



Gamification

motivating language learning with gameful elements

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Potential impact	high
Timescale	ongoing
Keywords	gamification, gamefulness, engagement, motivation, rewards

What is it?

Gamification is a methodological strategy that uses “game design elements in non-game contexts” (Deterding, Dixon, Khaled, & Nacke, 2011, p. 10). The purpose of gamification is to engage people, motivate action, promote learning, and solve problems (Kapp, 2012). There are other educational approaches that use playful components but are different from gamification, such as game-based learning or serious games. In those two cases, all kinds of games (digital video games, table games, outdoor games, etc.) or educational games are used to achieve a learning goal. Within the language learning area, Reinhardt (2019) opts for the global concept of ‘gamefulness’ which embraces all types of vernacular games, serious games, and gamification.

Different taxonomies of the game elements have been classified for gamification purposes. Among these classifications, Werbach and Hunter (2012) present the game elements in a hierarchy, the Dynamics, Mechanics, and Components (DMC) Pyramid, identifying three categories: dynamics, aspects such as *constraints*, *progression*, or *narrative*; mechanics, basic processes that drive the action forward such as *challenge*, *competition*, or *rewards*; and components,

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How to cite: Pujolà, J.-T. (2021). Gamification: motivating language learning with gameful elements. In T. Beaven & F. Rosell-Aguilar (Eds), *Innovative language pedagogy report* (pp. 109-114). Research-publishing.net. <https://doi.org/10.14705/rpnet.2021.50.1244>

the specific instantiations of mechanics and dynamics such as *avatars*, *badges*, *leaderboards*, *levels*, or *points*.

As mentioned in [Pujolà and Appel \(2020\)](#), [Kapp \(2012\)](#) distinguishes two types of gamification: structural and content. Structural gamification refers to a model in which the structure of the learning tasks is gamified without modifying the content. The main aim of this type of gamification is to engage students through rewards using, for instance, Points, Badges, and Leaderboards (PBL). Content gamification, on the other hand, implies changing the learning content to make it more like a game or video game, such as including a narrative in which challenges related to the story must be solved to achieve the objectives of the course.

Examples

The following examples are Spanish content gamifications that integrate different game elements and use a variety of technologies:

- [Acedo's \(2019\)](#) *La liga de la justicia y los superhéroes españoles* (Justice league and Spanish superheroes); and
- [Niño's \(2020\)](#) *Ciudad de todos* (City for all).

These projects have the following relevant features in common:

- they integrate and intertwine various game elements to make sure that different types of learners interact positively with them;
- PBL are not the only game elements introduced so their gamification interventions go beyond the most common reward mechanism;
- the narrative in each case helps to integrate the game elements, the learning tasks, and the use of technologies in a coherent way;

- the goals to be achieved in the gamified tasks are moderately challenging with increased complexity and clear progress; and
- feedback and rewards are provided within a short time.

Benefits

Gamification can be used in all educational contexts from primary to adult education and can be applied in any pedagogical approach: communicative, flipped classroom, or task-based learning. Gamified educational environments should create learning conditions to increase students' engagement, to activate their learning, to develop their autonomy, and thus, to motivate them.

The development of motivation in gamification starts with the students' involvement with the gamification processes, with their desire to take an active part in them. In that sense, choice is a relevant component by which students learn how to take decisions for successful learning and also constant feedback, as happens in video games, is indispensable for students to advance in the gamified learning context. A well-planned gamified instructional design allows for the development of multiple learning strategies and language learning competences.

Research to date has mostly focused on student engagement, motivation, or affective factors with mixed results (Homer, Hew, & Tan, 2018; Sailer, Hense, Mayr, & Mandl, 2017). As for language performance, most studies report some positive outcomes mainly on vocabulary learning according to Dehghanzadeh et al. (2019) or others on the development of pronunciation (Barcomb & Cardoso, 2020).

How can it be implemented?

Gamification can be implemented with or without technology. Nevertheless, the use of technology helps teachers keep record of the whole process in a gamified context and makes the teaching and learning processes more accessible. There

is a diverse variety of platforms, apps, and tools for teachers to use when implementing gamification in their teaching. Four approaches to use different Information and Communication Technologies (ICTs) when gamifying can be established according to [Pujolà and Appel \(2020\)](#):

- gamification platforms that help to set up and manage gamified lessons or entire courses: [Classcraft](#), [ClassDojo](#), or [Gradecraft](#);
- gamified quizzes that help teachers improve lesson interaction and also build gamified tests for assessment purposes: [Kahoot!](#), [Socrative](#), or [Quizalize](#);
- game-like features and plugins introduced in regular virtual learning environments such as Moodle: e.g. [Quizventure](#), [Level Up!](#), or [Ranking Block](#); and
- different ICTs used when implementing a gamified teaching intervention: [Voki](#), [Makebadges](#), [Genially](#), or [Pointagram](#).

There are also other learning platforms like [Duolingo](#), [Drops](#), or [Memrise](#), mainly for self-learning with a rather traditional rote learning approach, that use gamification elements such as points, levels, or trophies to encourage users to continue progressing through the contents of the course practising mainly vocabulary, grammar, pronunciation, and translation (for further information on these platforms, see [Jueru, Ferrão, Vitória, & Ferrão Silva, 2020](#)).

Looking to the future

Gamification is a pedagogical trend with great potential and a positive effect on student engagement but it is still to be proved that the increase of motivation results in better learning outcomes ([Dehghanzadeh et al., 2019](#)). However, the constant increase of gamification teaching experiences in language education should

help to carry out more research studies dealing with issues such as learning gains in different language areas. More empirical and systematic studies should focus on the development of language skills and language learning strategies that confirm gamification as an effective methodological strategy.

References

- Acedo, J. R. (2019). *La liga de la justicia y los superhéroes españoles* (Justice league and Spanish superheroes). <https://juanrafaelacedo.wixsite.com/ligajusticia>
- Barcomb, M., & Cardoso, W. (2020). Rock or lock? Gamifying an online course management system for pronunciation instruction: focus on English /r/ and /l/. *CALICO Journal*, 37(2), 127-147. <https://doi.org/10.1558/cj.36996>
- Dehghanzadeh, H., Fardanesh, H., Hatami, J., Talaee, E., & Noroozi, O. (2019). Using gamification to support learning English as a second language: a systematic review. *Computer Assisted Language Learning*. <https://doi.org/10.1080/09588221.2019.1648298>
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness. *Proceedings of the 15th International Academic MindTrek Conference on Envisioning Future Media Environments - MindTrek '11* (pp. 9-15). <https://doi.org/10.1145/2181037.2181040>
- Homer, R., Hew, K., & Tan, C. (2018). Comparing digital badges-and-points with classroom token systems: effects on elementary school ESL students' classroom behavior and English learning. *Journal of Educational Technology & Society*, 21(1), 137-151. <http://www.jstor.org/stable/26273875>
- Jueru, T., Ferrão, S., Vitória, F., Ferrão Silva, R. (2020). Gamification for technology-enhanced language learning (TELL) – success factors of gamified language learning platform design. *Revista Iberoamericana de Informática Educativa*, 31, 54-69. <http://iecom.adie.es/index.php/IECom/article/view/334>
- Kapp, K. M. (2012). *The gamification of learning and instruction: case-based methods and strategies for training and education*. Pfeiffer: An Imprint of John Wiley & Sons.
- Niño, J. (2020). *Ciudad de todos* (City for all). <https://sites.google.com/view/ciudad-de-todos/inicio>

- Pujolà, J. T., & Appel, C. (2020). Gamification for technology-enhanced language teaching and learning. In M. Kruk & M. Peterson (Eds), *New technological applications for foreign and second language learning and teaching* (ch. 5). IGI Global. <https://doi.org/10.4018/978-1-7998-2591-3.ch005>
- Reinhardt, J. (2019). *Gameful second and foreign language teaching and learning*. Palgrave-Macmillan. <https://doi.org/10.1007/978-3-030-04729-0>
- Sailer, M., Hense, J. U., Mayr, S. K., & Mandl, H. (2017). How gamification motivates: an experimental study of the effects of specific game design elements on psychological need satisfaction. *Computers in Human Behavior*, *69*, 371-380. <https://doi.org/10.1016/j.chb.2016.12.033>
- Werbach, K., & Hunter, D. (2012). *For the win: how game thinking can revolutionize your business*. Wharton Digital Press.

Resource

- Practical guide to gamification in Spanish: Acedo, J. R. (2019). *Guía práctica para una gamificación en ELE*. <https://es.scribd.com/document/435018588/Hip>



Published by Research-publishing.net, a not-for-profit association
Contact: info@research-publishing.net

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Innovative language pedagogy report
Edited by Tita Beaven and Fernando Rosell-Aguilar

Publication date: 2021/03/22

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Cover layout by © 2021 Raphaël Savina (raphael@savina.net)
Photo by Digital Buggu from [Pexels](https://www.pexels.com/) (CC0)

ISBN13: 978-2-490057-86-3 (Ebook, PDF, colour)
ISBN13: 978-2-490057-87-0 (Ebook, EPUB, colour)
ISBN13: 978-2-490057-85-6 (Paperback - Print on demand, black and white)
Print on demand technology is a high-quality, innovative and ecological printing method; with which the book is never 'out of stock' or 'out of print'.

British Library Cataloguing-in-Publication Data.
A cataloguing record for this book is available from the British Library.

Legal deposit, France: Bibliothèque Nationale de France - Dépôt légal: mars 2021.
