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Gamification: An emerging strategy for your distance learning toolbox

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Abstract

This article discusses the ideal versus the reality of teacher preparation for teaching English as a second language (TESL) in an online learning environment in the United States. Some of the difficulties include the large number of students and the limitations of the teacher to develop individualized instruction for each student. Besides these problems, the context of asynchronous teaching, in which teacher and students are not present at the same time, can also affect the success of the online environment. With the advancement of technology, it is possible to incorporate pedagogical strategies, such as gamification, to help mitigate these problems. Gamification is a strategy that uses elements of games in contexts other areas of activity. This strategy is important for online learning because it can influence motivation and maintain student interest in the topic studied. In this paper, we will discuss the structure of gamification, as well as strategies to incorporate it into online classes, particularly in TESL classes.

Keywords: Games, Gamification, preparation of TESL teachers, online learning.

Introduction

Today, it is impossible to deny the influence of digital technologies in our lives. Whether in the professional or personal field, these tools are instrumental in facilitating performance of daily activities (Kämpfen; Maurer, 2018). In fact, a Pew Research Center survey reveals that of the Americans who participated in the study, 42% believe that technology was the factor that had the biggest impact on their lives in the last five decades (Strauss, 2017). Although the reason is not clear, it is possible to speculate that the integration of technology into various areas and occupational sectors may be one of the causes. For example, with the evolution of the internet to mediate various practices such as the purchase and sale of items, access to information and communication at work, technology not only facilitated the work process, but it also transformed the way people work. That is, the rapid advancement of technologies has impacted society in the ways we communicate, work and manage our lives. This holds true in the educational field as well. Schools and other institutions use technology for a variety of purposes, such as: (a) the presentation of basic information, (b) communication between students and teachers, (c) the production of simulations and educational animations, (d) project management, work and pedagogical activities, among others. Among these technologies, it is important to highlight digital games, that have been gaining interest from students and educators for their educational and motivational potential. Although digital educational games are not a new approach, have existed since the early 1970s (Egenfeldt-Nielsen, 2007), the use of digital games can provide a unique experience for students, stimulating learning and arousing students' interest in certain topics or content (Freitas, 2006; Ke, 2008). Within this area of experimentation with games for learning, a new technology emerges: gamification. The concept of gamification has received much attention from researchers in recent years and because it is a relatively new branch of research within the broad area of Education and Technology, there are several definitions and understandings of this new strategy (Matallaoui; Hanner; Zarnekow, 2016).

However, gamification can be defined as a strategy that uses elements of the games, such as punctuation, levels, challenges, among others, and incorporates these elements into routine activities to engage the user (Johnson; Adams Becker; Road; Freeman, 2014).

However, there are a very limited number of instances in the literature on Teaching English as a Second Language that use gamification as a pedagogical approach. Besides this factor, personal observations of a TESL instructor at a university in North Carolina indicate that some disciplines, such as linguistics, contain topics that involve a great deal of repetitive activities of listening and pronunciation of sounds, that discourage students' interest in the discipline. The use of gamification in these classes may add a layer of interest to students in transforming routine activities of the course in an exciting learning experience. Thus, the purpose of this work is to examine existing studies in the areas of games and gamification, and the implementation of the strategies of gamification in the context of the preparation of teachers of TESL.

How do we get into the game world?

Both authors of this article had different experiences with games, yet a similar vision of the potential of these tools for education. For example, before entering the academic career, Author number one was a computer teacher at a private elementary school in Fortaleza, Brazil for almost two years. In a personal observation of the author, school students were excited about using educational games in the computer lab to learn or practice mathematical concepts. Although these educational games had their own rules, students created additional rules for elements of competition and time (i.e., the first to finish is the winner). These rules made the game even more interesting to them.

This inborn interest of the students in the games inspired author number one to doctoral research on learning experiences of elementary school students with online educational games at a private school in the United States (Author, 2015). Participants in the study engaged in workshops after school to play math games in the virtual world *Club Penguin* ™. The math games studied, *Pufflescape* and *BitsAndBolts*, encompass arithmetic and geometric concepts. The elements of the games were also examined for signs indicative of engagement (or disengagement) of the children while playing. Engagement in this context was examined as a state in which children participated in the activity of the game and were attentive. The results of the study show that: (1) participants demonstrated greater engagement and motivation with educational games in which content was implied, (2) the cheating strategies that are allowed in games may compromise the formal learning vision in education, and (3) the high degree of activity involving problem solving in games can creativity of children. These results suggest that future research and studies of online games should examine the needs, limitations, and desirable activities that children expect from such games to inform the design, development, and use of games in education.

Author number two's introduction to games and the idea of playing as a way of learning started not in the classroom, but in sports. Author number two practiced various styles of martial arts for many years before falling in love with Brazilian jiu-jitsu. This combat sport, which has Japanese roots, was developed in Brazil in the early 1900s. As a Brazilian jiu-jitsu expert explains, the moving human body is complex, but when two of them move in opposite directions, complexity is exponential (Frank, 2017). The more experienced athletes can reduce this complexity by reorganizing and refinement of the most efficient movements (Frank, 2017). Jiu-jitsu is a form of struggle that can be practiced safely and at great speed between specialists with little chance of injury. At the upper levels, training becomes a form of play. One can even induce fighters with similar skill levels into a state of flow (Csikszentmihalyi, 2014), in which they lose their sense of the outside world and become immersed in the immediate sphere of the practice of the game. This feeling of being totally immersed in an activity is difficult to achieve.

Since then, author number two has been looking for broader strategies in education that can emulate the state that he experienced with jiu-jitsu. That is, being able to create an experience in your class that simulates the state of flow and motivates students to practice the activities planned in the course. Thus, gamification is one such strategy that aroused his curiosity as he combines his interest in sports games and his desktop. With the increasing reliance on online education in the field of education, gamification can assist in distance learning by incorporating game elements to motivate and promote student learning. Losing yourself in a fun task can make for enjoyable and efficient learning.

Why games?

When we look at the reason for the interest in digital games, an obvious answer is in the number of people playing in these media (Davidson, 2011). Digital games, especially video games, are an industry that is growing economically and demographically. According to the Entertainment Software Association, about 60% of the US population plays video games daily (Esa, 2018). Video games are popular with young people and adults. For example, six out of ten Americans between the ages of 18 and 29 play video games often or occasionally (Brown, 2017). The number of children and teenagers who play video games is also high, with about 60% playing regularly (Rideout, Foehr, & Roberts, 2010). Consequently, the video game industry in the United States continues to grow with the number of players, generating about $36 billion in profits in 2017 (Esa, 2018).

Digital games can also bring benefits to education. Some of benefits include the use of these tools in the motivation to engage with academic content (De Freitas, 2006; Ke, 2008) as well as in stimulating the player's creativity, skill of problem solving, strategic and critical thinking (López; Cáceres, 2010; Moline, 2010; Gee, 2004; Rieber, 1996). Other authors (Bogost, 2008, Gee, 2007) suggest that players learn to read images and symbols through participation in the game. Digital games have also improved information processing as well as cognitive abilities of the player (Anderson & Bavelier, 2011). In summary, the purpose of examining and using digital games in this article is not due to their economic value, but to the educational benefits that games can provide players. According to McGonigal (2011), we must enhance the interest and energy that players devote to games and invest this potential in the service of education. One way of exploiting this potential can be through strategies such as gamification. However, before discussing what gamification is and how to apply it in the educational context, we must first examine and define games.

What are games?

The term gamification is associated with the Old English word "gamen". There are numerous definitions available for the word game and different types of games on the market. Many authors focus on the classification of games as activities these definitions are very broad, since they associate games and toys as simulated objects (Schell, 2008). According to Cassie (2016), toys and games are generally considered synonyms or elements of the same category. Although games and toys share some similarities, toys in themselves are not systems, a characteristic peculiar to games. For example, the experience of playing with a ball, a toy, is not the same as playing baseball. Baseball is a game characterized by a system with objectives, rules, players, and other components essential to form the game.

Systems can be defined as a set of elements that interact and affect each other to form a whole, which is larger and different than the individual parts (Salen & Zimmerman, 2004). Five basic components should be considered when analyze the meaning of the term system: (1) the objectives and performance measures of the player in the game ; (2) the environment, which is the space of the game itself and the restrictions stipulated by game environment; (3) the resources, which are the materials and equipment used to make the game exist and function; (4) components, which include game elements such as activities, goals and measures used to measure the performance of the player, and (5) management , which is how the game works once all of the elements are present (Chapman, 1979).

The game can be understood as a system in which the player faces a conflict characterized by a series of rules that result in a quantifiable result (Salen & Zimmerman, 2004). In considering this definition, artificial conflict can be seen as a problem inserted in the context of the game by the creator of the game. Usually, games are characterized by activities that involve problem solving similar to what we find in real life (Koster, 2005; Schell, 2008). For example, digital games such as SimCity simulate common problems that a mayor of a city would find in administration and construction. However, it is important to note that, while games may simulate real events, actions and contexts, these simulations are artificial and can not be considered as a replica of reality. That is, in the case of the SimCity game, the player, assuming the role of the mayor in the game, may think that raising taxes "always" results in turmoil (Turkle, 2005), although it does not always happen this way in reality.

Another essential point to be discussed is the player's performance in solving the problems and conflicts in the game. This performance can be assessed and of a quantifiable result, which defines whether the player has won or lost the game. That result is usually presented to the player in the form of points acquired or during the game, and the effort that the player exerts during the game influences this result (Juul, 2005).

Thus, the outcome of a game is one of the components that generally distinguishes games from other less formal play activities (Salen; Zimmerman, 2004) such as playing with a doll. In other words, playful activities like playing with a doll do not include a formal scoring system that determines whether a person won or lost the game.

In addition to objectives, rules, conflict and outcome, Schell (2008) proposes important qualities that outline the concept of the game. One of them is the intentional or voluntary participation of the player. That is, players accept and submit to objectives and rules of the game consciously, but also understand that the game is an open space that allows the player to enter and exit the game at will (Mcgonigal, 2011). In this way, the experience of the game only occurs with the participation of the player(s), who have decision making power and agency with the game. And it is the need for this direct participation that generates another quality of the game: interactivity.

Although there are many qualities peculiar to the game, one of the most prominent is the interactivity (Salen & Zimmerman, 2004). Interacting with a game means making choices within your system that lead to a series of actions with results. That interaction is not limited to the game itself, but may occur with other players or other contexts beyond the game space. Salen and Zimmerman (2004) also propose that scholars in this field analyze the interactivity of the game according to the mode of interaction, to identify four types of modes: (1) cognitive interactivity, which involves psychological, emotional and intellectual participation between the player and the game; (2) interactivity which includes structural and functional interactions with the components and materials of the system; (3) explicit interactivity, which is visible and explicit participation, as per example, handle control in a digital game or follow the rules of a board game; and (4) interactivity beyond play, which are interactions that occur outside the context of the game (e.g., when fans of a game create an online community to discuss elements or strategies of the game).

When examining the interaction of the player with the game, it is possible to observe a system of immediate feedback between the actions taken by the player and the results in the game. That is, the player makes a decision that is assessed, and receives information about his decision in the form of positive or negative feedback. The purpose of feedback is to direct or discourage the player to take certain actions and make decisions (Rogers, 2017). According to McGonigal (2011), the feedback system also allows the player to know how close he or she is to achieving the goal of the game. For example, in digital fighting games like Mortal Kombat or Street Fighter, it is common for the player to visualize how close he is to eliminating his opponent through a progress bar present on the game screen. In addition, feedback can be seen as an element of satisfaction (Csikszentmihalyi, 1990) and motivation for continuing the game (Mcgonigal, 2011).

Not all of these elements have always been present in games. With the advance of new technologies for game creation, these components can be adapted and modified to give rise to other games. As games become more sophisticated and incorporate emerging elements of playful activities, a single definition for games may seem like a limitation. Thus, when analyzing the current digital games in the market, Author (2016) suggest that many of these games exist as exploratory experiences rather than systems limited by conflict, conditions of victory, or points. The authors propose a definition that focuses on electronic games as an interactive experience in which the player uses overlapping systems, such as game mechanics and audiovisual elements. A more comprehensive definition for current electronic games would be to define the game as an interactive experience in which the player exploits the layered play (e.g., game mechanics, audiovisual, cinematic, narrative and/or social interaction). In the midst of so many definitions and concepts of games, to recognize and specify one's own definition is a more important step than trying to decide the "correct" one (Egenfelt-Nielsen, Smith, Tosa, 2008).

What is gamification?

Gambling is an interdisciplinary strategy that has been incorporated into various sectors, such as marketing, education, training and other areas, with the aim of motivating users to follow certain behaviors or cognitive activities (i.e., learn fast, use a specific platform daily, etc.) (Matallaoui; Hanner; Zarnekow, 2016; Zichermann; Cunningham, 2011). There are several definitions of what the term gamification means. Some are more limited, while others are more comprehensive. The term was first used in 2002 by British consultant Nick Pelling, who created the term to be a deliberately technical word to describe the design of user interface, which resembles a game, and make electronic transactions pleasant and fast (Burke, 2016). Since its initial use, the term has been developing, and today, has a different and far-reaching meaning compared to what Nick Pelling created. The term has been contested by many game creators and experienced designers, prompting them to create their own term (Matallaoui, Hanner, Zarnekow, 2016; Deterding, et al., 2011).

One of the most well-known and popular definitions is that of Deterding and colleagues, who consider gamification the use of game elements in the design of contexts that are not related to games (Deterding et al., 2011). To better understand this definition, we will analyze some important concepts listed by the authors. The concept of games, already discussed in this paper, is developed in such a way that the elements that constitute a game are not equivalent to play activities. The elements of a game interact within a system that provides the player with the experience of the game, however, since these elements are extracted from the context of the game and incorporated into other situations, the activities of the game cannot be understood in the same way. The situations in which gamification may be implemented vary among training, news, health, and other areas. In addition, the term gamification is not synonymous with other terms related to gaming activities such as game design or entertainment design. However, the behavior and game thinking is an expected outcome of gamification (Deterding, et al., 2011).

Another important distinction is that gamification is not the same as serious games. This term redefines game design for contexts non-recreational or entertainment purposes using digital games and educational simulations (Aldrich, 2009) for learning or training purposes (Loh, 2011). Gamification is a strategy that incorporates elements of games with or without commercial purposes, but gamification is not a game in and of itself (Matallaoui, Hanner; Zarnekow, 2016; Deterding, et al., 2011). That is, when an activity is gamified, only elements of games are incorporated.

In addition to the distinction between gamification and serious games, it is necessary to differentiate between two other emerging terms: (1) game-based education, and (2) gamified education. Both terms are associated with strategies that can be applied in education. Game-based education is the integration of existing games into the educational context (Cassie, 2016). For example, a teacher decides to use a game in the classroom to assist students in learning a topic or a concept in science or history. Gamified education, on the other hand, includes the mechanics of games to create an educative experience (Cassie, 2016). For example, a teacher identifies and selects elements of games to create a gamified experience in the classroom.

Some essential elements of the games that should be taken into account in the process of gamification are: (a) the mechanics of the games, (b) aesthetics, and (c) thinking like a game (Kapp, 2012). First, the mechanics of games are the mechanisms of actions, behaviors, and control provided to the player within the context of a game (Hunicke, Leblanc, & Zubek, 2004). Mechanics can include levels of challenge, of gratification (e.g., virtual badges, medals, coins, etc.), scoring system, and time constraints (Kapp, 2012). The aesthetics of the game includes the visual elements developed to generate emotional responses in the player (Hunicke, Leblanc, & Zubek, 2004). The aesthetic part includes the graphics, the user interface, as well as the appearance of the experience provided to the user. The aesthetics of the experience influence the will of a person in accepting and participating in a gamified activity. Finally, thinking like a game is one of the most important elements of gamification, since it is the game that turns everyday life, such as running or climbing stairs, into an engaging and motivating activity when running to escape from zombies or when creating music when climbing a ladder that resembles a piano (Kapp, 2012).

However, with the introduction of any new technology on the market, there is always a tendency of the population to overestimate the value and benefits of this technology in society. Many organizations are rushing to implement this new tool, but without fully understanding their potential and criteria for success (Burke, 2016). For example, in the past, technologies such as radio and television have been introduced in schools with great enthusiasm based on the belief that television would revolutionize education. But these technologies have been used in a limited way, such as a teaching center, the role of which was to convey content and information to students. Consequently, this strategy did not result in improvements in learning (Howard & Mozejko, 2015). Similar scenarios such as this may also occur in the implementation of gamification in education. In other words, if the focus of gamification is limited to the use of some simple elements, such as punctuation or virtual badges, without taking into account other game elements, their potential and contribution to education may be restricted. In in some cases, they may be detrimental to the student's educational goals, motivation, and satisfaction (Hanus & Fox, 2015).

Through a survey of current studies and research in the area of gamification, Seaborn and Fels (2015) noted that this approach has been criticized for focusing on points, virtual badges, and rankings. In addition, accounts of the effectiveness of gamification show mixed results.

For example, Hanus and Fox (2015) noted that students enrolled in a gamified course had a reduction in their motivation, satisfaction and sense of power in contrast to students enrolled in an non-gamified version of the same course. On the other hand, Domínguez et al. (2013) observed positive results, suggesting that the online platforms have the potential to increase student motivation. Other authors (Kuo & Chuang, 2016) also found a positive impact of gamification in an online context in promoting academic disclosure. While Wardrip et al. (2016) found positive results with gamification when using the systems for students and teachers, this system did not facilitate collaboration between instructors.

Although there are several factors that influence the success of gamification, one of the main factors in the educational environment seems to be the context (Hamari et al., 2014). Hamari et al. (2014) suggest that the design of the system, the qualities of the user and the social environment influence the effectiveness of gamification. However, further studies on gamification and the development of gamified learning experiences are necessary. It is important to note that when gamification is used properly, it can assist in the acquisition of information, involvement, and learning of the user (Kapp, 2012).

Preparation of ILE teachers: language course

Despite the enthusiasm for the use of gamification, this approach has been limited in some areas such as TESL. In the case of teacher preparation for TESL, there is a shortage in the number of studies and surveys available. This gap in the literature turned our focus toward examining a linguistics course that prepares future teachers of English as second language. This course was selected because, in addition to being a compulsory course for TESL graduate students, the course content contains a large amount of text reading as well as repetitive activities of listening and pronunciation of sounds that can discourage the interest of students due to the diligence required.

"English as a Second Language" is a term that has been popularly used since the 1960s. However, the focus on the preparation of TESL teachers only began to excel in public education in the United States in the 1990s. The quality of teaching methods used is one of the most important factors in determining the success of the student (Calderon, Slavin & Sanchez, 2011). Accordingly, teachers of TESL courses in colleges of education are constantly seeking the best methods to convey information to their students, who are from a generation with advanced technological knowledge, also known as digital natives (Prensky, 2001), and familiar with online learning. Gamification can be a strategy used in these courses to arouse students' interest, transforming routine activities and mandated lessons into an exciting learning experience. The incorporation of gamification into general teacher preparation courses is becoming increasingly popular (Cheng, She & Annetta, 2015), mainly in the teaching of complex topics that are difficult to convey in the online context, such as linguistics.

Linguistics is a compulsory course for all TESL teachers in the United States. A common module of this course, phonetics and phonology, is especially difficult to teach in an online environment. The topic is traditionally taught with the use of diagrams, videos or even anatomical models to show how the various sounds of the English language are produced physically. Reproducing these methods in an online format has proven difficult when trying to give instant feedback to students. It is equally difficult for teachers to remain up-to-date with the newest technologies available (Mompean, Ashby & Fraser, 2011).

In this way, gamification methods were incorporated into a linguistics course taught in an asynchronous online course at a university in North Carolina. That strategy was adopted in the last two years in which the course was taught. Before the methods were implemented, students expressed concern about the phonetic and phonology section of the Praxis preparatory test. This test is required for TESL certification of teachers in the United States. The material presented in the phonetic and phonology section of the test includes animated representations of the human mouth producing sounds. The students must determine which sounds are being produced, depending upon movement of the mouth and tongue. Through informal reports and personal communications with the professor of the course, students responded positively to the module's gamified activities, recognizing that this strategy helped in the results of the phonetics and phonology section of the Praxis test. The course professor also noted that students' misgivings about the Praxis dropped significantly. Realizing that the videos or graphics of the module can have also helped in learning this complex topic, gamification provides an option that is both informative and at the same time enjoyable for students. The figure below is a screenshot of one page of the online module of the linguistics course before being gamified.

Figure 1. Online module of linguistics class.

Gamification of the linguistics course

This section discusses the strategies of gamification adopted in a linguistics course in order to stimulate and maintain students' interest in the course content. By gamifying the course, various pedagogical strategies and elements of games were used to create an engaging experience for students in an online environment called Blackboard. Blackboard is a virtual learning environment that helps teachers in the generation of course content as well as course management in general. This space can also be used for student interaction with the teacher and other students enrolled in the course. Three gamification strategies were incorporated into Blackboard and are discussed in more detail in the paragraphs below.

One of the strategies incorporated into the course was the adaptation of the elements of games such as Bingo in an introductory activity. Although this activity is not part of the phonetics and phonology module, this was a way of introducing students to a gamified activity at the beginning of the semester so they could become familiar with the strategy. The activity requires students to introduce themselves to their classmates using Blackboard. In the presentation, students are encouraged to incorporate personal information (e.g., personal, extracurricular activities, etc.). Normally, students are not motivated to complete course introductory activities and usually complete only the expected tasks (i.e., respond to at least two students in the course). Because the course is asynchronous and online, students can complete the activity according to their availability.

In this activity, students observe presentations by their peers and use the Bingo card to identify the personal information of their colleagues. Each square of the card contains information unique to a class member. After observing the presentations, the students associate the information with their colleagues' names and submit it to the professor. The reaction of students to this type of activity has been very positive, with students completing the whole card. Some students even competed to deliver the card first. The benefits of this activity for students include: (a) familiarization with gamification, (b) engaging students in the expected tasks of the course, and (c) the interaction between students in order to establish a sense of community, an important tactic in online courses (Author, 2018).

Figure 2. Example of a gamified activity in an online environment.

Another strategy is the use of an online tool in which the professor creates various missions for the student in an interface that resembles a board game. The missions include such tasks as watching a phonetic video and answering a question or identifying sounds produced in an animation. When initiating the activities, students can choose the path to complete the assignments, which contain instructions, links, videos or questions to which the students must reply. Points are added to each mission, however, the tool allows the point system to be omitted if the student chooses. The application used is Symbaloo Learning Paths, and as of the publication of the current article, it is still free of charge to use.

Figure 3. Example of the initial screen of *Symbaloo Learning Paths* created for a course.

Finally, another strategy used was the adaptation of elements common to games of trivia. The activity combines the reproduction of sounds with images of the phonetic alphabet. Students also try to correctly guess sounds reproduced in anatomical animations. The material presented in this activity offer a way for students to practice common items on the Praxis test, in an entertaining way without the risk of failing the test. Student feedback in course evaluations regarding the use of gamification strategies in this manner have been generally positive.

Conclusion

It is important that the use of emerging technological tools be well thought out and planned. Rather than rushing into implementing these methods, you need to understand your potential and criteria for success (Burke, 2016) so that the results of implementation can be positive. In addition, new studies and research in the area of gamification should examine the levels of student engagement as well as the context in which it is applied (Kuo & Chuang, 2016). Thus, research and other studies in the area of gamification in TESL are necessary to support the effectiveness of this strategy in the learning and motivation of students. The use of gamification in teacher preparation programs also has great potential. However, the limited amount of studies suggests that the use of should be weighed, analyzing not only the context to be implemented, but also the the target audience.

We believe that gamification can improve training courses for online teachers if applied properly in order to engage, inform and support learning (Kapp, 2012). Future areas of research should examine the circumstances in which gamification best fits into a particular course, class or topic. Accordingly, taking note of when to include the elements of games in order to gamify online classes would benefit the educators who teach in this context.

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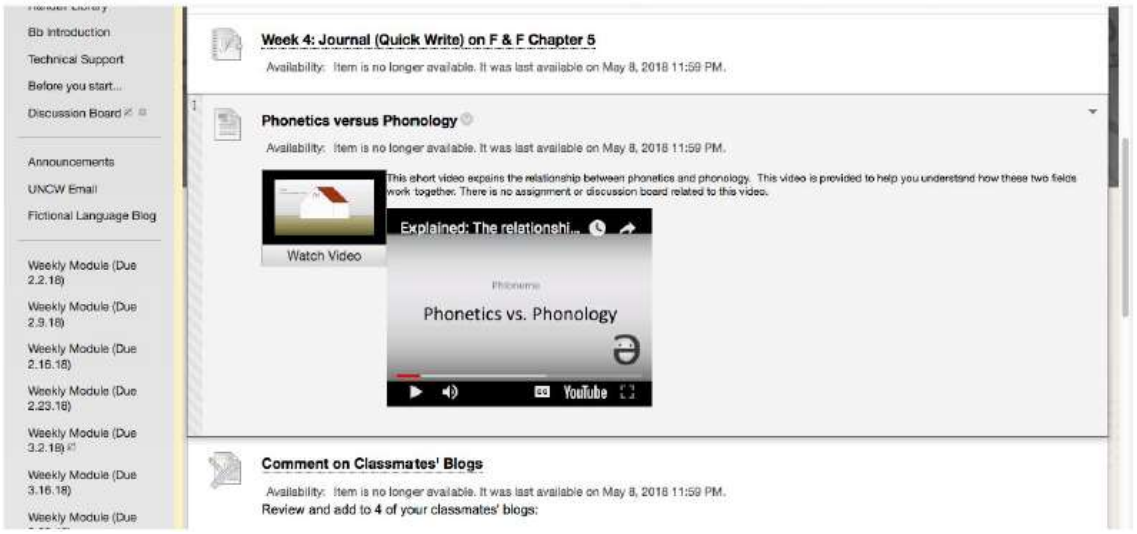

Figure 1. Online module of linguistics class.

After you introduce yourself, your goal is to find peers that fit at least 5 different categories on the bingo card below. Aim for five boxes in a row – going across, down, or diagonally. This game activity is a strategy to encourage you to get to know one another better. This part of the activity is due **by Aug 27, 2017, no later than 11:30 PM.**

B	I	N	G	O
Is left-handed	Loves horses or dolphins	Does not drink soda pop	Made a New Year's Resolution and kept it	Loves to sleep-in
Loves to read books	Keeps spare change in a container	Is a twin or has twin siblings	Has 2 or more pets	Knows answers to all of the times tables
Has never played Monopoly or Twister	Has been scuba diving	FREE	Wears contact lenses	Cuts their own hair
Speaks 2 or more languages	Has played a sport	Hates spiders	Plays a musical instrument	Washes their own car

Figure 2. Example of a gamified activity in an online environment.

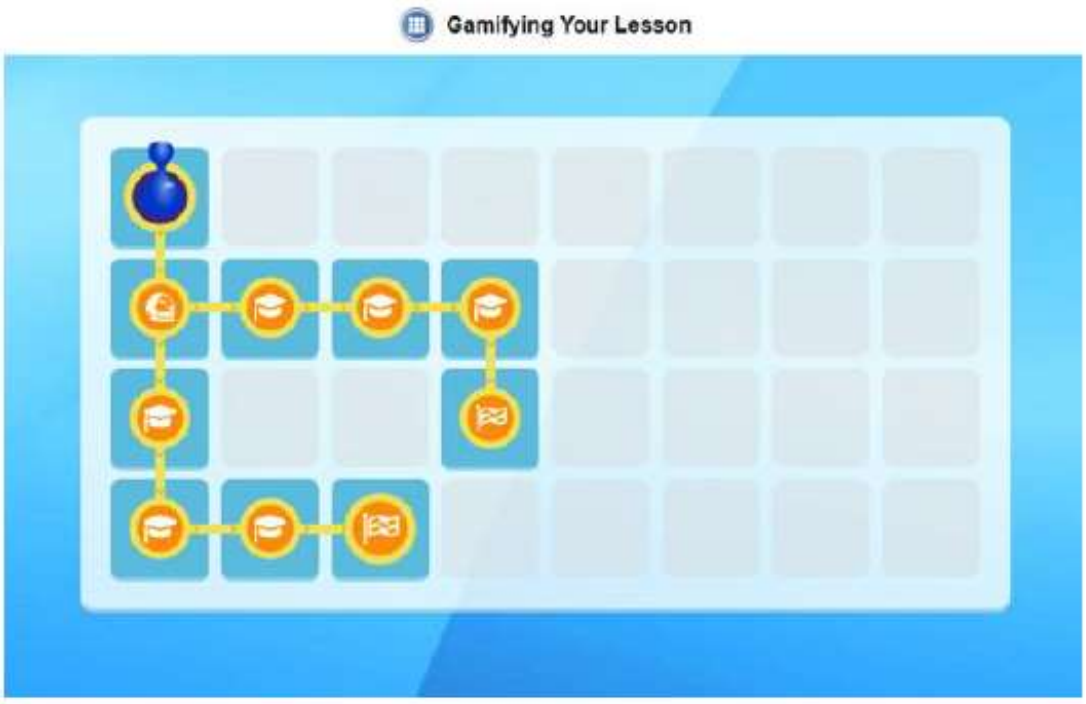

Figure 3. Example of the initial screen of *Symbaloo Learning Paths* created for a course.