communities to evolve and be formed of more efficient and well informed people.

For the benefit of businesses and citizens, efficient electronic services must be developed; the public institutions must, therefore, adopt a more general approach, by evaluating the e-services already in use and creating new ones where and when they are needed (Tîrziu, Vrabie, 2015).

Those that are part of the NET Generation join volunteer activities in a number higher than ever before, mostly because the Internet offers so many possibilities to do so. Educators should see this opportunity and take it into consideration. The traditional pedagogical model is focused on the teacher, being unidirectional and uniform and thus isolating the student in the learning process. In contrast, many of those who are members of the earlier mentioned generation prefer to learn through collaboration – both with the teacher and between each other. Therefore, they will respond positively to the new educational model that begins to take shape in today's society – a multidirectional and student-oriented model, which makes it personalized and collaborative (Tapscott, 2011).

In today's world, not only the young generations, but all the citizens use technology as a means to dominate the environment they live in as to follow and satisfy their needs and requirements, to solve

their problems and thus to be able to advance the society's expectations, having also the capability to control the way in which their internal and external relationships are taking place (Gilani, 2008, cited by Onuiri, Idowu, Chioma, 2015).

Because information is considered to be a key element of power, the best educational institutions of today provide their students with recorded class sessions conducted in an online environment and being free of charge. Such examples can be seen on Web sites such as www.coursera.org, www.udacity.com, www.futurelearn.com – these being just some sites on which top universities make available, for anyone who wants to benefit from them, free high quality learning resources (Onuiri, Idowu, Chioma, 2015). In this context, distance learning is becoming more and more popular among young adults. It is a method of conducting the learning process from distance, in contrast, from many points of view, to the traditional learning, which is made in a classroom setting, by face-to-face interaction between teacher and student. This type of learning is giving access to information to learners that are not able otherwise to receive the data they are provided with, for different reasons: geographic inaccessibility, course availability, family circumstances etc. (Garrison, 2000).

In the 21st century, the development of the IT field has brought with it a large request for cohesive communication which shares information through tools such as: e-mail, SMS, telephone as well as video conferencing. Along with these more "normal" instruments of sharing information, there are others being as well a part of the social media environment. To give some specific examples, we can name: Facebook, Twitter, YouTube, LinkedIn, ResearchGate or Academia.edu which, apart from being used as a communication tool in social engagement, are also being used as online platforms for transmitting information in any type of relationship possible: teacher – researcher – learner (Onuiri, Idowu, Chioma, 2015).

3. Online learning framework. Benefits and drawbacks

Most of the universities, colleges and high schools nowadays provide pupils and students with free Wi-Fi in order for them to easily collaborate and transfer knowledge, interests and opinions regarding a social or political event – such as the United States presidential election in 2007 (Tapscott, 2011), Romanian presidential election in 2014 (Le Monde, 2014) or even Arab Spring in 2010 (Radsch, 2014). They also offer to their academic communities open and free access to online data bases for enhancing their own research and development activities (NUPSPA, 2015).

Although we do not totally agree with The Finnish National Board of Education's initiative to replace pupils' handwriting with the use of tablets and smart technologies (The Independent, 2015), this should be seen as a strong movement towards this new learning approach.

Another initiative we mustn't ignore is the one of Stanford University in US as well as the one from The Open University in UK, which both provide free online courses to learners all over the world (Stanford Online, 2015; The Open University, 2015).

In order for all education centers to adopt a positive attitude towards technology, it is necessary for them to be helped by the Ministry of Education by financing IT&C infrastructure development projects or by enhancing collaboration partnerships with private companies which are interested in the educational/academic environment (we might give as examples Oracle Academy, Microsoft Virtual Academy, IBM Academy of Technology – companies of which it is well known that are very involved in research and development activities).

In order to better understand the advantages and disadvantages brought up by learning using online methods of receiving and giving information, we will present bellow a SWOT analysis:

Table 1 SWOT analysis on online learning methods

STRENGTHS	WEAKNESSES
- the large range of models and theoretical approaches that match a variety of solutions strongly user-oriented;	- the long-lasting scarcity of economic, professional, human, structural and technological resources, that can affect the educational system at all levels;
- the rapidity of ICT, which allows learners to speed up each type of relationship and discussions;	- the shortage (when it is not a total absence) of clear policies regarding the e-learning process at a structural level;
- the attraction of younger students (now recognized as the NET Generation), who prefer using new media for the learning process;	- the deficiency of abilities and technical figures in educational institutions, at various levels;
- the easiness with which the younger generation moves in the techno-social environments;	- the lack of educational and methodological skills that many teachers need for developing ICT methods useful in the teaching process;
- the techno-social environments have the potential to be used in different ways.	- the spontaneity of initiatives that often stay remote and are thus unable to run critical mass and stimulate the procedures for organizing the learning process.
OPPORTUNITIES	**RISKS**
- the progressive costs reduction regarding the ICT and technological infrastructures' dissemination;	- the absence of public investment regarding this domain in educational systems;
- the increasing easiness in using technology;	- the scarce technological infrastructure support of the country;
- the openness to the global market;	- the lack of a system vision, which is an effect of the general lack of knowledge and proper information on the educational systems' state;
- the range of opportunities for students who can build customized learning paths;	- the lack of vision and policies regarding the progress at the decision making level, with real consequences on the potential ways of improving technological gaps;
- the many teaching ways that the old and the new media panel make possible.	- the insufficient research conducted on this field in order to generate a full understanding of the phenomenon.

According to Capogna, (2015), *E-learning uses. Risks and perspectives*, Journal of International Scientific Publications, Educational Alternatives, Vol. 13, Bulgaria, pp. 5-7.

4. Conclusions

Information and communications technology is evolving day by day, bringing with it various benefits that can help the young adults in developing both their personal lives and future professional careers. Nevertheless, improvement in this area is still needed, as there are no guarantees that ICT will produce positive effects if the people who are using it do not change their traditional way of thinking.

Using electronic media in the learning process will be a key element in simplifying the NET Generation's access to information by giving its constituents the possibility to interact with the educational institutions and, furthermore, with the society they are a part of. Educational systems must implement policies regarding the role that the technology field has in the general framework of development at a national level. The prosperity of various experiences should be made available and followed step-by-step – where possible – in order to generate real changes in both the public and private educational institutions, thus providing the learning process with quality organization and assurance of training at all levels using as many ways of delivering this type of services as possible.

The NET Generation students are not so keen on using traditional methods of learning, demanding to receive more technological challenges and flexibility, thus making high educational institutions implement and/or develop e-learning initiatives. Unfortunately, not all these institutions are responding to the young adults' requirements, therefore they are starting to become unattractive in the eyes of today's learners. In the actual context, schools and universities should be ready to embrace the increased demands of technologies and services that are used to provide e-learning.

A "global city" is to be formed because of the social media use, the social software stimulating the creation of virtual spaces in which people can share information, collaborate, explore and also form proper communities to belong to. The instruments of social networks are starting to redefine the concepts of traditional communities, as for they are helping people begin to have a creative and innovative thinking. If we take into consideration the technologic approach, we will see that social media is shaping both society and culture by changing concepts such as privacy, friendship, information exchange, teaching and learning, public speech and even self-expression.

However, we must not forget that in a framework of human intelligence, the aim is to enhance the intelligence of the human race, not just the tools that it uses. This highlights the fact that we have to rely on human intelligence in the development of technological infrastructure, and to not remove the human being from the equation (Mann, Niedzviecki, 2001).

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