

WEB-BASED GAMIFICATION IN CLASSROOM LEARNING

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Introduction

The development of innovation has changed education from a conventional approach into a more technological-oriented approach. The teaching and learning experience in the 21st century has intensely depended on technology use (Flores, 2015). An education organization aims to prepare individuals for future professional careers that are competent with 21st-century abilities. As Mee et al. (2020) addressed, these skills are the core competencies of collaboration, digital literacy, critical thinking, and problem-solving ability. Subsequently, a technological and educational digital analog is to be actualized in the education system to suit learners who are getting more indulged in the virtual world. Games are tools that teachers can utilize to progress learners' outcomes across numerous regions. Boyle et al. (2016) investigated experimental evidence of computer games' impacts and effects in educational settings. They found that games are effectively utilized for knowledge acquisition, skill acquisition, affective and perceptual objectives, behavior change, as well as cognitive and physiological results. In this way, the researcher feels the need for web-based gamification in classroom learning.

Literature Review

Miller and Robertson (2011) found that games in classrooms expanded communication abilities, resourcefulness, and adaptability. Morthy and Abdul Aziz (2020) recommend that language games empower students to learn the target language in a non-undermining learning environment effectively. Moreover, gamification may advance students' learning practices; also, utilizing games in classes is beneficial for students (Barab et al., 2009). Students may progress their 21st-century aptitudes, including literacy, speaking, listening, critical thinking, digital literacy, and problem-solving aptitudes. Learner independence increases since students can redress themselves with low stress. They advance by learning at their own pace (Maloney, 2019). Anyaegbu (2010) accepted that our learners are changing

quickly; most of them discover classroom exercises boring, and at last they lose interest during the learning process. Since the educational system no longer meets the requests of our society, Shaw (as cited in Bromley, 2007) proposed that teachers should always look for other ways to connect with future learners while teaching language. Rao (2014) emphasizes that students pick up more words and learn the proper structures of English when they are engaged in games. It is expressed that English games advance an inexplicable learning experience where students keep looking forward to learning unused words. Kuo (2008) notices that “games and game- like exercises have continuously been a prevalent device in an English course to interest and 'Wake up' uninterested students”.

Defining Gamification

Whereas there's no universally accepted definition of gamification, most descriptions have similar characteristics (Burke, 2014). Deterding et al. (2011) support that it is “the use of game design elements in non-game contexts. Zuckerman (2010) characterizes it as the “process of using game thinking and mechanics to engage an audience and solve problems,” and Kim (2011) understands it as “using game strategies to make activities more engaging and fun.” Gamification is further divided into two types (Kapp et al., 2014): structural gamification and content gamification.

In the past, game components were added to a system in order to impel students through content without changing the content itself. As it were, the structure encompassing the content is aiming to be game-like (points, badges, levels, etc.). An illustration would be a learner gaining points within a course for completing a task. Content gamification refers to the incorporation of game elements into content to make it more game-like. Marczewski (2015) agrees with this categorization but renames both types as extrinsic gamification (structural gamification) and intrinsic gamification (content gamification) and puts forward a better approach to categorizing gamification types, namely, digital gamification, analog gamification, and hybrid gamification (Marczewski, 2020). Digital gamification is commonly utilized online. An example may be a reward system implanted on a website or game-like materials transferred to a learning administration framework. These are the cases of Blackboard, Edmodo, Google Classroom, Moodle, and Schoology.

Analog gamification typically consists of board games or card games and takes place in real- time with members within the same area. For instance, an escape room that uses a number of games to help participants acquire or review specific content. Digital and analog gamification are combined in hybrid gamification.

Gamification in the Educational Field

The Piano Staircase and The World's Deepest Bin, two tests conducted by the Fun Theory, an activity of Volkswagen (Volkswagen, 2009), revealed that individuals are more

likely to take part in an activity if it appeals to them. Numerous children are attracted to games since they are closely related to the concept of leisure. According to Richards (2003), the average adolescent will have spent roughly 10,000 hours playing video games by the age of 21. In reality, the gaming division has recently surpassed the movie industry in terms of income (Richter, 2020), and the number of dynamic video gamers all over the world has never been higher (Forbearing, 2021). Moreover, concurring with later research from the University of Oxford, time spent playing video games is emphatically related to well-being (Johannes et al., 2021). Games and video games entail the existence of a parallel universe where rewards, fun, and competition inspire individuals to act. They also involve creativity, problem-solving, teamwork, and a variety of other skills.

According to the New Media Consortium (NMC) (2014) Horizon Report, gamification is also gaining popularity among teachers. The report demonstrated that “the gamification of education is gaining support among teachers who recognize that effectively designed games can stimulate large gains in productivity and creativity among learners” (NMC, 2014). The NMC Horizon Report embodies this point with Kaplan University, where gamification was implemented in their web applications and a pilot program was conducted in an information technology class. The results of this study revealed that student’s grades improved by 9% and the number of students who failed the course decreased by 16% (NMC, 2014).

Gamification in Online Classroom

One of the issues with online classrooms is that there's a small level of engagement between students and teachers. Thus, schools, besides teachers, have to discover a way to create activities that can foster engagement and eagerness for learning. With the assistance of the gamification concept, this issue can be settled. There are three fundamental reasons why this is the right solution.

- The primary reason is that learning by playing games is better than plain examining. According to Koster Raph (2004), playing can enhance learning with more impacts than individuals could imagine. Schatz and Loschiavo (Kirkland & O’Riordan, 2008) included that playing can lighten the mood, facilitate greater creativity, and boost moral interest. Sometimes, the teacher recognizes these two aspects of playing and learning as having two conflicting aspects.
- The second reason is that individuals will feel challenged rather than influenced when they play a game. Indeed, in spite of the fact that a few games are more complex than learning the school subject, players are not feeling pressured when facing a difficult situation.
- The third reason is that gamification has been demonstrated in different research, including education games, as a powerful tool for learning, which is why it should be connected within the classroom. The game may be an effective instrument for learning, which is why it ought to be applied in the classroom.

Difference between Game and Gamification

Games are part of the gamification process to enhance user engagement and productivity and achieve the required results. Game-based learning gives comprehensive learning with a sense of authentic circumstances, giving a chance to grow one's viewpoints of science. As an operative training approach, game-based learning encourages students with captivating participation. Games incorporate fun, attractive game designs, rules, and short-term engagement.

Types of Language Games

Hadfield (1984) explained two ways of classifying language games. The author divides language games into two types: linguistic games and communicative games. Linguistics games focus on accuracy. On the other hand, communicative games focus on the exchange of information. A language game is a fusion of language and play (Rooyackers, 2002). Passive learners get the chance to speak in the classroom through games. Games are too reasonable for low-capability learners, as they won't feel pressure while learning English in a fun way.

Various researchers (Chan & Lin, 2000; Jiang, 2008; Kuo, 2008; Robinson, 1960; Zheng, 2008) have pointed out that games are useful for children involved in the learning of English since games can reinforce students' inspiration and self-confidence. The significance of playing is additionally supported by Piaget due to its contribution to the development of problem-solving, creativity, and communication, which actually happen in the process of playing games (Slavin, 2006). In Jiang's study (2008), composed of a structured questionnaire, classroom observations, and the dynamics of teacher-student relationships, 360 respondents' attitudes toward utilizing games in learning English at a primary school were examined. Sixty-eight percent of students preferred using games as teaching aids. Besides, all students communicated a negative state of mind when games were not employed in class.

In other words, students like to be immersed in a fun learning environment, which is very effective in increasing motivation and interest in learning English. The same conclusion is also defended by the research of Kuo (2008). Kuo compared two teaching methods, conventional teaching and game teaching, by dividing students into an experimental group (game teaching) and a control group (regular teaching). The results showed that the experimental group outperformed the control group in both English-speaking ability and student confidence. Therefore, games not only bring fun to the classroom but also motivate students and build their confidence (Chan and Lin, 2000; Robinson, 1960; Zheng, 2008).

Conclusion

This study proposes web-based gamification in classroom learning. In the current time, there's a need for language teachers to search for modern techniques and educational procedures to make the classroom fun and interesting for their learners (Pek & Mee, 2015). Subsequently, teachers have to design gamified activities to capture young learners' interest. The collaboration of gamification in education is a milestone for the effective implementation of active learning. The learning process's focus should be more on developing skills for collaboration, teamwork, and responsibility for the group's performance than competition between learners. This not only enhances language skills but also cultivates interpersonal aptitudes, communication, and teamwork. Teachers and educators ought to strike a balance between the fun and engaging aspects of gamification and the learning objectives of the language curriculum.

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