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EDUCATION IN THE DIGITAL ERA AND THE ROLE OF TEACHERS

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ABSTRACT

In the context of rapid changes in communication techniques, culture, pedagogy and the evolution of knowledge, it is vital that educators are familiar with new educational changes, mainly those changes that are related to technology.

This article aims to explore the main factors that inhibit teachers from change and focuses on teachers from kindergarten to college teachers in general. The rationale behind the relationship with teachers in general and not with teachers in a specific discipline is to explore how teachers in low-tech areas might see their development from a digital perspective. It is also assumed that digital education is needed in all areas of education, as there are already policies on integrating technology into education.

If people were asked what change means, they would use negative and positive terminology, such as fear, danger, anxiety or emotion, improvement, and energization. The same author defined teacher development as the process of "developing new perspectives on pedagogy and one's own practice and exploring new or advanced understandings of content and resources." (Fullan, M., 2006). Therefore, development is perceived as a change. With the digital changes in information, communication and technology, the role of teachers is changing and becoming more and more important in a way that educators need to think about teaching students who are eager to use technology.

However, some teachers fear change and therefore stick to traditional teaching. Traditional teaching is based on a top-down process, in which the teacher is the provider of knowledge and enters the classroom with a lesson plan that has been designed by the teacher. In the information age, teachers are preparing students for the first time for a future that they cannot clearly describe, and students' ability to use technology exceeds the teacher's ability.

KEY WORDS: globalization, technology, communication, change

Introduction

In the context of rapid changes in communication techniques, culture, pedagogy and the evolution of knowledge, it is vital that educators are familiar with new educational changes, mainly those changes that are related to technology. Change can be accompanied by fear, and therefore some teachers may resist the change. (Fullan, 2006). In the digital age, some teachers

may be reluctant to change because they feel like immigrants in the digital world. In developing countries, teachers may feel more frustrated because of the digital divide in their countries and because of the digital divide with students.

This paper aims to explore the main factors that inhibit teachers from change. This paper focuses on teachers from kindergarten to college in general. The rationale behind the relationship with teachers in general and not with teachers in a specific discipline is to explore how teachers in low-tech areas might see their development from a digital perspective. It is also assumed that digital education is needed in all areas of education, as there are already policies on integrating technology into education.

In his argument about change, one author argued that if people were asked what change meant, they would use negative and positive terminology, such as fear, danger, anxiety or emotion, improvement, and energizing. The same author defined teacher development as the process of "developing new perspectives on pedagogy and one's own practice and exploring of new or advanced understandings of content and resources." (Idem) A. By definition, development is perceived as a change. With the digital changes in information, communication and technology, the role of teachers is changing and becoming more and more important in a way that educators need to think about teaching students who are eager to use technology.

However, some teachers fear change and therefore stick to traditional teaching. Traditional teaching is based on a top-down process, in which the teacher is the provider of knowledge and enters the classroom with a lesson plan that has been designed by the teacher. In the information age, teachers are preparing students for the first time for a future that they cannot clearly describe, and students' ability to use technology exceeds the teacher's ability. (Zur, Zur, 2011).

Thus, some teachers fear the use of technology because they consider themselves digital immigrants, while their students are digital natives. A well-known author in the field argued that teachers' fear of change is not only related to digital tools, but also that teachers are concerned about the neurological, social and psychological effects of excessive use of technology by students. The fear of teachers to change in the digital age as a non-acceptance of some teachers that the digital age is a new era. As a result, there is a tension between two mentalities in digital growth. The first mentality, called Mindset 1, assumes that the digital revolution is just an extension of the industrial revolution. On the other hand, Mindset 2

assumes that the world is now completely different from the way it was 30 years ago in terms of thinking and acting.

Teachers with Mindset 1 believe that there is no urgent need for a change in the educational model and oppose the change. Teachers may think that they do not need to change, because they have succeeded without digital tools. Change could be more difficult for teachers who live or teach where digital development has only just begun to emerge, such as developing countries. As explained in some studies, e-educators in developing countries are frustrated by two types of digital divide: the digital divide between developed and developing countries and the digital divide between students and teachers. (Guemide, Benachaiba, & Bouzar, 2012)

Teaching in the digital age is not without its constraints and potential worries, but if students use Wikipedia instead of using library books, teachers should not be alarmed. The change is not unknown to teachers, because they are constantly changing in terms of teacher development. However, the change in the digital age requires a shift from mindset 1 to mindset 2, and change may be difficult for some teachers because there is tension between the two conflicting mindsets. (Rosen, 2010). The fear of not being able to change due to digital divisions is not related to tools or students, but is related to the teachers themselves. Not all teachers are digital immigrants and not all students are digital natives. Constraints are related to the relationship that students and teachers have with technology, and the digital divide is a "human" problem, which means that the gap is related to people, rather than a software problem.

Educational challenges in the digital age

Well-known education expert Ken Robinson says the internet is "like a vibrant digital cortex that envelops humanity with a trillion connections that affect how we think and behave and what we can become. Digital networks are excellent resources for work, leisure, creativity and collaboration and have a great potential for learning, education and school ". (Robinson, 2018, p. 87)

The phrase "digital natives" was first introduced to literature by American author Marc Prensky in 2001, through two articles entitled "Digital Natives" / "Digital Immigrants".

For current generations of learners, the standard is a connected society. Digital devices are extensions of everyday life. Nothing out of the ordinary, because digital natives are always around a device with internet access, be it a phone or laptop, tablet or smart watch. "Supported by connectivity, they think from the bottom up, feeling that they have the power to change the world. They inherited a world with many problems and situations to be repaired. But will they have the power to radically rethink society? Or do they just want to brag and throw ideas? Even if they are motivated to do things individually, their network represents their knowledge, and since we live in the information age where access to data has never been so easy and instantaneous, knowledge can be downloaded. " (Dumitrescu, 2013, p. 75, Muste, 2017, p. 47)

For digital natives, the use of technology is natural, but this is not the case for everyone, as there are digital inequities, which are particularly challenging for those teachers who want to use digital technologies in teaching and learning practice.

From the analysis of the literature, concerned with digital natives and our professional experience, we can say that they do not act the same, they do not form a homogeneous group in terms of using digital technology. Thus, some of them, even if they were born in the digital age, are not particularly interested in digital technologies, they do not have a Facebook account like most of their colleagues, do not send excessive amounts of messages, do not own or use mobile phones, instead they use them according to their original purpose, that is, to communicate with those closest to them. The reasons why this part of digital natives belong more to non-digitization can be:

„• individual, attributed to personality characteristics (temperamental and characteristic type)

• related to the impossibility of internet access, digital inequality continues to increase in some countries (at the end of 2014 there were almost three billion internet users globally, two thirds of them coming from developed countries, according to a UN based International Telecommunication Union study. This figure represents approximately 40% of the global population, according to the study cited by The Telegraph, and in Romania at the end of 2014, only 61.6% of citizens aged between 16 and 74 (54.4%) of all households had access to the Internet at home, according to the Institute of Statistics);

• *parents' attitudes about the time spent around digital devices (in some families the computer is part of the learning activity, in other families it is seen as a source of entertainment) ".* (Catalano, 2015, p. 3)

A real challenge is suggested by Don Tapscott, who believes that students in this era are the first generation in the history of diversity to be smarter, faster and more tolerant, so schools and universities will have to adapt to their style of reaction. "I hope that teachers will consider changing the traditional, one-way approach to training, once they realize what is inappropriate for the representatives of this generation. Innovative corporations, more open families, democracy based on participatory citizenship and maybe even the new interconnected society ". (Tapscott, 2011, pp. 29-33)

Teaching itself has become a challenge for teachers, so for the generation of digital natives, the teacher has become a facilitator of learning. It is necessary for him to abandon classical declarative knowledge, as schools will no longer be institutions that prepare graduates, but for professions that do not yet exist, and acquisitions of multiple and dense content will no longer be a priority as final elements of education. In this situation, we could rely on the importance of the term coaching, which in the future could take the place of teaching, which could significantly contribute to well-being, team spirit development, support and guidance and giving students the opportunity to ask questions about what and how to learn.

Another challenge of the digital age is the initial training of teachers. Changes in the phenomenon of digitalization, social and economic developments trigger changes in professional beliefs and skills. A broader shift in pre-university and higher education systems is needed to respond to the increased use of digital technology in education. Digital devices are more mobilizing and motivating in triggering learning than old intellectual tools. They allow for more individualized knowledge, so that "individuals can study, they can try to acquire a skill when they want, at the pace they choose, alone or in the company of someone else, with or without certification. And become advanced in certain problems and skills. in different ways ". (Gardner, Davis, 2015, p. 174)

We can also see that even in parenthood there are additional responsibilities due to the use of digital devices. If parents carefully and atentively control their children's activities in outer space, the generation of digital natives has found freedom in the online environment and keeps them close to their parents and removes the behavior of disobedience. The consequence

of such a reason is reflected in the lack of parental control, at an early stage, on the child's development due to the impossibility of monitoring it.

In 2016, Unilever funded a study entitled "*Release Children*." Its purpose was to encourage parents to talk about the barriers they have in letting their children play outdoors. This study looked at the opinions of 12,000 parents worldwide. "*The project team found that today, on average, children spend less, often less than an hour a day, playing outside. That is, less than half of the time that international law requires him to spend every day outside of high-security prisoners.* " (Robinson, 2017, p. 94) It is obvious that the way digital natives spend their time has changed radically compared to previous generations. The seduction of technology has taken them away from their gaming activity since an early age, even though the extraordinary benefits of gaming in social, physical, emotional and cognitive development are proven by scientific studies.

Educational opportunities in the digital age

In the digital age, its specific culture is very dynamic, flexible and allows for social innovation and change.

This is a good time to reconfigure digital skills. Through formal education that facilitates lifelong learning, it is possible to provide graduates with the tools they need to succeed in their personal and professional lives, although in the future they should not be served by technology, ie they should not be an end in itself, but only a tool for improving, adapting and making learning flexible.

We believe that the digital age offers the opportunity to positively use the profile of the digital generation from the perspective of initial teacher education, so that their skills, abilities and attitudes provide the basis for modeling the ideal profile of teachers.

Veen and Vrakking call the technical man a Homo Zappiens whose values and behaviors can be considered opportunities in reshaping the future of education. "Instead of considering it a threat and neglecting our habits, we suggest looking at this generation as a source of inspiration and guidance on how to adapt our education systems to meet the needs of our future society." (Veen, Vrakking, 2011, p. 5)

In the vision of the well-known psychologist Howard Gardner, digital culture offers the possibility to initiate and develop knowledge products in a personalized way, so that "anyone

with a smart device can start sketching, publishing, taking notes, creating works of reflection, art, science - in short, everyone becomes a creator of knowledge ". (Gardner, Davis, 2015, p. 181)

At the same time, digital devices contribute to the development of the ability to use different forms of understanding (seen as a form of thought expression), knowledge, expression, etc., so that those individuals who are not temperamental are prone to communication reports.

It is clear that the digital age is producing innovations and changes in many areas, from entertainment to quality of life and health, from education to tourism and the environment. Consequently, there is the possibility to consider digital natives, "raised in a culture of invention, in which innovation takes place in real time, stimulates a fruitful exchange of knowledge between generations, helping both parties to understand what is best. ". (Dumitrescu, 2013, pp. 95-99)

Conclusions

The prerequisites of the digital age can be translated into digital education, seen as a very dynamic dimension, which integrates digital technologies into the teaching process and can contribute to the development of students' creative abilities, critical thinking, socialization and autonomy.

We appreciate that the digital age will provide the opportunity for each student to progress in self-learning, individualized and contextualized, the educational programs proposed by schools will be designed according to age and individual characteristics.

Microsoft recently published the results of a study according to which teachers who use technology in teaching earn 30% more time in lessons than those who do not.

The future of education must take digitalisation into account, even if "any technological progress is huge, it also comes with big problems. And social networks are no exception. When there is balance, there are exceptional results and fabulous development opportunities, but when control is lost , the results are devastating, produce victims and destroy lives. "(Roseti, 2018, p. 48)

Further research is needed to identify the skills needed for the digital age and to predict where shortcomings may arise. In order to support the changes specific to this phase, all state institutions must work together to ensure that digital education, in its broadest sense, facilitates

the accessibility and social inclusion of individuals. Thus, every learner, regardless of age and experience, should have access to the digital learning opportunity and the benefits that digital technology can offer as a support.

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