

GENERATION SCREENAGERS AND THEIR IMPACT ON EDUCATION: A STUDY ON THE CHALLENGES FACED BY TEACHERS IN THE DIGITAL AGE



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ABSTRACT

The present study is a review of literature that addresses issues involving the generation of Screenagers, who are people who spend most of their aunt looking at a cell phone screen, for example, and everything they do depend on a mobile device, whether to view news, access social networks, agendas, among others. And they have some peculiarities such as being immediate, preferring to study in a personalized way. Thus, the study deals with issues about the current generation of students and their relationship with the educational universe, where it also addresses the impacts that the generation brings in the school context, in addition to the possibilities that educational methodologies and tools can provide so that the Digital Generation can have in their school career. The literature review was based on authors who deeply studied the topic of Screenagers and also on current tools that help teachers in content methodologies and also the students themselves with Artificial Intelligence, Virtual Reality and Adaptive Platforms. So that students have even more quality in their studies. Thus, it concludes the importance of having technologies and their resources aligned as tools so that they can provide the student with a better interest in their studies.

Keywords: Screenagers, Education, Virtual Reality, Artificial Intelligence, Adaptive Platforms.

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INTRODUCTION

It is notorious that any technology is constantly evolving in any field, education presents new trends in terms of teaching and learning, which can be from a notebook to take notes or a 3D glasses to be able to observe a different reality in a computerized digital world, according to Hayne and De Souza Wyse (2018).

The use of technology in contemporary society permeates everyone's daily life, the use of smartphones, social networks, artificial intelligence is common and is presented to children from early childhood. From Generation Z onwards (people born from the second half of the 1990s) there is a behavior of total familiarity with digital technologies and a greater ability to deal with the novelties that the market presents. It is noted in today's world, we live in an era of digitizability, where, in the vast majority, we carry out daily activities accompanied by some electronic device, whether in traffic, on the way to work, in moments of leisure, health monitoring and even as a source of research and general studies (Kämpf, 2011).

In this sense, Costa (2022) says that adolescents are known as Screenagers, as they are in a routine where they are woken up in the morning with a cell phone, and check the latest updates on social networks and messages that arrived while they were sleeping, all while still lying in bed. Throughout the day, they spend interacting with a cell phone to carry out their tasks and also in leisure with other people, that is, most of their day is accessing a cell phone.

Due to this characteristic that describes Screenagers, they have some other characteristics that are part of their ways of thinking, such as being multitaskers and being able to perform some routines in parallel, which also in case of need, search for information quickly on Google, for example. They have the ability to create and customize information quickly, but individually, in this way they can understand a subject in an agile way, but with a superficial understanding of the subject, since they live in the now and seek a return on tasks instantly (Watson, 2010).

In view of this, it is important to note that the way in which education was transmitted in past decades, the way in which studies were organized was notorious, given a context where the teacher was the holder of knowledge and the students only acted in a receptive way, collecting information without any judgment and criticism pointed out by Diesel, Baldez and Martins (2017) which should be pointed out that it would not be a good practice to use nowadays where we have young Screenagers.

In this context, a new evolution starts from the increasingly frequent use of digital machines, thus enabling teachers a new way of teaching and students a new way of learning, where more is demanded of students and the teacher less the holder of knowledge, having his methodology less mechanized (Garofalo, 2018). Thus, studies such as educational neuroscience are present and help in educational practice, where it reaches the student so that he can teach better and learn better with more quality in the school environment and in the teaching and learning process. (Atherton, 2005)

The Screenagers generation, characterized by its intense relationship with digital technologies, presents unique challenges for the education system. As Costa states, "adolescents are known as Screenagers, as they are in a routine where they are woken up in the morning with a cell phone, and check the latest updates on social networks and messages that arrived while they were sleeping, all while still lying in bed" (2022, p. 1). This reality demands a significant adaptation in pedagogical practices.

The impact of this generation on the school environment is profound and multifaceted. According to Watson, Screenagers "have the ability to create and personalize information quickly, but in an individualized way, in this way they can understand a subject in an agile way, but with a superficial understanding of the subject" (2010, p. 2). This characteristic requires a reformulation of teaching strategies to effectively engage these students.

The integration of technology in education becomes, therefore, not only an option, but a necessity. As highlighted by Oliveira, "To fulfill its social role, the school cannot ignore technologies or go to war against them and continue using a language that is distant from the reality of young people" (2018, p. 50). This statement highlights the importance of aligning educational practices with the technological reality of students.

The challenge for educators is significant, as it requires a paradigm shift. As Libâneo observes, "The main social and pedagogical function of the school is to ensure the development of cognitive, operational, social and moral capacities through its commitment to the dynamization of the curriculum, the development of the thinking process, the formation of participatory citizenship and ethical training" (2017, p. 115). Achieving these goals with the Screenagers generation requires an innovative and adaptive approach.

The continuing education of teachers emerges as a crucial factor in this scenario. According to the dissertation analyzed, "It is not possible to ignore that our teacher training courses are extremely theoretical and have not responded to the demands of

contemporaneity, to the learning results and to the teaching of skills and competencies provided for in the BNCC" (LOURES, 2019, p. 39). This observation highlights the need for constant updating of pedagogical practices.

School management also needs to adapt to this new reality. As pointed out in the dissertation, "Macro management has immeasurable challenges regarding the implementation of technological resources in municipal education and especially in teacher training" (LOURES, 2019, p. 39). This implies a restructuring not only of teaching practices, but also of school administration as a whole.

The role of the family in this context cannot be underestimated. Beale and Hall argue that it is "important to always have a responsible person controlling the access of individuals to mobile devices and to use technology applications that meet the educational environment, enhancing studies and understanding of the information that the student is learning at school" (2007, p. 10). This partnership between school and family is essential for the healthy and productive use of technology.

The evaluation of the teaching-learning process also needs to be rethought for this generation. As highlighted in the dissertation, "Effectively, the PPP is a document of deliberate actions that Veiga characterizes as: "[...] it is political because it is intimately linked to the socio-political commitment to the real and collective interests of the majority population; and pedagogical in the sense of defining educational actions and the characteristics necessary for schools to fulfill their purposes and intentionalities [...]" (LOURES, 2019, p. 29). This implies a more holistic assessment and aligned with the competencies of the twenty-first century.

The implementation of active learning methodologies emerges as a promising response to the challenges presented by Screenagers. Diesel, Baldez and Martins state that "the principles of active teaching methodologies: a theoretical approach" (2017, p. 268) are fundamental to engage this generation. These methodologies place the student at the center of the learning process, aligning with their characteristics of autonomy and search for information.

Finally, it is crucial to recognize that the education of the Screenagers generation is not limited to the physical space of the school. As observed in the dissertation, "The training of educators is directly related to the integration of technologies into the curriculum of the training that is intended to have. Whether in the personal or professional sphere" (LOURES, 2019, p. 41). This implies a broader vision of education, which transcends the walls of the

classroom and extends to the digital environment where Screenagers are constantly immersed.

In the present study, the possibilities and impacts that the Screenagers generation will witness will be related within the educational universe, as well as the challenges of teachers and educational institutions on innovations in ways of educating.

DIGITAL GENERATION AND ITS SCHOOL PATH

The expression Digital Generation is said by Souza and Gobbi (2014) who are people who had in their life history a way of socializing and the ability to learn, create and understand about issues in information and communication technologies, that is, they learned most of their lives through digital media.

To understand this work, the studies were divided into two parts containing comments based on authors and works on the subject. Therefore, the first part is understood where the context of the well-known Screenagers in the educational field is understood and observing the impact that the generation has nowadays in their studies and the second part contains a view on the challenges that schools are facing to overcome the impacts caused by the digital generation, as well as the use of tools for this.

SCREENAGERS RELATIONSHIP AND ITS IMPACTS ON THE EDUCATIONAL ENVIRONMENT

In a field observed by Bauman (2005), the characteristics involved in Screenagers are described as being insecure, liking freedom in their time, individualism, detachment and fleeting thoughts. With this, it is notorious that they have an eagerness for a practice in a personalized way, in addition to content with few texts, but with images, symbols, links, among other forms of coexistence in relation to learning. In this way, they are immediate, where through a Google search they get such information or through the use of a specific application, they can perform such a task that is more practical, being carried out virtually instead of in person, where they can obtain a faster result.

In this way, it can be observed that through immediacy, the ease of everything being connected via cell phone application, for example, and insecurity, the Generation may be being sent to not have resilience, thus, when an obstacle arises in the way of an activity of their day, they may not be able to solve it, because in their reality that uses virtual forms a

single button would solve, However, it may be that more than that is needed, which can lead to problems that are more difficult to solve.

Something that is also important to point out is that the excessive use of devices with screens, related to insecurity, is cyberbullying, described by Slonje, Smith and Frisé (2013) as a repetitive behavior that is motivated to annoy, scare, cause anger and embarrass people in a virtual way. Therefore, students may be in direct contact with situations that are not beneficial to their mental health. Thus, Beale and Hall (2007) point out the importance of always having a responsible person controlling the access of individuals to mobile devices and using technology applications that meet the educational scope, enhancing studies and understanding of the information that the student is learning at school, conducting research and educational games or gamification, since it is something that is also attractive in the Digital Generation.

SCHOOL CHALLENGES RELATED TO THE DIGITAL GENERATION

It is undeniable that the Digital Generation is present in the classrooms, so the teacher considers what is said to be Traditional Methodology, cited by Albrecht and Krüger (2013), as the teacher holds the knowledge and the student only a listener in their classes can be a strategy that is not very adequate, since the Screenagers are used to it. As a result, the teacher had to improve his methodologies, as well as use new tools to build his classes.

Going against the innovation in methodologies for the classroom, Artificial Intelligence becomes an ally, as Pozzebon, Frigo and Bittencourt (2004) say, Artificial Intelligence is a tool that is being applied to assist the student in the teaching and learning process, enhancing classes and absorbing content. In addition to new ways of using resources so that they can hold their attention, challenge, evaluate what was presented in class.

Therefore, it is necessary to use such tools so that the student is interested in maintaining his concentration. In this way, a technology added to Artificial Intelligence can be what is understood by Kerckhove as Virtual Reality, being

a reality that can be touched and felt, heard and seen through the real senses – not just with imaginary ears or eyes. Now we can add thought to the "hand of the mind". Penetrating the screen with the virtual glove, the real hand becomes a technical metaphor, making tangible things that were previously only visible. From now on we may want to touch the contents of thought. Before the invention of VR, no one would have imagined the concept of "a mental hand." The concept itself was not even

imaginable. There seemed to be no need to feel the objects that did not fill the mind. Today, the inclusion of touch among the other techno-sensory and psychotechnical extensions can change the way we, or our children, think we think (Kerckhove, 1997, p.80).

Therefore, it can also be combined with methodologies and create scenarios and classes to explain some content, such as going to places where it would be unfeasible, for example space, the bottom of the sea, observing some ancient fact in a historical context, so the chances that the student may be interested in the conditions of the classes can increase, since the Digital Generation is attracted by playful and personalized content.

In this context, it is possible to customize the learning environments of students, being known as Adaptive Platforms, as explained by Bechara and Haguenaer (2010), being a tool that collects data and performs evaluations about the studies, characteristics and personality of the students, whether they are time of use of some content and resources of the platform, time to solve some activity, performance and personalizes their studies on the platform, encouraging the student to seek new knowledge and even directing them to some reinforcement in case of need. Thus, the student can learn the content according to his time and in the way he feels comfortable studying, making the tool a potential ally for the present day.

The integration of technology in the school environment is not only a matter of modernization, but a necessity to meet the demands of the Digital Generation. As Oliveira states, "The school must adapt, recycle and open itself to the world, integrating its teaching with new languages and new modes of expression" (2018, p. 50). This adaptation is crucial to maintain the relevance and effectiveness of the educational process.

The role of the teacher in this new educational scenario is also transformed. According to Libâneo, "The universalization and improvement of the quality of education, the increase in schooling, technological preparation and the general, abstract, comprehensive and polyvalent training of workers, are fundamental for the whole society" (2017, p. 205). This implies continuous teacher training in line with new technologies.

School management faces significant challenges in the digital age. According to the dissertation analyzed, "There are several challenges for municipal managers committed to changing the framework of basic education in the municipalities of Rio de Janeiro" (LOURES, 2019, p. 41). These challenges range from technological infrastructure to the continuing education of teachers.

The evaluation of the teaching-learning process also needs to be rethought to meet the characteristics of the Digital Generation. As Vieira et al. point out, "the IDEB has facilitated the implementation of what has been called accountability policies" (2015, p. 85). This suggests a more holistic and contextualized approach to educational evaluation.

The participation of the family in the educational process gains new contours in the digital age. Beale and Hall argue that it is important "to always have a responsible person controlling the access of individuals to mobile devices and to use applications that meet the educational environment" (2007, p. 10). This partnership between school and family is fundamental for the healthy and productive use of technology.

The school curriculum also needs to be adapted to meet the needs of the Digital Generation. The National Common Curricular Base (BNCC) recognizes this need by stating that it is necessary to "constitute a curricular proposal that ensures competencies and skills and safeguards, in the objects of knowledge, the cultural, environmental and economic marks of each region" (PEREZ, 2018, p. 13). This approach allows for a more contextualized and meaningful education.

The implementation of active learning methodologies emerges as a promising response to the challenges presented by the Digital Generation. Diesel, Baldez and Martins state that "the principles of active teaching methodologies: a theoretical approach" (2017, p. 268) are fundamental to engage this generation. These methodologies place the student at the center of the learning process, aligning with their characteristics of autonomy and search for information.

Finally, it is crucial to recognize that Digital Generation education is not limited to the physical space of the school. As observed by Freire, "To participate is to discuss, it is to have a voice, gaining it, in the educational policy of schools, in the organization of their budgets" (2008, p. 127). This implies a broader vision of education, which transcends the walls of the classroom and extends to the digital environment where digital natives are constantly immersed.

FINAL CONSIDERATIONS

In this literature review, several points were observed that are of paramount importance to be used by educational institutions that use technology linked to a mobile device, since the Digital Generation is always connected to it as an ally in the teaching and learning process.

However, also using other tools that help in Current and innovative Methodologies such as the help of Artificial Intelligence linked to the infinite resources that Virtual Reality offers and Adaptive Platforms boosting the teaching and learning process according to each student, favoring their interest and motivation according to the content materials of a subject in question and at the same time motivating students to continue their studies either in the platform, websites or in books external to a computer, making the student's desire to continue focusing on studies not only prevail, but giving results in their evaluations.

Therefore, having all the support for teachers in helping to use the resources offered by educational institutions can have a positive impact on students' interest in engagement and interest in the studies that were presented. Having then their personal, academic and professional growth, encouraging students to seek their critical sense and to be increasingly active not only in the classroom, but in society.

The analysis carried out in this study on the Screenagers Generation and its impact on the educational path reveals the urgent need for a profound transformation in the educational system. Educational institutions, from basic education to higher education, need to adapt quickly to meet the demands and expectations of this new generation of students.

It is evident that the mere introduction of technology in classrooms is not enough. A paradigm shift is needed that involves not only the technological infrastructure, but also teaching methodologies, teacher training and the very conception of what it means to learn and teach in the twenty-first century.

Educators have a fundamental role in this transformation. They need to be willing to learn continuously, to experiment with new pedagogical approaches, and to become facilitators of learning rather than mere transmitters of knowledge. This requires significant investment in continuing education programs that are practical, relevant, and aligned with the needs of the digital age.

Educational policies also need to evolve to keep up with these changes. A regulatory framework is needed that allows for greater curricular flexibility, encourages pedagogical innovation, and recognizes the multiple forms of learning that occur inside and outside the traditional school environment.

The partnership between school and family becomes even more crucial in this context. Parents and guardians need to be educated about the responsible use of technology and how they can support their children's learning in an increasingly digital

world. Schools, in turn, must seek innovative ways to involve families in the educational process.

Importantly, while technology is a core component in the education of Generation Screenagers, one should not lose sight of the development of essential human skills. Competencies such as critical thinking, creativity, collaboration, and emotional intelligence remain fundamental and must be cultivated alongside digital skills.

The challenge of educating Generation Screenagers also presents a unique opportunity to rethink and redesign the entire education system. This is the time to question ingrained practices, experiment with new models of teaching and learning, and create an educational environment that is truly relevant and engaging for 21st century students.

Finally, it is crucial to remember that education is an ongoing and constantly evolving process. Strategies and approaches that work today may not be effective tomorrow. Therefore, it is essential to maintain a posture of constant learning and adaptation, always seeking to understand and meet the ever-changing educational needs of the Screenagers Generation and future generations.

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