



Gamification in foreign language teaching: A conceptual introduction

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ABSTRACT

Over the past few years, the concept of gamification has gained increased attention in foreign language teaching research as it demonstrates potential to promote motivation and learner engagement. The authors of the paper believe that gamification can become an innovative and promising tool to help students overcome their motivational difficulties. When it comes to language learning and teaching, one of the major issues to be tackled is the differences among students in terms of academic achievement. Applying gamification in the field of education profoundly supports the process of teaching and learning by creating a supportive environment, which is reinforcing and enables individual progress. One specific feature of gamification is that it breaks down learning into elements, similarly to motivation theory, where goals are not uncommonly divided into subgoals. It also includes applying the characteristics of games, and implementing these in real-world situations, while generating specific behaviours within the gamified situation. The most important benefit of using gamification in language teaching is that it provides differentiation. Learners can progress at their own pace, their assessment is individualised, their motivation is strongly influenced by their own skills and abilities that are reinforced by gamification itself. As the process of learning meets the individual's needs, differentiation can be brought about. This paper highlights the most important outcomes of research into gamification in language learning, while exploring its underlying principles in the field of motivation.

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KEYWORDS

gamification, motivation in language learning, self-regulated learning, digital language learning

INTRODUCTION

This paper attempts to offer an insight into the terminology of gamification, although it needs to be pointed out that the technical terms *gamified*, *gamification* and *game-enhanced* are often used interchangeably in research and education. This article focuses on the original term of gamification and it dismisses games used in the classroom or game-enhanced environments, where education is supported by videogames. First, we will provide a definition of the term gamification, then examine the context in which it has emerged. Then the motivational effect of gamification will be highlighted, and finally its implications in the foreign language classroom will be discussed. It is self-admittedly an introduction into its theoretical concept and background, and even though the weaknesses of a gamified classroom environment will be enlisted, we do hope that its predominantly engaging and motivating feature will be convincing in the conclusion.

THE TERM: GAMIFICATION

There is no official Hungarian or Spanish name for gamification,¹ a game mechanic that involves different aspects of life. It essentially refers to the mechanism of games, particularly to the rules of video-gaming. The widespread use of gamification dates back to 2011, when it was most commonly defined as “the application of elements of game design in a non-game environment” (Deterding, Dixon, Khaled, & Nacke, 2011, p. 10). The concept of gamification first appeared in business, marketing, and the language of multinational companies. The basic function of computer games began to be used to increase productivity indicators, change corporate management attitudes, and motivate employees. Werbach and Hunter (2012) were the first to summarise how elements of gamification and related technology had conquered contexts outside computer games. They believed that any tasks or activities can be gamified. They pointed out that one of the most important components of computer games is design: they are designed systematically and artistically, since their main aim is to engage and promote reinforcement (Cruaud, 2018; Szabó, Abari, Balajthy, & Polónyi, 2022). This approach is of particular importance when considering the role of gamification in education. Several researchers (López, Calonge, Rodríguez, Ros, & Lebrón, 2019; Pappas, 2013) emphasise that strategies based on gamification make work processes more interesting and stimulating and keep participants interested. Pappas (2013) refers to the adoption of gamification elements from computer games as an application in real-life context. This represents a turning point for educational theory: a language and a toolkit have been introduced into educational methodology that has a significant impact not only on motivation and involvement, but also on forms of assessment (Sailer & Homner, 2020). According to Pappas,

¹The translation varies: *gemifikáció* or *gamifikáció* are both used in Hungarian. Spanish speakers refer to it as *gamificación*, while it is used as *gamifikazioa* in Basque.



gamification fundamentally changes the framework of assessment and evaluation, since in a gamified classroom environment the learning process becomes rather competitive, individualised and trackable.

Among the many other definitions, we should highlight [Kapp's \(2012\)](#) definition, in which he also explicitly refers to the field of education: gamification is a set of principles and methods borrowed from games and applied to the non-game part of life. In principle, any process or activity can be gamified, but today it is mostly used in business, marketing, and education. Point accumulation schemes, frequent flyer schemes, prize draws all contain some form of motivational elements used in the game (points, gifts, feedback). This is the main purpose of gamification, to create and maintain motivation, and it draws its ammunition from games ([Abari, Szabó, & Polonyi, 2021](#)). As pointed out by [Kenéz \(2015\)](#), many well-known global brands have harnessed the principle of gamification not only among their employees but also among their customers. Customers can earn points, badges and rewards for certain purchases, achievements, and loyalty. A similar concept is used by a number of trendy sports apps (e.g. Nikerunner, Runkeeper, Strava) that encourage users to compete. They can track the results of their peers and opponents on a leaderboard, which increases motivation and thus performance. Keeping track of each other's results also gives a sense of belonging to a community, as this type of competitive situation has a cooperative and rivalry effect.

[Fromann \(2017\)](#) claims that when games are used in teaching, i.e., when learning processes are embedded in a game, we talk about game-based learning. Individuals participating in gamified education generally say that they experience learning as not learning, similarly to gamified work, where individuals experience work as a game ([Abari et al., 2021](#)). These individuals also experience the challenges and problems of everyday life differently from the average and say that the problem is nothing more than a challenge.

THE CONTEXT: “DIGITAL NATIVES”

Gamification in educational context has become a substantial technical term both in pedagogy and methodology. However, gamification has multiple meanings and uses, since the term was coined in the language of video-games. To understand the cultural context in which gamification has entered the field of language teaching, the concept of digital natives/digital generation must first be discussed. In the information age, not only has society changed towards a more globalised, more knowledge-based community, but students have also changed so radically that, as argued two decades ago by [Prensky \(2001\)](#), they no longer resemble the young people who were designed to be taught by the traditional education system. Today, students are digital natives ([Prensky, 2001](#)), having spent their entire lives surrounded by technology, the Internet, computers, smartphones, videogames, and other mobile digital devices. Given this native use of technologies by the younger generation, this author reflects on what we should call these ‘new’ students of today and proposes the following terms ([Prensky, 2001](#), p. 1): “Some refer to them as the N-[for Net]-gen or D-[for digital]-gen, or the most common name: Digital Natives”. At the opposite spectrum of this ‘native’ Net Generation are Digital Immigrants, that is, people “who were not born into the digital world”, but who at some point in their lives became fascinated (or not) by the new technology and adopted many or most of its aspects and uses in their daily lives. Digital Immigrants are not considered to be technology



savvy, and sometimes have a rather negative attitude towards it. Therefore, [Prensky \(2001\)](#) argues that Digital Immigrant educators need to think about how to teach Digital Natives in the language of the Digital Natives, which would involve significant translation and methodology change, as well as new content and thinking. In [Kárpáti's \(2009, p. 151\)](#) words, teachers should “develop a Net Native frame of mind”. However, some scholars, such as [Bennett, Maton, and Kervin \(2008\)](#) or [Crook \(2012\)](#) have criticised the taking for granted of students’ ‘native’ knowledge of technologies and proficient skills. As noted by [Crook \(2012, p. 77\)](#): “As is often the case in education, there is a need to be aware of the differences students bring with them to school in terms of their readiness to exploit innovative practices and resources”. Likewise, [Kennedy et al. \(2009\)](#) point to the more than likely mismatch between the digital literacy expected of the ‘net generation’ by some academics and the preferences for technology use and the actual abilities and aspirations of students: even if their general access to and use of technologies is common, this is certainly not the case in all contexts. In a similar vein, [Oblinger and Oblinger \(2005\)](#) observe that the ‘native’ status of the young generation, i.e., the fact that they have grown up with widespread access to technology and are able to use a wide range of digital devices and navigate the Internet intuitively and comfortably without a user manual, does not guarantee that their digital literacy is at an expert level. On the contrary, their understanding of the technology or resource quality may often vary or be shallow ([Oblinger & Oblinger, 2005](#)). [Crook \(2012, p. 77\)](#) observes that the rather slow integration of ICT (Information and Communication Technologies) into educational practice in most contexts may be due to “conservative hesitancy on the part of schools and an exaggeration of digital fluency among young people” (see also [Collins & Halverson, 2010](#); [Crook, 2008](#)). Both teachers and learners should show some enthusiasm and interest in using ICT and see how they might benefit, for example, EFL (English as a Foreign Language) lessons. The question arises however: how can ICT and digital literacy be revamped? Is there life beyond digital tools, smartboards, tablets, or digital course materials? To re-ignite digital literacy in the classroom, a new mindset is needed which can be brought about by gamification, a phenomenon that has increasingly become popular in various classroom settings.

GAMIFICATION AND MOTIVATION

If we focus on the issue of gamification of education, we can list four important traits as benefits that have a positive impact on the learning/teaching process ([Boller & Kapp, 2017](#)). Most importantly, learners will be more motivated and feel more engaged in the learning task because gamified implementation and assessment of tasks have a higher enjoyment value. This, in turn, might enhance the learning performance. Gamification therefore ensures engagement and immersion (in the task, the topic, or classmates), which is one of the best ways to learn. Gamified systems are often designed to allow for multiple access and replay of content. Repetition aids learning, since the more the learners are exposed to the content, the more their skills develop and their knowledge increases. They have also more opportunities to focus on other aspects of language that they might have previously overlooked ([Ellis, 2003](#)). To gain fuller control of the learning situation, learning pathways can be different in a gamified system. In such system, the learning environment is usually personalised, with different learners following more or less different paths, and the system itself may encourage the learner



to explore. Gamification encourages reflection: learners receive immediate feedback on their answers, and if they get it wrong, they take more time to get it right next time (because they want to win), so learning happens. In summary, engagement, opportunities for repetition, personalisation and reflection all support learning in an effective gamified learning environment (Boller & Kapp, 2017).

Whether at the workplace or in an educational institution, the three basic catalysts for the efficiency and performance enhancing factors of gamification are an increase in individual and group motivation, the strengthening of community cohesion, and the result-orientedness, stemming from the target system of the gamified processes (Polonyi et al., 2021). In answer to the general question of what areas gamification can help, it is safe to say that it can be applied to all areas of life. However, there are sectors where the introduction of gamification seems almost mandatory for the reasons explained above.

How do the underlying principles in motivational theories in language pedagogy relate to gamification? The learning environment and enjoyment derived from learning a foreign language (L2) resulted important in shaping learners' image of themselves as successful language users, as remarked by Kormos and Csizér's (2008) study of Hungarian adolescents learning English. Csizér and Kormos (2009) observed that the language learning experience appeared to exert a very strong influence on motivated behaviour of secondary education pupils, a stronger influence than among university students, which may be accounted for by the fact that a less developed L2 self-concept in the younger learners emphasised the importance of their need for intrinsic enjoyment of learning. This led the authors to conclude that teachers should be more aware of their responsibility in motivating students.

Hence, as emphasised by Dörnyei (2009), it seems that the positive L2 learning experience itself might play a significant role in learner's motivation towards the L2, and make possible learner's successful engagement in the language learning process. In fact, as attested by numerous studies, it was found "the most powerful predictor" of "intended effort or L2 achievement" (Dörnyei, 2019, p. 22). This suggestion is particularly important for the purpose of the present paper.

As seen in multiple motivational theories, it is essential for serious games to have an ultimate goal to be achieved, which the player keeps in mind at all times, and which drives them through the difficulties. There must always be a story/the big picture, in which the individual feels that they are finally part of something bigger, which gives meaning to all the actions in the game. Professional game developers make sure that the ultimate goal is 'broken down' into many smaller goals. This prevents the ultimate goal from being seen as too far away and unattainable, so the player does not abandon the game. The more levels there are, the more small goals need to be set to provide frequent (in extreme cases: continuous) positive experiences. The same theoretical idea emerges in the goal setting theory in psychology as defined by Dörnyei and his colleagues (Dörnyei, Henry, & Muir, 2016). This means that positive feedback (i.e. rewards) are always given for every small achievement and always "immediately" (i.e. immediately after the achievement). Another important factor is that these rewards are proportional to performance, so that there are no asymmetries (positive or negative) that are so typical of real-life situations; thus the individual's sense of justice is assured. This is eventually the underlying principle in the mechanism of gamification. How can it be applied in and transferred to the foreign classroom setting?



GAMIFICATION IN THE FOREIGN LANGUAGE CLASSROOM

The role of gamification in foreign language teaching has grown significantly in the recent years: not only has its motivational role been highlighted in educational theory, but it also has a structuring and organising power that has a clear impact on learning organisation patterns. This section will first discuss the concept of gamification, followed by a discussion of the effectiveness and impact of this phenomenon in education, and finally a critical analysis of gamification and its possible weaknesses.

The digitalisation of education through the rise of technology has made it possible to integrate gamification into the learning and teaching process. [Prensky \(2001\)](#) points out that the digital generation or the digital natives have a different approach to processing information. Many researchers stress that this will not only lead to new learning strategies and learning styles, but also to new approaches to education. This is where the notion of gamification enters the educational lexicon: as an alternative teaching and assessment method and a motivation for learning, it contributes to learner engagement and interest by adding playfulness and non-traditional pedagogical values. The phenomenon of gamification strongly supports the learning process of a foreign language. [Flores \(2015\)](#) argues that the integration of gamification into pedagogical work results in an effective and engaging learning experience. Its depth can be seen in the increased social interaction and in the way students perceive language learning as a game. The most important aspect of any learning process is what the teacher and student want to achieve. This is a fundamental feature of the gamification system. The pedagogical dimension of goal orientation has been described by [Dörnyei et al. \(2016\)](#) in their book on Dynamic Motivational Currents. According to the authors, setting the objective is not only inevitable in the long term, but also in the short term. Building on principles from sport psychology, Dörnyei and colleagues theorise about main and sub-goals that can ensure the learner's continued engagement in the process of learning an L2.

Closely related to this, [Flores \(2015\)](#) and [Kenéz \(2015\)](#) contend that the most important pillar of gamification is to keep up the level of achievement and to set and achieve new goals. Kenéz distinguishes between several types of goals: higher class participation, more intense attention, more active involvement, but this can also apply to home learning and continuity of learning. According to [Kenéz \(2015\)](#), one of the most crucial strategic criteria when using gamification is to set only one goal at a time, as this is the way to measure progress and level change. [Ames \(1990\)](#) and [Pintrich \(2003\)](#) agree that slow progression and continuous completion of modules, lessons, and tasks move the learner forward and ensure continuity of learning. This can be explained by the original function of gamification, which is to allow the language learner to spend as much time as possible in the virtual learning environment, to progress through as many levels of the gamified course material as possible and, preferably, to repeat various levels for revision after finishing. The adoption and consolidation of this approach in language teaching bodes well for future empirical research. From an educational point of view, it not only allows the gradual practice of the learning material, but also warrants the continuous and active presence of the learner in the language learning process.

The process of gamification is described by many researchers in different models, but they are all similar in that they distinguish different phases that are strictly interdependent. In [Huang and Soman's \(2013\)](#) four-stage model, the stages are logically distinct from each other, but there is a strict dependency relationship between them. For them, the first phase of the structure is to



define precisely who the target audience is and what classroom and learner group characteristics should be used. This is followed by the second stage, where the gamification is implemented by formulating the objectives. Huang and Soman distinguish three types of goals: instructional, learning, and behavioural. According to their theory, successful learning processes require the teacher to synthesise these goals. The third, or middle phase, provides an opportunity for structuring and analysing the experience to date (power gathering), while subtle corrections and additions can be made. In the fourth phase, the elements of gamification are identified by the teacher and adapted to the needs of the group.

Flores (2015) classifies the elements of gamification into two groups: proprietary elements of badges, levels, and time-limits. The main role of these elements is to support a competitive environment and reinforce a sense of accomplishment. They also include interaction and cooperation as social elements. Kenéz (2015) and Rigóczki (2016) assert that the process of the game is characterised by the principle of slowness and gradualness, where language learners can organise their participation and involvement along the lines of the principle of volunteerism. As the levels become more difficult, so should the learning objectives: learners should be increasingly challenged, as the routine of doing familiar exercises takes the motivation out of the dynamic (Kenéz, 2015). He also summarizes the most important criteria for the application of gamification in education: “One of the most important things in the gamification of education is the breakdown into elements. One of the most important aspects is to design the game so that it has several stages or it can be joined or caught up with later. You can even restart the scoring for each topic (...)” (Kenéz, 2015, p. 4).

The main merit of using gamification in language teaching is that it provides differentiation. Learners can progress at their own pace, their assessment is individualised, their motivation is strongly influenced by the possibility and purpose of catching up and cooperating, and they can complete levels individually. Prievara (2015) indicates that the form of accountability can be very specific: learners are given choices and control over the process by which they reach their own achievement. They can earn points from a myriad of task types, from which they build up a grade. At each new level they start the scoring process all over again, as Prievara (2015) calls it a ‘cycle’ in his own terminology. Gamification provides an assessment system in which learner autonomy and independence can be enhanced: learners choose how much time and effort they are willing to invest in learning.

Thus a reward system emerges in which different tasks can be performed with different levels of completion. The advantage of gamification is that learners can move freely within a framework. From an educational perspective, the question arises: can the concept of gamification be interpreted as a new definition of learner autonomy? Many researchers (see e.g. Prievara, 2015) believe that it certainly can: it gives educational actors the opportunity to measure learners against themselves rather than against each other. Prievara calls this type of learning ‘organic’ because everyone can develop at their own pace, individual paths may differ, but the goal is common: to complete the curriculum within the subject. There is a growing body of opinion on the acquisition and renewal of 21st century learning skills that calls for a genuine understanding and implementation of learning autonomy. By learner autonomy we mean self-regulated learning, which does not only mean the affective, cognitive, motivational, and behavioural regulation of the learning process. The autonomous learner is also able to take responsibility for the content of the learning process (Prievara, 2015). However, we cannot take it for granted that gamification will solve all problems in the foreign language classroom.



Besides its dominant motivational effects, gamification does demonstrate drawbacks as well. For instance, it is difficult to apply pair-work or small-group communication with it. Furthermore, due to its pregnant individualistic characteristics, it still needs to be elaborated on how it promotes speaking skills or interaction among students. Concerns arise as well with regard to pupils' possible feelings of anxiety, frustration or deception when gamified objectives are not met (for a review of Spanish context, see Pérez-López & Gértrudix-Barrio, 2021 and Parra-González, López, Segura-Robles, & Fuentes, 2020). How gamification affects academic performance remains a controversial issue, as research findings on its potential benefits in this area are inconclusive (see Pérez-López & Gértrudix-Barrio, 2021). Most critiques claim that a gamified classroom environment bring about too much competition and even though its merit is differentiation, it may result in highly individualized learning processes. One recurring criticism also draws on the digital divide, or inequality, since a gamified classroom pertains to access to devices and internet.

CONCLUSION

Engagement in the classroom can only be attained if the level of students' motivation is not flagging, thus continuous attention could be attracted. Teachers therefore need to set goals and subgoals, while dividing tasks into further subtasks. Research has shown that positive feedback and continuous assessment generate motivation, which are the fundamental underlying principles of gamification. The term from videogames has entered the field of education, and the concept of gamified classrooms – both online and offline – has welcome a tremendous increase in popularity. Gamification inspires students to reflect on their own learning progress: they receive instant feedback, and if they have given a wrong answer, next time they will spend more time figuring out the right one (they want to win), thus deep learning is enabled. This paper attempted to provide an overview of the term itself, while mapping out both international and Hungarian literature exploring the mechanism of gamification that is linked to motivation and engagement, specifically in the foreign language classroom. Positive classroom milieu and deep learning will be expected to take place if students embrace ownership of their own learning. Although not free from some concerns, critics like Bogost (2015) pointed out that the term gamification is misleading and erroneous, and 'pointsification' should be applied to the gamified learning environment because of the assessment framework using points and badges. It can be concluded that although the terminology might be complex and misleading, gamification does generate and promote autonomy and motivation in an intensive and surprisingly interesting way.

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