

## Gamification in the English language classroom in primary and secondary education

Gamification is a methodology that consists of the incorporation of game mechanics in the educational context. Since technology continues to advance at an ever-increasing rate, more and more educators incorporate game elements into their English classes in order to engage students in their learning process. Gamification encourages teamwork and capitalizes on human instincts such as curiosity and competition, and combining these elements with appropriately designed educational games creates an environment which is more conducive to foreign language acquisition. Given the popularity and importance of using games in foreign language classes, the present study carried out a bibliometric analysis of the publications that dealt with the use of gamification in English classes at the primary and secondary school levels. The objectives of the study were to analyze the evolution of the number of studies published per year and to identify research trends related to gamifying lessons in the English subject. The search for studies analyzing the use of gamification in English classes was conducted from inception to December 2022 (included). The database which was used for retrieving studies was the Web of Science. The search was carried out in the search field type “topic” and the search syntax was as follows: (gamification OR gamified OR gamifying) AND ("English lesson" OR "English class" OR "English subject" OR "second language" OR "foreign language" OR ESL OR EFL) AND (English) AND (“primary education” OR “secondary education” OR school OR schoolchildren OR students). A total of 95 publications identified were retrieved for a more detailed screen. Afterwards, from the title and abstract of the publications assessed for eligibility, 47 publications dealt with gamified classes in schoolchildren (except for 4 systematic reviews which focused on all levels of education) and, thus, were included in the present study. The majority of studies which were excluded were carried out with university students. The results indicate a growing trend in publication numbers in this field since the numbers of studies are as follows: in 2022 (14 studies), 2021 (12), 2020 (2), 2019 (5), 2018 (3), 2017(4), 2016 (2), 2015 (2), 2013 (1). As regards the scope review, after an in-depth analysis of the 47 selected publications, the majority of studies underscored the benefits of applying educational games in classes. The increased motivation is the most palpable benefit reported, followed by meaningful learning, improvement of language skills, and increased learners' engagement, confidence and autonomy. Most studies indicated that games facilitate language learning and ensure active class participation, making the whole process of learning more enjoyable and effective. Apart from content and language acquisition, the use of games in class has contributed to the development of other skills such as critical thinking, collaboration and creativity. Nevertheless, despite numerous benefits reported, it has also been argued that the use of gamification presents several challenges such as the occurrence of technical difficulties, the creation of a negative competitive setting or the creation of a noisy environment, which may increase students' negative emotions towards using games in class and, consequently, might have a negative impact on the learning outcomes. All these barriers along with the teachers concern over the game addiction and students' health/psychological well-being, make teachers opt for more traditional teaching methods. Therefore further research is required to assess all the educational games and their effectiveness and use in class. Furthermore, there is a need for educators to update their knowledge and teaching skills as they need to learn how to implement technology efficiently in the class.

