

Contributions of Technologies in Advancement of Goals 2 and 12 Proposed by the National Education Plan (PNE)

Ana Letícia Marcolla Gambús, Mariana da Rocha Carvalho (Pontifical Catholic University of Paraná, Brazil)

Abstract: The present work proposes a study about technologies as a means to accomplish goals 2 and 12 presented by the National Education Plan. Faced with a scenario in which the relation with cyberculture becomes inevitable, the importance of the theme within the school environment should be considered as a tool to facilitate learning, educational accompaniment and to prepare for life. Goal 2 concerns the universalization of basic education and the terminality at the correct age, while goal 12 concerns the increase in enrollment in Higher Education. In view of the undeniable relationship between technologies and human development, the question that guides this work is: how can technologies, as educational resources, contribute to the achievement of goals 2 and 12 proposed by the National Education Plan? The methodology used for this work was qualitative of exploratory bibliographic nature. The expanded summary articulates the relations with the National Education Plan based on the studies of Miranda (2016) and Vosgerau, Da Silva Brito, Camas (2016).

Key words: cyberculture, resources; national education plan, technologies, challenges

1. Introduction

With the enactment of Law 13.005/2014, which approves the National Education Plan, several strategies and guidelines were drawn up to achieve the goals stipulated between 2014 and 2024 and to meet the demands of the educational area, leading teachers to seek new resources and didactic directions.

Considering the new challenges faced daily, especially adjustments and adaptations to technological advances, cyberculture is a reality that should be increasingly considered by educators, as it has become a very present tool in our lives, from the simplest to the most elaborate habits. In this sense, it is important that educational institutions provide access to various technologies, as, in addition to being a tool that has become part of everyday life, they bring significant contributions to the teaching and learning process. Understanding this scenario, this article deals with the contributions of technologies in advancing the goals proposed by the National Education Plan (PNE).

Understanding the undeniable relationship between technologies and human development, the question that guided this work was: how can technologies, as educational resources, contribute to achieving goals 2 and 12 proposed by the National Education Plan?

Ana Letícia Marcolla Gambús, Master's Student, the Pontifical Catholic University of Paraná, Brazil; research area: education. E-mail: anagambus@gmail.com.

Mariana da Rocha Carvalho, Master's Student, the Pontifical Catholic University of Paraná, Brazil; research area: education. E-mail: marianacarvalho0409@gmail.com.

The specific objectives of this paper sought to define what the new education technologies are and how to use them in favor of the teaching-learning process.

The methodology adopted to carry out this work was a qualitative approach, and data collection took place through an exploratory bibliographic study.

2. Discussions

The use of technologies as an educational tool is the subject of many discussions. There are lines of thought that believe in their insertion into the school environment, as well as lines that disagree with it.

However, the school, as a fundamental institution for civic education, must keep up with changes in society and meet the demands of the community, incorporating strategies to use technologies in their favor in its curriculum.

Miranda (2016, p.42) contributes with definitions on the theme, defining educational technology as "a term that is not limited to technical resources used in teaching, but to all processes of conception, development and assessment of learning". ICT's (Information and Communication Technologies) "refers to the combination of computer or computer technology with telecommunications technology and is on the Internet" (Miranda, 2016, p. 43). The term Technological Education "is a broader concept than the previous one, as it implies "knowing how to use" technology and also analyzing its evolution and impact on society" (Miranda, 2016, p. 43).

Learning is a re(constructive) process, which means that students build new knowledge based on the structures and representations already acquired about the phenomena under study and that must be cognitively and affectively involved in the processing of new information. Effective learning must take effort and keep students engaged in completing tasks (Miranda, 2016, p. 45).

After understanding the role of rethinking educational strategies and the need to adapt the curriculum, it is emphasized the obligation to bring technologies into the educational environment as an auxiliary resource for the development of intentional practices.

The integration process of digital technologies in pedagogical action should correspond to the existence of pedagogical models and curricula that give educational meaning to the use of educational technologies in the classroom and beyond (Vosgerau, Da Silva Brito and Camas, 2016, p. 104).

Cyberculture can be defined as a term used to refer to the interaction space that takes place with the help of technology. An informational space endowed with technology, where several spaces are built, among them, the educational space.

Goal 2 of the PNE addresses the universalization of elementary education for everyone between 6 and 14 years of age, and ensure that at least 95% of students complete this stage of education at the recommended age. The strategy 2.6 of the plan to achieve this goal consists in:

develop pedagogical technologies that combine, in an articulated way, the organization of time and didactic activities between the school and the community environment, considering the specificities of special education, rural schools and indigenous and quilombola communities.

In this sense, Vosguerau, Brito and Camas (2016, p.114) warn us that,

adopting, adapting and appropriating technologies in education, in any modality, is an urgent need, which should be planned by interdisciplinary teams, by the teacher and the student, in order to be understood and

used as training methodologies. If this point is not understood, there will be no document that integrates the technological resource to the educational nation.

Technologies come as auxiliary resources that, in addition to being a possibility of material explored by the student, can contribute to the follow-up carried out by the teacher on the teaching and learning process.

The exchange of information and knowledge is becoming faster and more uncomplicated. This communication takes place in all spaces, at all hours, inside and outside the classroom. An example of technological advance, which has been gaining ground in the field of education, is the distance education.

According to art. 1 of Decree No. 9,057, of May 25, 2017:

distance education the educational modality in which didactic-pedagogical mediation in teaching and learning processes occurs with the use of information and communication means and technologies, with qualified personnel, with access policies, with compatible monitoring and evaluation, among others, and develop educational activities for students and education professionals who are in different places and times." (Brazil, 2017).

Distance learning has had several means of communication throughout its history, from radios to the ease and practicality of the internet today. With the world increasingly globalized, this modality comes as a facilitator of the teaching and learning process, making teaching possible in different places, reaching people who, for many reasons, cannot have access to face-to-face teaching.

Goal 12 of the National Education Plan is:

to raise the gross enrollment rate in higher education to 50% (fifty percent) and the net rate to 33% (thirty-three percent) of the population aged 18 (eighteen) to 24 (twenty-four) years old, guaranteed the quality supply and expansion to at least 40% (forty percent) of new enrollments in the public segment.

Taking into account Article 1 of Decree 9,057/17, which considers the distance learning modality as a possibility of teaching, with people in different places and times, this teaching modality contributes to the achievement of goal 12, as it increases the number of enrollments in higher education, since it serves a larger and more diverse audience, reducing physical barriers, such as difficult access (riverside community), or cities that do not have universities.

It has a flexible schedule, for those who work full time, as teachers and students meet at different times and spaces. In addition, it does not require a large physical structure, since the institutions would only have centers for carrying out assessments, serving employees and students and other situations that need to be attended to in person. This also contributes to the modality becoming more financially accessible.

3. Final Considerations

This study was based on the development of a digital culture, which plays an integrative role in the student's development, with the intention of assisting in the teaching and learning process, and access to information and knowledge.

In the National Education Plan, an attempt was made to analyze the goals that technology may have as a potential resource for its implementation, making education reach places where face-to-face teaching could not. Another challenge is the disparity that exists between low-income students and those with greater purchasing power.

It also reinforces the importance of a flexible action on the part of education professionals, who must always

be rebuilding their practice, in order to follow the development of cyberculture, and insert their students in this context, in the best possible way, respecting differences.

Thus, distance education comes as a way to minimize this inequality and take knowledge to more distant places, contributing to the achievement of goals 2 and 12 more effectively.

These considerations are emphasized and gain strength in the current pandemic situation we are experiencing. Many realities that used to happen on-campus are adapting and reformulating themselves for the remote modality, at a distance. This provides many opportunities for those who were previously unable to do so. It is a fact that there is still a long way to go until we can state that distance learning happens the way it should, with the proper investment, the necessary conditions and preparation of professionals to teach in this modality. But it is one more possibility for knowledge and quality training to reach places not imagined before.

References

Miranda Guilhermina Lobato (2016). "Limits and possibilities of ICT in education", Sisyphus, No. 3, pp. 41-50/EN 39-48.

- Vosgerau Dilmeire, Da Silva Brito Glaucia and Beds Nuria (2016). "PNE 2014-2024: Educational technologies and teacher training", *Teacher Training – Brazilian Journal of Research on Teacher Training*, Vol. 8, No. 14, pp. 103–118, available online at: https://doi.org/10.31639/rbpfp.v8i14.135.
- Brazil (2017). Decree No. 9,057, of May 25, 2017. Regulates art. 80 of Law No. 9,394, of December 20, 1996, which establishes the guidelines and bases of national education. Official Gazette of the Union.

Brazil, Law 13.005, of June 25, 2014. Approves the National Education Plan – PNE and other measures.

Brazil National Institute of Educational Studies and Research Anísio Teixeira (2015). National Education Plan PNE 2014–2024: Baseline, Brasília, DF: Inep. 404 p.: il.