e-ISSN: 2595-5527 Doi: 10.32435/envsmoke-2023-12 Volume 6, Issue 3, p. 32-35 2023



INNOVATIONS AND CONTRIBUTIONS IN PEDAGOGICAL PRACTICES: AN ANALYSIS IN THE TEACHING OF THE TECHNICAL BASIS

Ary Gustavo da Silva Cesar¹\*💿

#### Abstract

With the confirmation of the worldwide outbreak of the new coronavirus, COVID-19, society's general reality has changed. With this, various measures have been necessary for everyone to adapt to a new reality. Based on this scenario, many schools have sought alternatives to continue their activities. This work was carried out based on an analysis of the pedagogical practice of the João Roberto Borges de Souza Technical Integral Citizenship School, in João Pessoa, Paraíba, in 2020, which aimed to analyze the teaching of the Technical Base, during remote education, discussing the contributions and innovations used in pedagogical practices implemented by this Area to comply with the school curriculum, in the context of the pandemic.

**Keywords:** Technological Innovation. Remote Learning. Pandemic. Technical Basis.

<sup>1</sup>Undergraduate student in Geography at the Federal University of Paraíba (UFPB). Technologist in Environmental Management at the João Pessoa University Center (UNIPÊ). Specialist in Environmental Sciences at the Integrated Center for Technology and Research (CINTEP). Master's student in Regional Development at the Federal Technological University of Paraná (PPGDR/UTFPR), Pato Branco, Paraná, Brazil.

\*Corresponding author: acesar.periodicos@hotmail.com

Submitted on: 27 Nov. 2023 Accepted on: 29 Nov. 2023 Published on: 31 Dec. 2023



# 1 Introduction

D iscussing the conceptions and use of innovation in education has become a growing practice among educators, specialists, and authorities (TELES, 2020). Teaching is a form of interaction between the student and the content, mediated by the teacher, with the aim of learning. Traditionally developed on this tripod, there have been changes in the interaction of this teaching process with the incidence of the COVID-19 pandemic. Thus, the impact of the pandemic is reflected in the challenges educators and teachers face in terms of welcoming, rescuing, and motivating students to continue with teaching activities (CUNHA, 2022).

Given the exceptional rules on the school year in primary education resulting from the measure to deal with the public health emergency, which exempted schools from face-to-face activities, this paper analyzed the teaching of the Technical Base of the João Roberto Borges de Souza Integral Technical Citizenship School, in João Pessoa - PB, during remote teaching, discussing the contributions and innovations used in pedagogical practices implemented by this Area to comply with the school curriculum, in the context of the pandemic. Despite being a recent change, teachers and students have had to adapt, without any preparation, to unfamiliar technological instruments or without the slightest idea of their potential.

# 2 Methodology

This work was carried out based on an analysis of the pedagogical practice of ECIT João Roberto Borges de Souza in João Pessoa, Paraíba, in 2020, the year in which the coronavirus, popularly known as COVID-19, appeared. Its analysis stems from a case study describe for (GIL, 2007), with a qualitative approach and descriptive and explanatory analysis, in order to achieve the established objectives.

The school was chosen because of its willingness to share information about the actions it promotes with remote education and because the author is a teacher at the research institution.

That said, the analysis took place in the subjects of the technical course offered at the institution, such as Pedagogical Company, Community Intervention, TCC, Hygiene and Safety at Work, Marketing Management and Commercial and Personal Marketing, and in the monitoring of other pedagogical activities promoted by the school, such as meetings with parents, pedagogical alignment meetings and compulsory curricular internships.

Using a questionnaire made available and applied by the school itself, authorized by the Paraíba State Secretariat for Education, Science, and Technology (SEECT-PB), the institution sought to understand the socio-economic reality of the 320 students in the three grades of technical high school, in the technical course in commerce, distributed in seven classes. In addition, the questionnaire aimed to verify the student's access to technological devices and, therefore, evaluate the institution's remote teaching as a whole, according (ALVES, 2022; SEABRA, 2022). Once this was done, it was possible to see that the school had to adapt, looking for emergency solutions in order to continue its activities. Concerning the objectives of this research, the questionnaire only collected information on technical teaching.

# 3 Results and Discussion

After a month of uncertainty and searching for the most appropriate and safe solutions for the continuity of teaching activities, new methodologies based on digital technologies were introduced with the help of remote support and technological devices. Thus, in a partnership between the State Government and Google, virtual classrooms were created through Google Classroom, allowing the creation, distribution, and evaluation of activities inserted into the student platform.

Given this fact, for quality remote teaching, it is necessary to see how many students have a network and devices for accessing classes, of which 98% of those interviewed said they had access to the internet.

In parallel with the students' access to the internet, one point that should be considered is the means used to access remote learning. According to the school's questionnaire, the device most used by students is a smartphone (53%), followed by a laptop (20%) and a Smart TV (18%) - for those who followed classes on the channel provided by the state. It is also worth noting that 32% of the students reported that more than one person shares these devices in their household.

The practice of these students sharing devices at home impacts learning in remote education (EXPONENTIAL SCHOOLS, 2022). When analyzing this question, doubt emerges about whether they are learning. When asked if this practice impacts their learning, according to the questionnaire, 46% of the students interviewed reported that it does.

It is important to note that in addition to sharing devices, students report that their home office environment also impacts their learning, which may be related to the inclusion of home activities (TELES, 2020).

When analyzing the leading platforms used by the institution's teachers, the students highlighted Google Meet (40%) as a platform for online classes, Google Classroom (36%) as a platform for posting activities and asynchronous classes, and YouTube com (17%) as a platform that allows live broadcasts, as well as posting classes and videos for later access.

Innovation in teaching practices is necessary, especially those that stimulate student learning (SEABRA, 2022). When asked if the students had observed teachers using new methodologies in their classes, 55% of the students interviewed said that they had, 27% said that teachers had not, and 18% did not know. Similarly, the methodological tools used by these teachers to improve remote classes also stand out. These include the use of Kahoot, with 90%, followed by QuizLet, with 34%, and Padlet, with 20%, representing modernization in teachers' pedagogical practices in the study area.

In an atypical year, in which everyone had to reinvent themselves to continue their activities, the internship curriculum was no different. In order to prevent students from being affected by the pandemic, the interviews and selection process for participation in the Primeira Chance Program, a state program to encourage internships and activities to initiate professional practice, took place entirely remotely.

Reaching as many students as possible is a challenge that the school management faces daily, and the work has intensified during the pandemic. As a way of rescuing students and getting them to participate assiduously in the school's pedagogical activities, activities were promoted with the participation of professionals from outside the institution, where these participants contributed with lectures, debates, conversation circles, in order to contribute knowledge and the exchange of experience with the students.

This post, for example, of Luisa Brandão, an Administration course intern who accompanied the students between the first and second semesters, observing and developing activities related to her degree course and the course offered by the institution. Her participation went beyond the Technical Base subjects, where she also contributed to the Post-Medium subject. So, she lectured on the curriculum at the end of the first semester subjects.

In this lecture, the Administration undergraduate presented the main differences between the Professional Curriculum and the Lattes Curriculum and gave tips on the essential information that students needed to know when building their Curriculum.

With this in mind, the school, seeking to contribute to the educational and emotional development of students, offered a lecture by psychologist and military officer Jonathan Coimbra, who discussed the behavioral and mental changes that have developed during the pandemic, which has imposed on schools the urgent need to adapt to the use of online tools to maintain their activities and, at the same time, the challenge of attracting students' attention to classes via the internet.

Because of this, it is clear that it is not only essential but also possible to educate young people in a way that strengthens the bonds of citizenship, inserting the subject into decisions that can bring benefits to society as a whole and that we must learn to deal with unpredictability and find in the crisis an opportunity to learn something new (ALVES, 2022).

# 4 Conclusions

The purpose of this work was to reflect on the teaching of the Technical Base at the João Roberto Borges de Souza Integral Technical Citizenship School in João Pessoa - PB during remote education, discussing the contributions and innovations used in pedagogical practices implemented by this Area to fulfill the school curriculum. The school's outstanding achievements in terms of pedagogical activities are highlighted.

Remote teaching has brought several changes to the educational environment, not only because of the adaptation to digital technologies but also because of the possibilities of redesigning and rediscovering ways of teaching primary education. It can be seen that more than half of the students recognize the insertion of new methodologies by teachers to continue and improve their classes, which contributes to the dynamism of remote classes, as well as to the motivation of students to continue classes since it was expected to observe students participating more in the classes of some teachers and others not.

Even so, the school has shown concern for the quality of the student's learning by seeking to include professionals from outside the institution who have contributed with lectures, debates, and round tables to contribute knowledge and exchange experiences with the students. However, it should be noted that the devices used by the students to access the school's activities are shared with more than one person at home and that the home office environment has a particular impact on the student's learning since this situation may be related to the inclusion of domestic activities. INNOVATIONS AND CONTRIBUTIONS IN PEDAGOGICAL PRACTICES: AN ANALYSIS IN THE TEACHING OF THE TECHNICAL BASIS

It is important to note that the school has been trying to keep up with and adapt to the sudden changes that have forced teachers and students to adapt to a new reality and this new teaching method, which is well-known but little used by institutions in general. As a result, it can be seen that the school has continued with its teaching activities, given the atypical nature of the year in question, and that the strategies used by the technical base stimulate creativity and the use of diversified resources in classes during this period, thus expanding the possibilities for student learning. Therefore, Brazilian education requires, first and foremost, changes in curricular conceptions and practices after the new coronavirus pandemic, which has generated instability in the teaching modality. It is essential to have a safe plan for returning to school.

# CREDIT AUTHORSHIP CONTRIBUTION STATEMENT

The author declares that he is the sole author of the manuscript INNOVATIONS AND CONTRIBUTIONS IN PEDAGOGICAL PRACTICES: AN ANALYSIS IN THE TEACHING OF THE TECHNICAL BASIS, and that he researched and wrote the article. As he is trustworthy, he publicly assumes responsibility for the content of this article.

# DECLARATION OF INTEREST

The author discloses that they have no known competing financial interests or personal relationships that could have appeared to influence the study reported in this manuscript.

# FUNDING SOURCE

The author declares that no funding is applicable for this research.

#### REFERENCES

ALVES, Lynn Rosalina Gama. New technologies: instrument, tool or structuring elements of a new thinking? Journal of FAEEBA, Salvador, p. 141-152, 1998. Available at: <u>https://www.academia.edu/download/New</u> technologies: instrument, tool or structuring elements. Accessed on: 20 Dec. 2022.

CUNHA, Paulo Arns. The pandemic and the irreversible impacts on education. Educação Magazine, v. 15, 2020. Available at: https://revistaeducacao.com.br/2020/04/15/pandemia-

educacao-impactos/. Accessed on: 15 Oct. 2022.

EXPONENTIAL SCHOOLS. School in times of Coronavirus: the challenge of moving from face-to-face teaching to distance learning. In: **Exponential Schools**. Available at: <u>https://escolasexponenciais.com.br/School in times of</u> Coronavirus: the challenge/. Accessed on: 11 Nov. 2022.

GIL, Antônio Carlos. **How to write a research project**. São Paulo: Atlas, 2007. Available at: <u>https://files.cercomp.ufg.br/GIL, Antônio Carlos. How to</u> <u>write a research project</u>. Accessed on: 20 Dec. 2022.

SEABRA, Carlos. Educational software and telematics: New resources for the school. Lecionare, no. 2, nov. 1994. Available at: https://cseabra.wordpress.com/Educational software and telematics. Accessed on: 20 Dec. 2022.

TELES, Edilane Carvalho et al. Remote teaching and the impacts on learning. Journal **ComSertões**, v. 9, n. 2, p. 72-90,2020.

https://doi.org/10.36943/comsertoes.v9i2.10091.