The role of gamification for the school inclusion of students with disabilities

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ABSTRACT

The objective of this research was to analyze teachers' perceptions about the role of gamification for school inclusion in a Brazilian public school. To this end, an exploratory research with a qualitative approach was applied with 13 teachers. Analysis of teachers' perceptions of the role of gamification in school inclusion reveals its acceptance as a promising tool to stimulate student engagement, especially those with disabilities. Gamification's ability to transform the learning environment into a dynamic and motivating space is highlighted as key to promoting a more inclusive and student-centered education. Teachers' reports emphasize not only the effectiveness of gamification in promoting active student participation, but also its ability to tailor teaching to the individual needs of each student, ensuring that everyone feels valued and included in the educational process. In addition, the perception that the playful elements of gamification make learning more accessible and interesting underscores its importance in overcoming learning barriers and promoting equal educational opportunities. In this way, teachers recognize gamification as an effective strategy to promote a more personalized, student-centered, and inclusive education, thus contributing to the academic and personal development of each student and to a more satisfying and effective educational experience for all.

Keywords: Gamification, School inclusion, Technology, Education, Students with disabilities.

INTRODUCTION

School inclusion is a fundamental concept in contemporary education, which aims to ensure the access, participation and success of all students, regardless of their individual differences and characteristics. In an inclusive context, diversity is valued and respected, and measures are taken to eliminate barriers and promote equal opportunities. This means that students with disabilities, learning disorders, behavioral difficulties, among others, should be welcomed into mainstream educational settings, receiving the support and resources necessary to reach their full potential. School inclusion is not only limited to the physical presence of students in the classroom, but also involves adapting pedagogical practices, curricula, and school environments to meet the needs of all students, thereby promoting a more equitable and inclusive education (LIMA et al., 2023).

As Biazus and Rieder (2019) reiterate, technologies play a crucial role in promoting school inclusion by offering tools and resources that can help overcome the barriers faced by students with different needs and abilities. In schools, these technologies can be used to provide individualized support to students, such as screen readers for visually impaired students, translation software for students who are deaf or hard of hearing, and educational apps that offer activities tailored to different learning styles. In addition, technology also allows for the creation of accessible virtual learning environments where students can participate in interactive, collaborative, and personalized activities, thereby expanding their learning opportunities and promoting a more inclusive and equitable education.

In this scenario, gamification, i.e., the application of game elements and mechanics in non-playful contexts, has proven to be an effective tool to promote the school inclusion of students with disabilities. Through gamification, it is possible to create more attractive and accessible learning environments that meet the specific needs of these students, providing them with meaningful and enriching educational experiences. By incorporating elements such as challenges, rewards, competitions, and engaging narratives, games make the learning process more dynamic and motivating, which contributes to the engagement and participation of students with disabilities in school activities (BASÍLIO et al., 2023).

Thus, taking into account the above, the objective of this research was to analyze teachers' perceptions about the role of gamification for school inclusion in a Brazilian public school. To this end, an exploratory research with a qualitative approach was applied with 13 teachers. It is hoped that the results of this research will provide theoretical and practical subsidies to understand how teachers perceive gamification as an effective tool to promote the inclusion of students with different abilities and educational needs.

METHODOLOGY

The research adopted was of the exploratory type, whose main objective is to provide greater familiarity with the problem under study, with a view to making it more explicit or to build hypotheses. This type of research seeks to explore the theme in a more comprehensive way, enabling a deeper understanding of the phenomenon in question (LIMA; DOMINGUES JUNIOR; GOMES, 2023). In the context of this study, the choice of exploratory research is justified by the need to understand teachers' perceptions regarding the role of gamification for school inclusion, a theme still little explored in the academic literature.

As for the approach, the research adopted a qualitative approach, which is characterized by the concern to understand the phenomena studied in their totality, valuing the context and social interactions, as highlighted by Godoy (1995). The choice for this approach is due to the nature of the object of study, which involves teachers' perceptions, opinions, and experiences in relation to gamification and school inclusion. The qualitative approach allowed for a deeper analysis of these issues, exploring the nuances and meanings attributed by the participants.

The sample consisted of thirteen teachers from a Brazilian school, selected by convenience. This selection method was adopted due to the practicality and accessibility of the participants, since they were available at the educational institution where the research was conducted. The choice of thirteen participants also provided a variety of perspectives and experiences, enriching the analysis of the data collected.

As for data collection, in-depth interviews were applied, which consist of a qualitative research technique in which the interviewer seeks to explore in detail the perceptions and opinions of the participants on a given topic. Initially, contact was made with the school manager to obtain authorization and cooperation to carry out the research.

Then, the interviews were scheduled with the participating teachers, during which recorders were used to ensure the accuracy of the transcription of the answers. Participants were informed about the objectives of the research and agreed to be recorded, ensuring respect for the ethical principles of the research.

Finally, data analysis was performed using the discourse analysis technique, which consists of identifying and interpreting the meanings present in the participants' statements. This approach allows for a deeper understanding of teachers' perceptions and discourses about gamification and school inclusion, making it possible to identify patterns and trends in participants' responses.

RESULTS AND DATA ANALYSIS

After data collection, it was possible to understand teachers' perceptions about the role of gamification for school inclusion. As a result, it was possible to verify that most teachers emphasized that gamification is a promising tool to promote school inclusion of students with disabilities. The professors highlighted that gamification provides a more dynamic and motivating learning environment, capable of actively engaging students in their educational activities.

> Gamification really transforms the classroom into a more engaging environment. I notice that students with disabilities feel more motivated to participate in activities and interact with their classmates (E2).
>
> Gamification is an excellent strategy for school inclusion. I have observed that students with disabilities are able to follow the content better when it is presented in a playful and interactive way (E5).
>
> For students with disabilities, gamification makes all the difference. They feel more included and have the opportunity to develop their skills in a more natural way, without feeling overwhelmed (E10).

The analysis of teachers' perceptions of the role of gamification in school inclusion reveals a positive and encouraging view on the part of the participating teachers. Most teachers emphasized that gamification is a promising tool to promote the inclusion of students with disabilities in the school environment. This suggests a recognition of gamification as an effective strategy to make the learning process more accessible and engaging for this specific audience.

The teachers' reports highlight the ability of gamification to transform the classroom into a more dynamic and motivating environment. They note that students with disabilities are more engaged and participative when exposed to gamified educational activities. This insight underscores the importance of innovative and interactive approaches to meeting individual student needs and creating an inclusive environment that encourages learning.

Teachers recognize that gamification provides an opportunity for students with disabilities to develop their skills in a more natural way without feeling overwhelmed. This aspect suggests that gamification not only facilitates the inclusion of these students, but also contributes to the development of their self-esteem and confidence, promoting a more active and meaningful participation in the educational process. This analysis highlights the importance of considering gamification as a valuable strategy in the search for school inclusion and in strengthening the educational experience of all students, regardless of their abilities or limitations.

In addition, the teachers pointed out that the playful elements present in gamification can make the learning process more accessible and attractive for all students, regardless of their abilities or limitations.

Gamification really has the power to make learning more accessible and interesting for all learners. I notice that, with playful elements incorporated into the activities, students feel more motivated and engaged, which facilitates the teaching and learning process (E7).

The playful elements of gamification provide a more inclusive learning experience. It is impressive to see how students, regardless of their abilities or limitations, get involved and actively participate in activities when they are presented in a more dynamic and fun way (E12).

The reports highlight teachers' positive perception of the use of gamification as a strategy to make learning more accessible and attractive for all students, including those with disabilities. By emphasizing the playful elements present in gamification, teachers recognize that such elements can increase students' interest in educational activities, making the learning environment more engaging and stimulating.

The observation that students feel more motivated and engaged when exposed to playful elements reinforces the effectiveness of gamification in promoting the active participation of students in the teaching and learning process. This additional motivation can contribute significantly to the inclusion of students with disabilities, allowing them to participate in school activities in a more active and satisfying manner.

Thus, the finding that the playful elements of gamification provide a more inclusive learning experience underscores the importance of this strategy to create a school environment that values diversity and meets the individual needs of all students. By offering a more dynamic and fun approach, gamification can help overcome learning barriers and promote equal educational opportunities for all students, regardless of their abilities or limitations.

Teachers also emphasized that gamification allows for greater personalization of teaching, making it possible to adapt activities according to the individual needs of each student, which contributes to a more inclusive and student-centered education.

Personalization of teaching is a crucial aspect of gamification, as highlighted by the teachers interviewed. By adapting the activities according to the individual needs of each student, this approach allows all students to feel included and cared for in their learning process (E3).

Another point highlighted by teachers is the ability of gamification to promote student-centered education. With this strategy, students have the opportunity to learn according to their own pace and style, which favors a more meaningful and rewarding learning experience for each of them (E9).

Teachers recognize gamification as a strategy that enables greater personalization of teaching. This personalization is seen as crucial to meeting the individual needs of each student, which is key to promoting a more inclusive education. By adapting activities according to the characteristics and abilities of each student, gamification creates a learning environment where everyone feels included and valued, contributing to their academic and personal development.

Gamification promotes student-centered education. This approach puts the learner at the center of the learning process, allowing them to learn at their own pace and style. This individualization of learning is seen as a way to provide a more meaningful and rewarding experience for students, as it allows them to explore their interests and develop their skills more autonomously. Thus, gamification is recognized as a tool that not only makes teaching more personalized, but also more student-centered, contributing to a more effective and satisfying education.

FINAL THOUGHTS

In view of the analysis of teachers' perceptions about the role of gamification in school inclusion, it becomes evident that this approach is widely recognized as a promising tool to promote the participation and engagement of students, especially those with disabilities. The finding that gamification transforms the learning environment into a dynamic and motivating space reinforces its relevance in promoting a more inclusive and student-centered education.

Teachers' reports highlight not only the effectiveness of gamification in stimulating active student participation, but also its ability to personalize teaching according to each student's individual needs. This personalization is essential to ensure that all students feel valued and included in the educational process, thereby fostering a more meaningful and rewarding learning experience for each student.

In addition, the observation that the playful elements of gamification make learning more accessible and interesting for all students underscores its importance in overcoming learning barriers and promoting equal educational opportunities.

Therefore, by recognizing gamification as an effective strategy to make teaching more personalized, student-centered, and inclusive, teachers corroborate its importance in the pursuit of an education that meets the individual needs of all students, regardless of their abilities or limitations. Thus, gamification not only transforms the classroom into a more engaging environment but also contributes significantly to the academic and personal development of each student, promoting a more effective and satisfying education for all.

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