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Games and Gamification

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The publication of a special issue on Games and Gamification by *Revista Brasileira de Linguística Aplicada* (RBLA – *The Brazilian Journal of Applied Linguistics*) recognizes the role of games and gamification in the discussions on language and language learning/teaching. It not only invites researchers to report on their most recent findings in the area, but also legitimizes its relevance and value in furthering studies in Applied Linguistics in Brazil.

Games and Gamification

The relationship between play and learning is not new. Historically, play has been recognized as a mediator of learning processes, including all phases of early childhood education, simulators for training, among other things. In Homo Ludens – a seminal work published in 1938 on playfulness in its various forms in cultures of all places and across time, the Dutch cultural historian Johan Huizinga argues that the activity of playing, or a playful attitude, is an archetypal experience that extends beyond human

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experience considering that even animals play. The author characterizes play as

> a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy and the consciousness that it is "different" from "ordinary life" (HUIZINGA, 1949, p. 28).

Despite the scope of his work, Huizinga (1949) does not draw a clear-cut distinction between 'play' or 'playful attitude' and 'game'. Salen and Zimmerman (2004), reflecting on the complex relationship between the two terms, say that it all hinges on viewpoint: play can be a component of game and game can be a subset of play. As Farber (2015) reminds us, defining game is a far more difficult task than it seems.

Salen and Zimmerman (2004, p. 80) revisit the concept and conclude that "a game is a **system** in which players engage in an artificial conflict, defined by rules that results in a quantifiable outcome" (emphasis added). In the authors' words:

> As systems, games provide **contexts** for **interaction**, which can be **spaces**, **objects**, and **behaviors** that players **explore**, **manipulate**, and **inhabit**.
> [...]
> A system is a **set of things** that affect one another within an environment to form a larger pattern that is different from any of the **individual parts**(SALEN; ZIMMERMAN, 2004, p. 50; emphasis added).

This concept endorses Farber's view (2015, p. 33), for whom game mechanics is developed through action verbs – in a game we are always doing something, solving a problem, which has consequences for the game system or for other players. By "interacting" with the "contexts" of the game, we are "inhabiting" the "spaces", "exploring" various "behaviors", "manipulating" the "objects", which are some of those "individual parts" that make up the "set of things" which is the game system.

These "individual parts" or "set of things" that make up the game system have been given different names in the literature – such as elements, principles, ideas, dynamics, mechanics, components – either

used interchangeably or referring to different things. Despite the lack of consensus regarding these constructs, such a systemic and functionalist perception of games can be used to explain the emergence of a practice that has become common, namely the "gamification of learning."

The term gamification was created to refer to

> the use of game-based mechanics and game-based design elements in non-game settings to engage users and encourage achievement of desired outcomes through motivation of users (REINERS; WOOD; GREGORY; TERÄS, 2015, p. 3061).

Although used for the first time around 2002 by Nick Pelling in consultancy aimed at creating game-like interfaces for electronic devices, the term became prominent in 2010 only (DETERDING; DIXON; KHALED; NACKE, 2011; WERBACH; HUNTER, 2012), having gained academic significance approximately six years ago (NACKE; DETERDING, 2017). Such recency calls for more research to help us develop our understanding of the area, justifying the choice of the theme for this special issue by *Revista Brasileira de Linguística Aplicada*.

Games/Gamification and Language Learning

Language learning through games is a well-known phenomenon recognized by researchers and teacher educators who see playing as a natural learning process that can lead to social, cognitive and even physical development, as is the case with children.

The use of games in language teaching and learning is not new. It gained momentum with the advent of the Internet, which enabled the availability of different types of games for – and ways to use them in – the language classroom (REINDERS, 2017). Likewise, technological advances have also favored the emergence of digital (entertainment or educational) games, which have been gaining a foothold in the language classroom. The recognition of the potential of digital games in this context has been widely discussed in the area, and its possible benefits, as pointed out by Godwin-Jones (2014), will depend on the affordances of each type of game. The researcher also argues that, with the vast difference in scope and purposes of games, it is possible to derive positive language learning experiences if games are properly suited to the purposes of a particular group of users.

Interest in games, mainly by teenagers and young adults, and the affordances provided by entertainment and educational games have led an increasing number of researchers to investigate the potential of these experiences for language learning. Whitton (2014) presents eight perspectives for aligning games and learning. The author emphasizes that there may be other ways in which the intersection between games and learning can be interpreted. We have sought to select a few themes that either have been or that can be explored from these perspectives.

1. **Learning with entertainment games:** the use of explicit re-purposing of games that were originally designed for pure entertainment in an educational setting.

It is a consensus that electronic and digital games can offer an immersive environment in which extensive use is made of the target language. Typically, to progress in a game, players often make active use of that language and will oftentimes encounter situations in which various language functions will be needed, such as asking for help, giving explanations, coordinating activities, reporting actions, or negotiating solutions. Players interact verbally with game objects or other players (ZHENG; NEWGARDEN; YOUNG, 2012; GODWIN-JONES, 2014).

Moreover, video games (mobile, computer, online, etc.) frequently offer narratives that can lead to a personal and immersive experience. Game narratives may be of interest in Narrative Research, a prominent area of investigation in Applied Linguistics. In addition to the interactions during games, the genres derived from the entertainment games experience, such as walkthroughs and game commentaries, as well as game lingo, are themes that can be explored in this perspective.

Teachers and researchers interested in planning gamification processes should probably consider becoming players themselves, as suggested by Gee (2007). Although this is not a requirement, it could certainly provide good insights into the workings of a game. These professionals could, for instance, analyze what elements make games what they are. This in turn would lead them to understand what gamification choices they can make for their own practices. Gee's suggestion to learn about games by playing them on a console also applies to games played on mobile devices.

2. **Learning with educational games:** The use of games developed with the express purpose of an educational setting.

Educational games or "serious games" can be customized to suit learning and curricular needs. These types of games have been used by teachers in the classroom and can be downloaded by learners interested in autonomously working to improve their language skills.

For language learning, as both computer games and games on mobile platforms are typically created for the linguistic development of the user, some themes that can contribute to the field include: investigating the concepts of language and language learning that underpin the activities proposed by these games, assessing their efficiency in favoring the development of the knowledge and skills to which they are intended, understanding their appropriation for learning in informal contexts, among other things.

Just as serious games appropriate game elements, teachers can appropriate these elements to gamify their learning objects. A recent study by Leffa (2020) underscores a tendency to stick to the use of points, badges and leaderboards (PBL) as gamification resources in the area of language learning, which does not seem sufficient to engage learners with the proposed tasks. Leffa further points out that even if the process of gamifying the learning objects is challenging, it should not be overlooked. He suggests that gamification scholars include in their agendas investigations that broaden their understanding of this process, "looking for attributes and principles in games that are more relevant to learning than the application of PBLs alone" (LEFFA, 2020, p. 12) (our translation).

3. **Learning inspired by games:** using games as a context for learning but not learning about the game directly, for example using chess as a stimulus for designing algorithms.

The playful experience brought on by games has the potential to give rise to learning that goes beyond the game itself. Through gameplay, players can be motivated to seek knowledge that goes beyond their narrative.

Areas of interest could include studies investigating players' agency in seeking new knowledge and in developing new skills inspired by their

games, or exploring interdisciplinary work in learning projects developed with students and the school community, to name a few.

4. **Learning within games:** the analysis and consideration of informal learning that happens while games are played for entertainment.

Studies under this perspective are, for example, those that investigate the learning process that takes place incidentally while players are immersed in the "space of possibility" of the game, that is, "the space of all possible actions and meanings that can emerge in the course of the game" (SALEN; ZIMMERMAN, 2004, p. 14). In other words, investigations centered on unplanned or intentional learning whether in digital games or not that try to understand how it takes place.

As is the case with incidental learning, tangential learning can also serve as a topic for language research. According to Floyd and Portnow (2008), "tangential learning is not what you learn by being taught; rather, it's what you learn by being exposed to things in a context which you're already engaged in." In this respect, the purpose of the game would be to make people interested in a certain subject - the idea is that "some portion of your audience will self-educate if you can introduce them topics in a context they already find exciting and engaging" (FLOYD; PORTNOW, 2008, online).

Unlike incidental learning, the purpose of tangential learning is to intentionally encourage the development of certain knowledge and skills, without getting in the way of the fun. Such a view can inform gamification initiatives as well as studies aimed at investigating their operationalization in language learning contexts. These studies could, for example, help to maximize language learning in games played in both consoles and mobile devices.

5. **Learning about games:** taking the perspective that games are cultural artifacts and studying them as such.

Some topical issues have also gained ground in the research on games: how gender issues are addressed (for example, the representation of female characters), issues related to the accessibility afforded and even favored by the game (players with some form of disability), etc.

In addition to these themes, studies in the area of translation have explored the concept of "localization", which involves the socio-cultural and linguistic adaptation of games for the region where they will be launched or used (ANASTASIOU; SCHÄLER, 2010). Other themes aimed at investigating aspects of multimodality in games (use of verbal and non-verbal language, including colors, images, sounds, videos) can be developed in this perspective.

6. **Learning from games:** analysis of the design principles that are embedded within many games and considering how these principles could be applied to learning situations.

One area of study in this perspective that is widely recognized by researchers on games involves the analysis of learning principles in games. Gee (2005, 2007) was the most influential proponent of the idea that good games carry good learning principles in their design, influencing scholars in the field worldwide.

Other areas of study include proposing models for game development (GUNTER; KENNY; VICK, 2008), evaluating games that are available for free or not on the market (GUNTER; CAMPBELL; BRAGA; RACILAN; SOUZA, 2016), analyzing mobile game elements (RACILAN, 2019).

7. **Learning through game creation:** learning that takes place during the process of design development and creation of games.

The creation of games or the adaptation of existing games for use in different areas of knowledge has garnered the attention of a number of teachers and researchers (BARBOSA, 2016; BORGES, 2013). In foreign language learning, these types of initiatives are often used as mediators of the processes for learning the lexical-grammatical elements of the target language with the production of versions of games known to the learners, especially board games, which are relatively simple to adapt. As such initiatives are generally carried out more or less informally, there is a gap in research that explores the various aspects of this creation or adaptation through the rigors of academia.

8. **Learning with in-game communities:** understanding about the groups and communities of practice, both online and real world, which develop around games and the collaborative and supportive learning activities that take place within these groups.

Virtual communities aiming for better performance in games, mainly collaborative games such as the Massively Multiplayer Online Role-Playing Game (MMORPGs), have piqued the interest of both teenagers and young adults, leading many of them to join these communities (clans, chat rooms, discussion forums, news, etc.). These communities have become strongholds of support for players and spaces for them to communicate in virtual worlds and take advantage of opportunities for exposure and interaction in the additional language. Themes focused on this perspective include: language development through interactions in this type of community of practice, the community of players as one of the motivational elements for language learning, the role of these communities as an informal learning space, among others.

By bringing to the fore some discussions and themes for research into games and gamification, we not only pay homage to studies already developed in these two areas, but we also invite novice and experienced researchers to conduct investigations in these areas. We also hope that the invaluable contributions by the scholars who have collaborated in this special edition can expand the discussion among language teachers, educators, and researchers.

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