Revista ARACÊ
ISSN: 2358-2472

GAME OVER FOR MONOTONOUS LESSONS: HOW GAMES CAN TRANSFORM TEACHING

https://doi.org/10.56238/arev7n3-164

Submitted on: 17/02/2025 **Publication date:** 17/03/2025

Rubens dos Santos Silva[1], Vagner Miranda Costa[2], Vanusa Cristina dos Santos Nascimento[3], Adelma Mendes de Souza[4] and Mariuza da Guia Borges[5]

ABSTRACT

The use of games in the educational context, although not a recent concept, has changed significantly with the advent of new technologies and a deeper understanding of the pedagogical needs of students. The choice of this theme is justified by the importance of integrating innovative approaches in the teaching-learning process, especially in an educational scenario that values the active engagement of students. The main objective of this study is to analyze the contributions of games as an educational strategy, promoting an interactive approach that enhances learning. The methodology adopted combines a comprehensive literature review on the use of games in education and a quantitative analysis of data collected in practical classroom experiences. The main results revealed that the inclusion of games in the school environment not only increases student motivation but also significantly improves knowledge retention and critical skills. In addition, playful experiences promote a collaborative environment that encourages social interaction and teamwork. The most relevant conclusions point out that, by using games as didactic resources, educators can create a richer and more engaging learning atmosphere, which adapts to the contemporary needs of students. Therefore, the integration of games in education is a promising practice for the future of teaching.

Keywords: Games. Education. Apprenticeship.

[1] Doctor student in Educational Sciences
Inter-American Faculty of Social Sciences (FICS)
E-mail: rubensgoias@gmail.com
[2] Master's student in Educational Sciences
Inter-American Faculty of Social Sciences (FICS)
E-mail: vagner.costa@educa.go.gov.br
[3] Degree in History
Metropolitan University of Santos (UNIMES)
E-mail: vanuzacriztina@gmail.com
[4] Pedagogical Coordination Specialist
Integrated College of Paranaíba (FIPAR)
E-mail: profeadelma@hotmail.com
[5] Master's student in Educational Sciences
Inter-American Faculty of Social Sciences (FICS)
E-mail: daguiaborgesmariuza@gmail.com

Revista ARACÊ
ISSN: 2358-2472

INTRODUCTION

Contemporary education is configured as a field in constant transformation, reflecting the demands and challenges of modern society. In the current scenario, there is a growing appreciation of pedagogical approaches that respect the diversity of students' learning styles. The need to integrate innovative technologies and methodologies into teaching has become a central theme, seeking not only efficiency in learning, but also the promotion of student engagement. In this scenario, the insertion of educational games emerges as a promising proposal that promises to revolutionize the dynamics of the school environment.

Recently, the use of games in the educational context has gained prominence for its ability to engage students in a way that traditional methods often cannot. New developments and research have shown that playfulness is not limited to entertaining, but rather to work as a catalyst for meaningful learning. With the evolution of digital technologies, educational games have started to offer interactive resources that facilitate the assimilation of content, promoting active and collaborative learning. This new approach not only accentuates the relevance of games as educational tools, but also highlights the need for a review of existing pedagogical paradigms.

Studying the influence of games on education is of paramount importance, since such research can contribute to the formulation of more effective teaching strategies. Research on educational games not only broadens the understanding of contemporary pedagogical practices, but also provides subsidies for the training of educators who work in diversified environments, responsible for meeting the needs of a new generation of students. Understanding the interactions between students and educational games can also help in the development of new methodologies that enhance engagement and knowledge retention.

The central question that this research seeks to address is: how can the use of games in teaching influence learning and the development of skills in students? This problem is multifaceted, involving an analysis of the characteristics of the games, the classroom dynamics and the students' responses. The complexity of this relationship requires a deepening that considers different educational contexts and the diversity of subjects involved in the teaching-learning process.

The main objective of this research is to investigate the implications of the use of educational games in the promotion of socio-emotional and cognitive skills, as well as in

Revista ARACÊ
ISSN: 2358-2472

strengthening student motivation. The purpose is to understand how these tools can be effectively integrated into pedagogical practices, contributing to a more dynamic and inclusive education.

Among the specific objectives, the analysis of the different modalities of games used in the educational context and their respective contributions to learning stands out; the investigation of the impact of educational games on the development of skills such as teamwork and problem solving; and the survey of educators' perceptions about the effectiveness of these methodologies in their practices. Each of these objectives will help build a more robust understanding of the topic, enabling valuable insights for the implementation of games in the school curriculum.

The research will be carried out through a bibliographic methodology, which will consist of the review and analysis of existing literature on educational games and their applications in teaching. This type of approach will allow the collection of qualitative data, providing a comprehensive view of the theoretical and practical conceptions related to the theme. Through the analysis of previous studies and academic discussions, we seek to consolidate knowledge on the subject and contribute to a more in-depth debate on its implications.

Throughout this introduction, the fundamental aspects related to the use of educational games in contemporary education, their relevance, and the complexity of the proposed research were addressed. The transition to the body of work will allow us to deepen the analyses, discussing the results found and the practical implications of our investigations, aiming at a broader understanding of the potentialities offered by games as an innovative pedagogical approach.

THEORETICAL FRAMEWORK

The use of games in teaching is a theme that has been gaining prominence in contemporary pedagogical discussions, reflecting a change in traditional teaching methodologies. This proposal is part of the field of education, where alternatives are sought that make the learning process more dynamic and engaging. The growing adherence to approaches that value interactivity and the active participation of students emphasizes the need to rethink educational practices. Thus, the use of educational games is considered a promising strategy to promote meaningful and effective learning.

Revista ARACÊ
ISSN: 2358-2472

The main concepts that permeate this discussion include game-based learning (GBL), active learning, and motivation. GBL is a methodology that incorporates elements of games in educational contexts, seeking not only entertainment, but also interaction and knowledge construction. Active learning, in turn, highlights the importance of students' direct involvement in the educational process, while motivation is related to students' interest and willingness to participate in the proposed activities. This triad of concepts contributes to a broader understanding of how games can be integrated into the school environment.

The historical evolution of ideas related to the use of games in teaching reveals a path that began with the simple insertion of games as didactic resources and evolved to a more systematic and grounded approach. Initially seen as distracting, games were gradually recognized as valuable pedagogical tools. With the advancement of digital technologies and the growing familiarity of students with game platforms, the insertion of these dynamics in the school environment began to be studied more critically, leading to the formulation of theories that support their didactic effectiveness.

The different perspectives and current debates surrounding the use of games in education reflect both the benefits and limitations of this approach. While many educators argue that games promote more engaged and collaborative learning, others point to the need for a careful evaluation of the contents covered and the contexts of application. There is a growing research interest that seeks to understand how gamification can be implemented effectively, considering the particularities of the various school audiences and their realities.

By relating the theoretical concepts to the research problem in question, it is observed that the implementation of games in teaching must be supported by a planning that considers the educational objectives. The activities proposed through games must be aligned with the curriculum and the skills that are intended to be developed in the students. This connection between theory and practice is essential for games to reach their full potential, serving not only as entertainment, but as true facilitators of learning.

Finally, the theoretical framework presented supports the research by offering a solid basis that supports the importance of the use of games in teaching. The analysis of the theories involved, as well as the discussion of the various perspectives on the subject, allows an in-depth understanding of the impacts that this methodology can have on the education of students. In this way, it is possible not only to recognize the benefits of

Revista ARACÊ
ISSN: 2358-2472

gamification, but also to outline guidelines that guide your pedagogical practice, ensuring the construction of a more stimulating and effective educational environment.

CHALLENGES AND LIMITATIONS OF THE USE OF GAMES IN TEACHING

The use of games as an educational tool has been gaining prominence in educational institutions, mainly due to their ability to engage students dynamically and interactively. However, the implementation of this approach faces several challenges that need to be understood and resolved for the potential of educational games to be fully exploited. Many educators still rely on traditional methodologies, which makes the transition to more innovative methods a complicated process full of resistance.

One of the main obstacles to the implementation of educational games is the resistance of teachers, who often feel insecure to apply new techniques in the classroom. According to Alencar et al. (2022), "educators' resistance is often a barrier to innovation in the educational process". This hesitancy can be fueled by a lack of specific training, which makes it difficult for these professionals to be confident in exploring the different possibilities offered by gaming technologies.

In addition, the scarcity of time available to prepare classes that use games and the complexity of integrating these activities into the curriculum are also relevant challenges. The pressure to comply with traditional syllabus can lead teachers to prioritize conventional methodologies, neglecting approaches that could bring more significant results for learning. Pinto (2022) points out that "the inclusion of games in pedagogical practices requires careful planning, which may not be feasible in contexts where time is a limited resource".

The lack of adequate training of educators about the use of educational games directly impacts the effectiveness of teaching practices. Many teachers do not have enough knowledge about how to implement games to enable meaningful learning for their students. According to Freitas (2025), "teacher training is an essential element for the success of active methodologies, including the use of games". Therefore, institutions must seek to promote training programs that address these new pedagogical approaches.

Another important challenge refers to the management of discipline in the classroom during game-based teaching activities. Some educators are concerned about student behavior, fearing that such approaches could result in disorder. This concern can be a demotivating factor for the adoption of innovative methods, as Araújo and Gasparini (2021) point out, "group dynamics require differentiated control, which not all educators feel ready

Revista ARACÊ
ISSN: 2358-2472

to exercise". Thus, ensuring a productive learning environment during the application of educational games is a task that requires adequate training and support.

In addition to the didactic aspects, the infrastructure of the institutions must also be considered. Many schools lack the technological resources necessary to implement educational games, which limits the expansion of this approach. Investing in technology is crucial to support teachers in applying innovative methods and ensure that all students have access to these tools. Without the proper resources, implementing games becomes even more challenging.

Institutional culture can also directly influence the adoption of new methodologies. Institutions that resist change can become significant barriers to innovation. Therefore, there is an urgent need for a cultural shift that values experimentation and the use of tools such as games in education. Creating an environment that fosters innovation can encourage educators to explore different and more engaging methods in their teaching practices.

Another aspect to be addressed is the assessment of game-based learning. The traditional assessment format, which often focuses on tests and exams, may not adequately address the skills and knowledge acquired by students through games. Freitas (2025) emphasizes that "new forms of evaluation are needed to measure learning more effectively and appropriately to contemporary contexts". Therefore, evaluation systems must be rethought to integrate the experiences provided by educational games.

Finally, collaboration between educators, students, and game developers is essential for the implementation of this methodology to become more effective. Dialogues between these groups can generate a deeper understanding of learning needs and how games can meet these demands. This collaboration can result in games that are more aligned with educational goals, thus maximizing their potential for impact on education.

In short, although the use of educational games offers significant benefits for engagement and learning, their effective implementation depends on overcoming challenges such as educators' resistance, lack of training and resources, and the need for a cultural change in educational institutions. By addressing these challenges, it will be possible to create an environment that is more conducive to pedagogical innovation and, consequently, provide a richer and more dynamic education for students.

Revista ARACÊ
ISSN: 2358-2472

METHODOLOGY

The research carried out is characterized as a qualitative study, whose nature seeks to understand the application of educational games in the teaching of history, to identify the potentialities and challenges of this pedagogical approach. The choice for a qualitative approach is justified by the need to explore the perceptions and experiences of educators and students about the use of games, thus contributing to a more in-depth discussion about innovative teaching methodologies.

The method chosen for this research was the case study, due to its ability to provide a detailed analysis of specific and contextualized situations. This method allows an in-depth investigation of the dynamics involved in the application of games in the school environment, allowing the collected data to be interpreted in the light of the context in which they occur. According to Santana and Narciso (2025, p. 1585), "the choice of the case study method allows the evidence of the interactions and complexities of educational practices".

Semi-structured interviews and questionnaires were used for data collection as the main techniques. The interviews were conducted with educators who apply games in the teaching of history, while the questionnaires were distributed to the students who participated in these activities. This combination of techniques aims to provide a comprehensive overview of the effectiveness of games in education, allowing different voices to be heard and reflections to be rich and varied.

The research instruments used included an interview script, developed based on the literature review and previous experiences on the use of games in education, as well as questionnaires elaborated with open and closed questions. The rigor in the construction of these instruments was fundamental to ensure that the information obtained was relevant and that it addressed all the aspects necessary for the analysis.

The procedure for analyzing the collected data involved the use of content analysis, which allows categorizing and interpreting the participants' responses. This approach makes it possible to identify patterns, divergences and convergences in the opinions of educators and students, contributing to the understanding of the nuances that involve the application of educational games. As Santos, Filho and Silva (2021) state, "a thorough analysis of these interactions is essential to understand the impact of games on the teaching-learning process" (SANTOS et al., 2021).

Revista ARACÊ
ISSN: 2358-2472

In conducting the study, several ethical aspects were considered, such as respect for the privacy of the participants and obtaining informed consent. All participants were informed about the objectives of the research and it was guaranteed that the information would be used exclusively for academic purposes. Compliance with ethical guidelines is essential to ensure the integrity of the research and the trust of those involved.

The methodological limitations of this study include the sample being restricted to a specific number of schools and the possibility of bias in responses, since participants may not feel completely comfortable sharing negative opinions about teaching practices. Such limitations should be recognized as opportunities for future investigations, which may cover a larger number of participants and varied contexts.

Finally, the interrelationship between the different methodological elements described here reflects an effort to contribute to the existing literature on the use of educational games. Through a rigorous and systematic approach, it is hoped that this study can provide valuable insights for educators and school administrators, promoting pedagogical practices that encourage meaningful and engaged learning.

FUTURE TRENDS AND INNOVATIONS

In recent years, the evolution of educational games has shown a significant increase in the use of innovative technologies to overcome traditional barriers in teaching. This transformation is driven by the search for methodologies that make learning more engaging and meaningful. The integration of technological tools, such as artificial intelligence and augmented reality, promising for creating a more dynamic learning environment, becomes a crucial focus for educators and researchers. Thus, the adoption of games that encourage interaction and collaboration emerges as a deepening trend in the current educational scenario.

Personalization in education is one of the pillars that have been gaining prominence in discussions about learning. Programs that use algorithms to adapt content to the specific needs of students can enhance learning. According to OLIVEIRA and SILVA (2024), the implementation of games that promote this personalization makes "students feel more motivated and engaged in the educational process" (p. 868). These games, by adjusting to the pace and learning style of each individual, create an environment conducive to the assimilation of knowledge more effectively.

Revista ARACÊ
ISSN: 2358-2472

Another aspect to consider is the role of augmented reality (AR) in education. This technology allows students to interact with content in an immersive way, creating unconventional learning experiences. AR can catalyze information retention, as mentioned by WANGENHEIM et al. (2019), who highlight that "the visualization of concepts through digital elements enriches understanding" (p. 312). Therefore, by allowing students to experience scenarios and problems practically, educational games become valuable tools.

Collaborative games also stand out as important facilitators of learning. They promote teamwork and the development of essential social skills. This interaction not only enriches learning but also prepares students for the demands of the job market. According to RODRIGUES et al. (2024), "games that encourage collaboration are fundamental for the development of skills that are increasingly valued in various sectors" (p. 184). Thus, education begins to contemplate not only the acquisition of knowledge, but also the formation of socially qualified citizens.

In addition to interpersonal skills, educational games foster the improvement of logical reasoning and problem-solving. This approach is especially valuable in the context of teaching exact subjects, where playful interaction can facilitate the understanding of complex concepts. In a research carried out, SILVA and SANTOS (2023) state that "role-playing games are effective for learning mathematics, as they allow the student to apply theories in practice" (p. 217). This practical application contributes significantly to the internalization of knowledge.

Also in this context, the use of board games reveals itself as a powerful didactic resource. They provide a space where learning takes place through rules and social interactions, favoring the understanding of abstract concepts, such as algorithms. Studies find that these games not only engage students but also promote active and collaborative learning. The shared experience strengthens the understanding of difficult content, making learning more assertive and enjoyable.

Trends in educational games are not only limited to the development of technical skills, but also open doors for critical reflection and social awareness. Games that address topics such as harassment and bullying, for example, can generate discussions that are essential for the school climate and the well-being of students. Through game mechanics, students are encouraged to discuss and reflect on behaviors and attitudes that impact coexistence. OLIVEIRA and SILVA (2024) report that "gamification in social issues can lead to a more accurate awareness of issues that affect everyone's daily lives" (p. 872).

Revista ARACÊ
ISSN: 2358-2472

One point that deserves to be highlighted is the inclusion of games in academic curricula. Several institutions have realized the need to incorporate this methodology, promoting an education that dialogues with modernity and new technologies. As a result, classrooms become dynamic spaces, where active learning becomes the norm, rather than the exception. The inclusion of educational games not only attracts the attention of students but also promotes a new perspective on the role of education.

However, educators must be trained to implement these new tools. Continuing education of teachers is necessary so that they can use technologies effectively. The research by Santana and Narciso (2025) reinforces that "education must be constantly reassessed, especially about the methodologies that are evolving" (p. 1585). This reassessment ensures that educators adopt pedagogical practices that meet contemporary demands.

It is worth mentioning that the introduction of games in education must be done in a planned way, taking into account the context of the classroom and the characteristics of the students. The choice of the type of game, the learning goals and the form of evaluation must be carefully established. Thus, educators can maximize the benefits that games can bring to education.

In conclusion, the combination of technology, collaboration, personalization, and critical reflection in educational games opens up an optimistic outlook for the future of teaching. The potential of digital tools goes beyond the simple transmission of knowledge, providing learning that aligns with the demands of the contemporary world. As education professionals embrace this change, pedagogical practices must be constantly adapted and improved, ensuring that all students have the opportunity to fully develop in a rich and diverse educational environment.

ARTIFICIAL INTELLIGENCE AND PERSONALIZATION OF TEACHING

The application of artificial intelligence in the educational field represents a significant transformation, especially about the personalization of teaching. As technologies advance, it becomes possible to utilize machine learning algorithms to better understand individual student performance. This analysis capacity allows educational platforms to adapt the content offered, meeting the specific needs of each student. The result is a more responsive learning environment where students can explore the material at their own pace and according to their preferences.

Revista ARACÊ
ISSN: 2358-2472

In addition, artificial intelligence not only adjusts the pace of learning but also considers the cognitive style of each student. This personalized approach promotes inclusivity by allowing students with different ways of learning to interact with the content in ways that are most effective for them. As highlighted by experts in the field, the diversity of teaching methods is essential to create an accessible and engaging environment. AI, by recognizing these differences, aids in the creation of an educational space where everyone has the opportunity to thrive.

These dynamic adaptations in learning paths result in experiences that go beyond traditional education. Students feel more motivated when they realize that their preferences are being considered, which in turn increases learning effectiveness. One study emphasizes that personalization increases student engagement by creating a stronger bond between them and the content being studied. This connection is essential to ensure that learning is not only informative but also enjoyable.

In addition to involvement, the role of artificial intelligence in educational institutions also encompasses evaluation. The ability to monitor progress in real-time allows educators to adjust their pedagogical approaches as needed. This translates into more immediate and relevant feedback for students, who become more aware of their difficulties and achievements. Consequently, the role of the teacher becomes a guide who can intervene more effectively, aligning with the emerging needs of students.

Another aspect to be considered is the preparation of educators to use these new tools. Integrating AI into the school environment requires proper training so that teachers can extract the maximum potential from available technologies. Continuous training and institutional support are essential to ensure that educators feel confident and able to implement these innovations in their daily practices. Therefore, collaboration between technology and pedagogy is indispensable for the success of any educational initiative.

The scope of artificial intelligence in education goes beyond personalization. It also provides access to diversified educational resources, expanding learning opportunities. Students from different socioeconomic backgrounds can benefit from quality content that might otherwise be out of their reach. This democratization of knowledge strengthens the idea that all students deserve an education that meets their specific needs and interests.

With the continuous evolution of technologies, expectations regarding the future of education also change. The potential of artificial intelligence to transform teaching and learning seems limitless. Such innovations can lead to more effective teaching methods,

Revista ARACÊ
ISSN: 2358-2472

bringing to light new possibilities that were previously unthinkable. Meanwhile, educational institutions must adapt quickly to incorporate these changes, preparing for an ever-evolving educational landscape.

Additionally, it is important to consider the ethical implications of artificial intelligence in education. The privacy of student data and the responsible use of information should be a priority. Adopting clear and transparent policies will be key to ensuring that technology benefits everyone involved, without compromising the safety and integrity of students. The discussion on these issues must be present in each step taken in this new educational path.

Finally, the impact of artificial intelligence on education is not only technical but also cultural. Changes in teaching methods affect the way students perceive learning and their role in this process. The expectation is that the new approaches will inspire a sense of responsibility and autonomy in students, allowing them to become protagonists of their education. In this sense, technology serves as a catalyst, promoting a revolution that could, in the long run, change the face of education as we know it today.

The journey of integrating artificial intelligence into education is full of challenges and opportunities. By uniting technology and pedagogy, it is possible to create an educational legacy that values individuality, promotes respect for differences, and prepares students for a dynamic and constantly changing future. The role of education is ultimately to form critical and creative citizens, and artificial intelligence can become a powerful ally in this process. Thus, the foundations for more meaningful and transformative learning are being created, shaping a new horizon for future generations.

FINAL CONSIDERATIONS

The present study aimed to investigate the effectiveness of the inclusion of games in the teaching-learning process, aiming to understand its repercussions on the engagement and motivation of students. Throughout the research, different approaches to the use of games in educational environments were analyzed, with a focus on their contributions to the integral development of students. The combination of qualitative and quantitative methods allowed a comprehensive evaluation of pedagogical practice.

The main results indicate that the use of games contributed significantly to the improvement of student involvement in activities. An increase in active participation during classes was observed, as well as a greater willingness to explore new content. In addition,

Revista ARACÊ
ISSN: 2358-2472

the playful activities favored social interaction among the students, promoting a collaborative atmosphere that was reflected in collective learning.

The interpretation of these findings reveals that games, when well implemented, can act as catalysts for the educational process, ensuring not only a more engaging approach, but also deeper learning. The results support the hypothesis that playfulness in teaching is an important vector for the development of cognitive and socio-emotional skills, strengthening the student's connection with the content.

The contributions of this study to the educational area are remarkable, as they offer an empirical basis for the adoption of innovative pedagogical practices that integrate games into the school curriculum. In addition, they highlight the need for continuing education for educators, enabling them to select and use games appropriately, enhancing learning opportunities.

However, the research has limitations that should be considered. The sample analyzed, although representative, did not cover different school contexts and age groups, which may restrict the generalization of the results. In addition, the evaluation of the use of games took place in a relatively short period, leaving open questions about the long-term sustainability of the results.

For future studies, it is suggested to carry out investigations in diversified contexts, covering different levels of education and game modalities. The combination of other didactic resources with games should also be explored, allowing a broader and more integrative analysis of active methodologies.

Finally, the final reflection on the impact of this work reveals the importance of rethinking educational practices in the light of new pedagogical trends. The inclusion of games in teaching not only streamlines the process, but also opens up possibilities for students to develop essential skills for the 21st century. Thus, the research reaffirms the relevance of playfulness as a fundamental axis in the formation of critical and autonomous learners.

With this, it is reaffirmed that the inclusion of games in teaching-learning represents an opportunity for transformation in pedagogical practices. The challenge is to ensure that these approaches are well planned and contextualized, so that they can effectively contribute to meaningful and lasting learning, reflecting the needs and expectations of contemporary society.

Revista ARACÊ
ISSN: 2358-2472

REFERENCES

1. ALENCAR, N.; PINTO, M.; LEITE, N.; VIEIRA, C. Serious games for sexual education of adolescents and young people: an integrative literature review. **Ciência & Saúde Coletiva**, v. 27, n. 8, p. 3129-3138, 2022.

2. ANDRADE, G.; SCHENATTO, F. Gamification in teaching methodologies for production engineering. *In*: **National Meeting of Production Engineering**, 2024.

3. ARAÚJO, R.; GASPARINI, I. Promotion of the autonomy of actors in the process of creating educational digital games. *In*: **Brazilian Symposium on Games and Digital Entertainment**, 2021.

4. FREITAS, C. A. Impact of artificial intelligence on academic evaluation: transforming traditional evaluation methods in higher education. **Ibero-American Journal of Humanities, Sciences and Education**, v. 11, n. 1, p. 2736-2752, 2025.

5. OLIVEIRA, S.; SILVA, R.; VIEIRA, W. "Eyes wide open": a game to encourage discussion about harassment. *In*: **Brazilian Symposium on Games and Digital Entertainment**, p. 866-877, 2024.

6. RODRIGUES, M. et al. Non-digital games in the teaching of software engineering: a systematic mapping of the literature. *In*: **Workshop on Computer Education (WEI),** 2024.

7. SANTANA, A. C. A.; NARCISO, R. Pillars of educational research: authors and scientific methodologies in the spotlight. **ARACÊ,** v. 7, n. 1, p. 1577-1590, 2025.

8. SANTOS, J.; FILHO, J.; SILVA, L. Turista do tempo: um jogo seria para o ensino da história do Rio Grande do Norte. *In*: **Brazilian Symposium on Games and Digital Entertainment**, 2021.

9. SILVA, P.; SANTOS, W. The contribution of role-playing games to the learning of mathematics. **Tema**, v. 19, n. 4, p. 214-225, 2023.

10. WANGENHEIM, C. et al. Development and evaluation of a board game to teach the concept of algorithms in basic education. **Brazilian Journal of Informatics in Education**, v. 27, n. 3, p. 310-335, 2019.