The importance of digital playful games for the teaching and learning process: A qualitative study

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ABSTRACT

This research aimed to analyze teachers' perceptions about the importance of digital playful games in the teaching and learning process. Using a qualitative approach, the research was conducted through in-depth interviews with fifteen teachers from a Brazilian public school. The interviews were recorded, transcribed and analyzed using the discourse analysis technique. The results revealed that teachers recognize the potential of digital playful games to promote student engagement, making classes more dynamic and attractive. Games were identified as facilitators for the exploration and understanding of complex concepts, in addition to stimulating cognitive and socio-emotional skills, such as critical thinking and collaboration among students. However, challenges related to specific teacher training and adequate school infrastructure were identified. Digital playful games have been found to be effective pedagogical tools to improve the quality of teaching and learning, promoting the holistic development of students. However, it is necessary to address the challenges associated with its implementation to maximize the benefits and minimize the negative impacts.

Keywords: Playful games, Technology, Education.

INTRODUCTION

In the context of contemporary society, digital technologies play an increasingly central role in various spheres of human life, influencing everything from communication to entertainment and education. With technological advancement and the popularization of devices such as smartphones, tablets, and computers, new forms of interaction and access to information have emerged, transforming the way people relate to the world around them. In this sense, digital technologies offer a diverse range of resources and tools that can be exploited to enrich educational processes, providing more dynamic and interactive learning opportunities (CONTE; HABOWSKI; RIOS, 2019).

In the field of digital playful games, there is a strand that capitalizes on these technological advances, combining elements of fun, entertainment and learning in a single virtual environment. Digital playful games are applications or software designed to provide interactive and immersive experiences, in which users can participate in narratives, solve challenges, and explore virtual environments. These games vary in complexity and theme, ranging from simple puzzles to sophisticated educational simulations, providing opportunities for the development of cognitive, social, and emotional skills in an engaging and motivating way (SENA et al., 2016).

In the educational context, digital playful games have stood out as an effective pedagogical tool to promote student engagement and enhance the teaching and learning process. By integrating elements of fun and challenge with educational content, these games become an attractive and motivating tool for students, stimulating curiosity, creativity, and interest in knowledge (CRUZ JÚNIOR, 2017).

In addition, digital playful games provide opportunities to practice skills such as problem-solving, decision-making, and collaboration, which are essential for the all-round development of students. With the possibility of personalizing and adapting the content according to the skill level and interest of each student, digital play games in education provide a more individualized and inclusive approach, meeting the diverse needs of students effectively (SENA et al., 2016).

In this context, the objective of this research was to analyze teachers' perceptions about the importance of digital playful games for the teaching and learning process. The study, with a qualitative methodological approach, was limited to fifteen teachers from a Brazilian public school.

METHODOLOGY

The research carried out was of the exploratory type, whose main objective is to explore a theme still little known or studied, seeking to understand its characteristics, contexts and possible relationships. This type of research was chosen due to the need to investigate in an initial and in-

depth way the integration of ludic games and digital technologies in education, an emerging and complex theme that still lacks in-depth studies.

As for the methodological approach, the qualitative approach was adopted, which is characterized, according to Lima, Domingues Junior, and Gomes (2023), by the search to understand the meanings, perceptions, and experiences of the participants. The choice of this approach is justified by the exploratory nature of the research and the need to understand in depth the perspectives and experiences of teachers in relation to the use of playful games and digital technologies in education.

The sample consisted of fifteen teachers from a Brazilian school, selected for convenience due to the ease of access and availability of the participants. The choice of teachers as participants in the research was due to their fundamental role in the implementation and use of educational resources in the classroom.

For data collection, in-depth interviews were conducted. Initially, contact was made with the school manager to request authorization and support in carrying out the research. After authorization, the interviews were scheduled with the participating teachers, being carried out individually and in person. During the interviews, tape recorders were used to ensure the fidelity of the information collected. Participants were informed of the objectives of the research and agreed to be recorded to ensure accurate transcription of interviews.

After data collection, the analysis of the participants' discourses was performed using the discourse analysis technique. This technique consists of identifying the linguistic and discursive elements present in the interviews, seeking to understand the underlying meanings and representations of the participants on the topic in question. Discourse analysis allowed for a deeper understanding of teachers' perceptions and experiences regarding the integration of playful games and digital technologies in education.

RESULTS AND DATA ANALYSIS

The results of the survey revealed a variety of perceptions and experiences of teachers regarding the integration of digital play games into the teaching and learning process. Most participants highlighted the potential of these resources to promote student engagement, making classes more dynamic and attractive. Many reported that digital play games stimulate students' curiosity and participation, creating an environment conducive to exploration and learning.

> Digital playful games have really transformed my classes, making complex concepts more accessible and motivating my students (E4).

> Implementing historical simulation games has breathed new life into my classes, encouraging my students to explore and better understand the events of the past (E8).

> The environmental simulation games were essential to engage my students with important sustainability issues, stimulating their critical thinking and environmental awareness (E11).

The analysis of the results reveals that teachers recognize the potential of digital playful games as effective tools to promote student engagement in the teaching and learning process. The widespread perception is that these resources make classes more dynamic and attractive, stimulating students' curiosity and participation. This suggests that digital play games offer an environment conducive to exploration and learning, allowing students to engage more actively and meaningfully with the content covered in the classroom.

Teachers' reports highlight the ability of digital playful games to make complex concepts more accessible and understandable to students. For example, the use of historical and environmental simulation games has been shown to bring new life to lessons, allowing students to explore historical events and environmental issues in a more engaging and immersive way. This suggests that digital play games not only promote student engagement but also facilitate the understanding and internalization of important concepts.

In addition, the teachers' reports show that digital playful games have the potential to stimulate cognitive skills, such as critical thinking and environmental awareness. By engaging students in simulation and decision-making experiences, these resources promote reflection and analysis, contributing to the development of a deeper and more critical understanding of the topics covered. This underscores the importance of digital play games not only as teaching tools, but also as instruments for developing essential life skills.

It is also noteworthy that the teachers emphasized the ability of digital playful games to develop students' cognitive and socio-emotional skills. Through solving challenges and collaborating with peers, students are encouraged to develop critical thinking, decision-making, and effective communication. Teachers reported that they observed an improvement in students' academic performance after the introduction of digital play games in the classroom.

> Digital playful games have been fundamental for the development of students' cognitive and socio-emotional skills, providing an environment conducive to the practice of critical thinking and collaboration among colleagues (E2).
>
> By using strategy games in my classes, I noticed a positive change in the students' behavior, who started to communicate more effectively and work as a team to solve the proposed challenges (E1).

However, some challenges were also identified by the participants. Among them, the need for specific teacher training for the effective use of these resources stands out, as well as the availability of adequate infrastructure in schools, such as internet access and technological devices.

In addition, some teachers expressed concerns about the excessive use of technology, stressing the importance of balancing the use of digital play games with other educational activities.

In the data analysis, it was possible to identify recurrent patterns in the teachers' perceptions, evidencing the importance of digital playful games as a pedagogical tool in the educational context. The results suggest that, when used appropriately and integrated into the school curriculum, digital play games can contribute significantly to improving the quality of teaching and learning, promoting the holistic development of students. However, it is necessary to consider the challenges and limitations associated with its implementation, in order to maximize the benefits and minimize the negative impacts.

FINAL THOUGHTS

The research highlighted a wide range of benefits associated with the integration of digital play games in the educational context, highlighting their ability to promote student engagement and make classes more dynamic and attractive. Teachers' reports highlight how these resources enable exploration and learning in an engaging way, making complex concepts more accessible and understandable for students. In addition, digital playful games have been recognized as effective tools for the development of cognitive and socio-emotional skills, stimulating critical thinking, decision-making, and collaboration among students. The overall perception of the participants was of an improvement in the academic performance of the students after the introduction of these resources in the classroom.

However, despite the evident benefits, some challenges were identified by teachers. The need for specific teacher training for the effective use of digital play games and the availability of adequate infrastructure in schools were highlighted as important issues to be considered. In addition, concerns about the excessive use of technology and the importance of balancing the use of these resources with other educational activities were also mentioned.

In short, the results of the research highlight the importance of digital playful games as a pedagogical tool in the educational context, evidencing their potential to promote the improvement of the quality of teaching and learning. However, it is crucial to address the challenges and limitations associated with its implementation, aiming to maximize the benefits and minimize the negative impacts.

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