


Chapter 12

Perspectives Before and After COVID-19 for Technology-Based Education of Pediatric Cancer Patients

Paulo Santos


Feevale University, Brazil

Débora Barbosa

 <https://orcid.org/0000-0001-8107-8675>


Feevale University, Brazil

Jorge Barbosa

 <https://orcid.org/0000-0002-0358-2056>

University of Vale do Rio dos Sinos, Brazil

Lucas Gregorio

 <https://orcid.org/0000-0002-0616-5792>

Feevale University, Brazil

ABSTRACT

This research has as theme the teaching and learning processes mediated by digital technologies aimed at young people undergoing oncological treatment. In this context, between 2015 and 2020 the authors developed a project called “learning with technologies workshop” in which patients’ writing, reading, and logical reasoning skills were developed, using mobile devices tablets. During the COVID-19

DOI: 10.4018/979-8-3693-2885-9.ch012

pandemic, the workshops were interrupted. In 2023, the authors resumed the project, now orientated by new trends in post COVID-19 education with technologies. Therefore, this chapter aims to discuss the trends prior and post COVID-19, identifying changes made to this research by analyzing an experience report of the new model of workshops developed in 2023. The results show that, in comparison, pre COVID-19 workshops were centered in individual tasks with little to no autonomy. In contrast, in post COVID-19 workshops students were incentivized to learn with autonomy, creativity, and citizenship in a digital culture.

INTRODUCTION

This research has as theme the teaching and learning processes mediated by digital technologies aimed at young individuals undergoing oncological treatment. According to the National Cancer Institute (Brazil, 2019) pediatric and adolescent cancer ranks among the main causes of mortality due to illness in the age group of 0 to 18 years in Brazil. Young individuals undergoing oncological treatment experience school absence during the treatment, receiving support from the school through distance learning or home-based assistance.

Technological resources can be an alternative for teaching patients undergoing oncological treatment (Brandao et al., 2019; Doorenbos et al., 2020; Kemp et al., 2021). The study of new methodologies enables the development of learning practices tailored to the needs of the patients. Concurrently, the development of digital games to assist in pediatric oncology services is a growing research topic (Bruggers et al., 2018; Cederved et al., 2022; Er et al., 2022, Schenck et al, 2023).

Between 2015 and 2020 we developed the “Learning with technologies workshop” project to address the educational difficulties of young people undergoing oncological treatment. The practices took place in an institution supporting childhood and youth cancer, in Brazil. The research aimed to investigate educational practices with mobile devices tablets to support in the scholar reinforcement of pediatric oncology patients. Each year, we developed different educational projects, using technological resources to playful learning activities.

In 2020, the workshops were interrupted due to the COVID-19 pandemic. During the pandemic, it was not possible to continue with the workshops. The patients were part of the at-risk group, needing to remain in isolation for an extended period. Furthermore, it was not also possible to do online practices, because many students lacked the necessary resources to participate in online classes. In Brazil, internet access and mobile devices are not economically accessible for families of low income, especially those facing health issues. Usually, most participants only had access to technology-based education during the workshops.

24 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/perspectives-before-and-after-covid-19-for-technology-based-education-of-pediatric-cancer-patients/352973

Related Content

From App Attack to Goal-Oriented Tablet Use

Dominic Mentor (2015). *Tablets in K-12 Education: Integrated Experiences and Implications* (pp. 1-21).

www.irma-international.org/chapter/from-app-attack-to-goal-oriented-tablet-use/113853

The Development and Application of Regional Education Informatization in China

Mingzhang Zuo, Sisi Liu and Ziyun Zhao (2014). *Transforming K-12 Classrooms with Digital Technology* (pp. 320-336).

www.irma-international.org/chapter/the-development-and-application-of-regional-education-informatization-in-china/88979

Telementoring and Virtual Professional Development: A Theoretical Perspective from Science on the Roles of Self-Efficacy, Teacher Learning, and Professional Learning Communities

Matthew J. Maurer (2011). *Telementoring in the K-12 Classroom: Online Communication Technologies for Learning* (pp. 186-205).

www.irma-international.org/chapter/telementoring-virtual-professional-development/46301

Children's Text Messaging and Traditional Literacy

Beverly Plester, Clare Wood and Samantha Bowyer (2009). *Handbook of Research on New Media Literacy at the K-12 Level: Issues and Challenges* (pp. 492-504).

www.irma-international.org/chapter/children-text-messaging-traditional-literacy/35934

An Interactive and Digital Media Literacy Framework for the 21st Century

Wei-Ying Lim, David Hung and Horn-Mun Cheah (2009). *Handbook of Research on New Media Literacy at the K-12 Level: Issues and Challenges* (pp. 119-127).

www.irma-international.org/chapter/interactive-digital-media-literacy-framework/35910