OLLReN Paper on:
GAMIFICATION IN LEARNING AND TEACHING
INTRODUCTION

This article will introduce the concept of gamification, also commonly referred to as gamified learning, and will present a synthesis of recent studies in the area of gamification for language teaching and learning. The affordances and drawbacks to gamified learning in the context of language teaching, will then be presented, and the article will conclude with an overview of the future directions of this field.

WHAT IS GAMIFICATION?

Gamification of content is now a ubiquitous element of modern life despite many users of gamified content may not being familiar with the term. Gamification is referred to as the incorporation of game elements into an interactive system which is not overtly perceived as a game (Seaborn and Fels, 2015; Deterding, 2012; Deterding et al., 2011a, 2011c). Wearable fitness trackers, mindfulness and productivity apps, and even music streaming services all incorporate elements of gamification, often without user being consciously aware of it. The incorporation of challenges and reward systems such as earning virtual badges or ‘prizes’ are common elements of gamified content as a means of encouraging the user to keep returning to the app or service, as well as the ability for users to compete with, follow or chat with other users. These features of gamified content are widely considered as motivational factors to prompt users to engage regularly with the system, with many systems offering reminders and notifications for the user to do just that. It follows logically therefore, that the incorporation of such motivational and rewarding content is ideally placed for integration into educational products.

GAMIFIED LEARNING

Gamification has long been a common feature of classrooms, with most students familiar with the use of games and puzzles to promote engagement with subjects such as Mathematics and spelling. The widespread integration of gamified learning into virtual learning platforms, however, is much recent, and its effectiveness overall is still being debated.

A study into the motivational effects of gamified learning on a Multiple Choice Question-based learning system (Denny, 2013) found that while the use of ‘badges’ motivated the quantity of responses and duration of time spent on the platform. It also found that there was no difference in the quality of responses from users who did not receive ‘badges’. Investigation into the motivational effects of use of a leader board system in the same study found that there was no significant relationship between students who viewed the leader board, which showed the number of badges awarded to each student, and the number of responses to the MCQ task. A study by Dominguez et al. (2013) found that in the integration of a gamified plug-in to a popular e-learning platform which incorporated reward systems and a leader board feature, engagement with practical tasks and assignments by users was increased, but it was noted that there was a deterioration in quality of written assignments and participation at the same time. One study which was deemed successful involved examining the incorporation of gamified tasks into a homework application (Goehle, 2013), where users earned points and progressed through levels of achievement as a result of completing homework tasks. A survey of the users reported increased motivation to complete the tasks, and a feeling of recognition as a result of the reward and progression system. A further study by Kaplan University placed groups into a pilot project, which involved the embedding of gamified learning software into their Learning Management System (LMS), and reported an improvement in student grades of 9%, and a decrease in course failure of 16% (NMC-Horizon Report, 2014).

GAMIFICATION IN LANGUAGE LEARNING

The integration of gamification into foreign and second language learning has been seen as an extension of the use of technology in language learning (Flores, 2015). Significant research has been carried out in the areas of Computer Assisted Language Learning (CALL) and more recently Mobile Assisted Language Learning (MALL), both of which fall under the broader category of Technology Enhanced Language Learning (TELL). The gamified learning systems currently being used in language teaching and learning bear little resemblance to early practice in “Behaviouristic CALL”, popular from the 1960s to the 1980s, centred around language drills and translation tests and strongly influenced by the theories of Skinner (Levy, 1997). Behaviouristic CALL was limited by its adherence to the dominant theory at the time, as well as the inherent limitations of technology which allowed for little more than a computerised version of the stimulus-response model. “Communicative CALL” was an evolution in the use of computers and technology in language teaching and learning, following cognitive theories which attempted to
simulate language and allowed users to work in pairs as well as alone. The current model of CALL, referred to as “Integrative CALL” (Ybarra and Green, 2003), is socio-cognitive in theory and emphasises the use of language in ‘authentic’, social contexts. The popularity and longevity of Integrative CALL is due in large part to the ease of use and availability of the internet, as well as the emergence of the “Digital Native” learner (Prensky, 2001), who has grown up with technology and views it as an integral part of their daily life, including their learning experiences.

Current and widely used gamified learning systems for second and foreign language learners are not only confined to classrooms – many people will be familiar with the language learning app Duolingo, which uses badges and rewards, tracks progress and denotes the stages of proficiency as levels, with the user’s “percentage of fluency” increasing as they complete level stages.

Gamified learning within the classroom can be seen in the form of flashcard and quiz-based websites and apps such as Quizlet, Kahoot, and Menti, among others. These systems use scores and ranking structures to reward correct answers, are generally used in real-time in the classroom, and allow teachers to design and administer personalised tasks and quizzes to learners as well as accessing banks of resources created by other teachers and users. These systems, however, do not introduce any new or innovative pedagogical approaches, functioning instead as an alternative delivery system for the existing language content. Gamification is, therefore, a teaching tool that can be introduced into language learning environments to supplement existing methods, and supplement existing methods, and provide alternative means of engaging and motivating learners to more ‘traditional’ pedagogical approaches.

**HOW TO APPLY GAMIFICATION IN THE LANGUAGE CLASSROOM**

For teachers who want to introduce elements of gamification into their language classroom, a five-step model for educational gamification has been produced by Huang and Soman (2013), which provide an outline of considerations teachers must take to successfully integrated gamification into their language lessons. These are as follows; understanding the target audience and context, defining learning objectives, structuring the experience, identifying resources and applying the gamification elements.

Firstly, the target audience and context must be considered. As abovementioned, gamification is, in essence, the addition of motivational and competitive elements to traditional pedagogy in order to increase learner engagement with the task and, hopefully, result in learning. As such, the teacher should consider which elements of gamification will best suit their target audience and educational context – a young learner will respond very differently to the awarding of virtual badges than an adult learner. The learning objectives must also be defined and carefully considered, as these will impact the gamification system that will best assist in these objectives being met. Huang and Soman (2013) recommend that learning objectives are considered in terms of their learning goals, instructional goals and behavioural goals. The establishment of the goals and objectives should lead smoothly to the third stage, in which the teacher breaks down the programme or syllabus to determine how and when gamification can be introduced in order to meet the learning objectives. The stage of identifying resources is one where the teacher has to further consider the practical application of gamification into their syllabus, and of particular importance to this stage is the identification and establishment of rules, a tracking mechanism and currency. The latter is of utmost importance when considering integrating gamification into the classroom – how are the learners to be rewarded for their progress, or adherence to the rules set out? Badges and levels, as we have seen, are popular currency in gamified learning systems, as are progress charts and leader boards. A key consideration for teachers when introducing gamification is that the tasks being gamified are meaningful, and will create opportunities for learners to engage with the target language in as authentic a manner as possible.

**AFFORDANCES**

The use of motivational tools such as badges and ‘levelling up’ has been considered useful as a form of formative assessment in language learning – the digital equivalent of a learner receiving a gold star from the teacher (Buckingham, 2014). The ability of gamified learning to provide opportunities for instrumental learning situations, where the learner engages with an activity for the purpose of achieving a goal associated with the activity (Gardner and Lambert, 1972; Brown, 1994) has been deemed one of its main affordances. The extrinsic motivational tools inherent in gamification allow for the enhanced enjoyment of learning tasks, which encourage the learner to engage, complete the tasks, and ideally to develop their language skills (Muntean, 2011). Gamification is essentially task-based in nature, and task-based language learning has been deemed effective in developing learners’ communicative competence through engagement with meaningful tasks.
DRAWBACKS/DISADVANTAGES

The main criticism of gamified learning among researchers is its emphasis on “pointsification” (Kapp, 2012), the overarching focus that gamified systems have on accumulating points, badges, or positions on a leader-board, with little empirical evidence that learning is taking place in line with these digital achievements. This is something to be considered by teachers during the planning stage, to ensure that gamification is being introduced as a valid means of meeting learning objectives.

CONCLUSION

This article presented an introduction into the topic of gamification, leading into an examination of gamified learning and gamified language learning more specifically. How to introduce gamification into the classroom was detailed, and lastly the affordances and drawbacks of gamification in language learning were presented.
REFERENCES


Ybarra, R., & Green T. 2003. Using technology to help ESL/EFL students develop language skills. The Internet TESL Journal, 9 (3).
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