
Gamification of Learning: Using Game Elements in Non-Gaming Contexts

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Gamification of learning is the introduction of game elements that can influence behaviour in a non-game context, such as school environment. The term gamification, coined in 2002, is not a one-dimensional reward system. Rather, it takes into consideration the variety of complex factors which make a person decide to do something; it is a multifaceted approach which takes into consideration psychology, design, strategy, and technology. The advancement in mobile technology have allowed for the exposure of a variety of gamification initiatives in many contexts, including education. The use of game elements such as points, badges and leaderboards to motivate behavioural changes and track those changes in online platforms. The gamification of learning is related to these popular initiatives, but specifically focuses on the use of game elements to facilitate student engagement and motivation to learn. A study results of Gamification of learning revealed that students who completed gamified experience has got better scores in practical assignments but performed poorly on written assignments and participated less on class activities. This article focuses on the ways to gamify education in classroom and the benefits of Gamification.

Keywords: Behaviour, Learning, Curriculum and Motivate.

Introduction

One of the trending educational approaches that motivate students to learn by using game elements and designs in learning environment is called

Gamification of learning the ultimate aim of Gamification is that to maximize the enjoyment by capturing the interest of the learners and engaging and inspiring them to continue learning. Gamification is the process of defining and introducing game elements to motivate players to continue playing and using those elements in a non-game context to influence behaviour. In educational contexts, Gamification can potentially influence desired student behaviour which includes attending classes, focusing on meaningful learning tasks and taking initiative.

There are two forms of Gamification, structural with no subject matter changes and the altered content methods that adds subject matter. Games applied learning are serious games, where the learning experience is centered on serious stories. These games provide point, leaderboards, direct competitions and stickers or badges for the successful completion of learning. The educators tested this gamify educational approach have seen positive results and also noted that it helps in retaining the content learnt.

Ways to Gamify Education in Classroom

There are variety of ways to introduce Gamification of education in classroom. Here, I am providing few ideas that can be used for Gamification to make learning more engaging.

Gamification in Grading: Students' grades are determined by the amount of point they have accumulated at the end of the course, in other words, by how much they have accomplished. Students are progressing towards levels of mastery, as one does in games. Each assignment and each test feel rewarding, rather than disheartening. Using experience points allows educators to align levels with skills and highlight the inherent value of education.

Award Students with Badges

For each assignment completed, award students with badges. This may seem like a regression back to Kindergarten stickers of gold stars, but it's working for Khan Academy. As students watch instructional videos and complete problem sets, Khan Academy awards them with points and badges to track progress and encourage perseverance.

Integrate Educational Video Games into Your Curriculum

The use of games allows students to fail, overcome, and persevere. Students are given a sense of agency—in games, they control the choices they make, and the more agency students have, the better students do. Instantaneous feedback and small rewards (or big ones, like winning) are external motivators that work.

Stir Up A Little Competition

Game mechanics of including a “tournament” module in learning platform found that the tournaments incentivize students to learn the material and practice. The use of the tournament function egged on some competition, boosted morale and got her students excited about demonstrating their understanding. It is also noted that the tool worked as a great equalizer among students. Introverts were able to demonstrate their knowledge of the material and participate without having to raise their hands. Most of all, “gamifying” the review of readings simply boosted the general energy of the class.

Implement a class-wide rewards system: Encourage camaraderie among students by setting up a rewards system where students achieve something as a team. For example, set a goal of 80% of the class passing an exam. As a reward, give the entire class bonus points or even a party. That

way, students are working to master the material together instead of competing, and the highest-achieving students will help those around them.

Gamify Homework to Encourage Informal Learning

Ultimately, educators hope that games translate learning into informal environments. There simply aren't enough hours in the day for an educator. Games allow the curiosity and the learning to continue after the bell rings.

Benefits of Gamification

Gamification initiatives in learning contexts acknowledge that large numbers of school-aged children play video games, which shapes their identity as people and as learners. Within games and other digital media, students experience opportunities for autonomy, competence and relatedness, and these affordances are what they have come to expect from such environments. Providing these same opportunities in the classroom environment is a way to acknowledge students' reality, and to acknowledge that this reality affects who they are as learners. Incorporating elements from games into classroom scenarios is a way to provide students with opportunities to act autonomously, to display competence, and to learn in relationship to others. Game elements are a familiar language that children speak, and an additional channel through which teachers can communicate with their students.

Some of the potential benefits of successful gamification initiatives in the classroom include

- giving students ownership of their learning
- opportunities for identity work through taking on alternate selves
- freedom to fail and try again without negative repercussions
- chances to increase fun and joy in the classroom
- opportunities for differentiated instruction
- making learning visible
- providing a manageable set of subtasks and tasks
- inspiring students to discover intrinsic motivators for learning
- motivating students with dyslexia with low levels of motivation

This game mechanic which involves tracking players' learning in the game, and responding by raising the difficulty level of tasks at just the right moment, keeps players from becoming unnecessarily frustrated with tasks that are too difficult, as well as keeps players from becoming bored with tasks that are too easy. This pacing fosters continued engagement and interest which can mean that learners are focused on educational tasks, and may get into a state of flow, or deeply absorbed in learning.

Conclusion

Gamification in education often cite its improper use of rewards as a motivator. Critics argue that relying on games can be detrimental to intrinsic motivation. Receiving a badge for a job well done is meaningless without an understanding of what specific skills this badge rewards. We

agree; games can't be used to replace pedagogy, but can be used to enhance the overall learning experience.

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