

GAMIFICATION STRATEGY

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Abstract

Education is the most powerful tool for building a future in the world. And learning is a major part of achieving any educational goal. Learning can be more effective if combined with experience. This paper is a detailed description of Gamification in education as a learning aid. And how does it work to strengthen and accelerate the learning? Gamification Strategy is adding game elements into children's non-gaming activity and learning experience during formal education, just to boost student engagement, motivation, and academic achievement. We can say it is to inculcate a positive attitude toward learning and performing better for a child's academic development. Also, it motivates them to complete tasks like school assignments or projects to receive more rewards.

Keywords: *Gamification Strategy, Learning, Student Engagement and Motivation.*

Introduction

“Tell me, and I'll forget, show me, and I may remember, involve me, and I'll understand.” – Confucius.

Today's students are technology savvy and covid pandemic has brought the new platform of online classes. But recent research has shown the adverse effect of online teaching learning as a failure and lack of student engagement and retention. So, to lure the attention of students to ward learning needs extra effort from educators. To engage and motivate students, just games and activities are not enough, we need to work on the psychological aspect of the learning environment too and according to substantial research, Gamification is an amazing solution of student motivation towards spending more time in learning.

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Background

Although it is presently in use, the term "gamification" is still relatively new. The term "gamification" was initially coined by Brett Terill in 2008, when he used it to describe the process of "taking game mechanics and applying them to other web properties to boost engagement." The term "gamification" is utilised more broadly to describe "the use of game design elements in non-game contexts" (Deterding et al., 2011: 9) or "using game-based mechanics, visual appeal and conceptualization of games to engage people, motivate action, promote learning, and solve problems" (Kapp, 2012). It is no longer only used to describe web properties.

Gamification as a concept

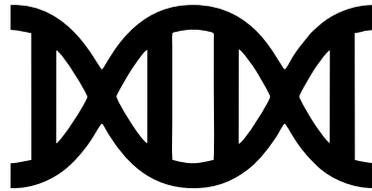
But to understand Gamification Strategy, first, we need to understand the difference between games, gamification, and game-based learning because these are very different from each other. A Game can be defined as a structured form of play, games are there simply for entertainment value, and they're meant to keep the players highly engaged. Game-based learning is to understand actual games to meet learning objectives. The students learn from playing the game, which can be a commercial or non-commercial game, digital or non-digital game. The term "game-based learning" describes the process of learning through playing video games. For example, in a game where medical students or staff undertake surgical procedures in a virtual setting (Kapp, 2012), the abilities that are tested in the game relate to the learning task (Gee, 2013).

Gamification applies core elements of what we love about games and applies them outside of traditionally gaming environments. In simpler terms, we describe gamification as the inclusion of game-like aspects to non-game activities. It does not, however, transform these non-game activities into games. Gamification has numerous applications in non-game contexts and can be applied anywhere from education, health and fitness, workplace productivity, and finance. Gamification is frequently used in education to increase student engagement and promote self-directed learning. It can be used to create learning progressions that are appropriate for students' skill levels, pique students' interest in a subject, or engross them in a lecture. Badges, diplomas, and awards are just a few examples of the game aspects that can be incorporated into an educational course as part of the gamification strategy. These elements are motivational tools and engagement factors. The first element is the setting of goal like the completion of stages which includes side goals, short term goals and long-term goals. Badges are another element. Just the way badges are used in the military, to level up the ability, it also allows the students to level up as a master of various standards. Whenever we gamify a course, it is necessary to provide students with relevant information as to how they are

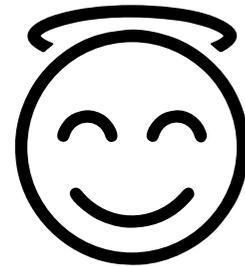
being tracked and assessed. So, gamification is altogether a new platform of making learning with levelling up of self-motivation. To understand the Gamification Strategy in more detailed form, let us see how it works.



REWARD



DOPAMINE



LET'S LEARN MORE

Illustration of how Gamification Strategy in Education Works

Each time we receive a reward our brain releases dopamine which makes us feel good and we chase after more rewards, which motivates us to do more. And that is exactly how Gamification Strategy works, it makes learning fun, more engaging and motivates the students to spend more time to learn. Different game mechanics and dynamics are used to gamify learning.

Few examples are:

Points and Rating scales – to develop a reward-based grading system where students earn point for every effort made. This cumulative way of marking will make students feel more rewarding with every single assessment and will motivate to achieve more and more points as a reward.

Levels and Challenges – we can use levels to define the learner's journey, we can start with the simple task as easy and gradually going up to medium then hard, as the student progresses in learning.

Leader-Boards – Everyone wants to see their names on the top and all the games have leader-boards, so it will motivate students to spend more time in learning.

Benefits of Gamification

- More student engagement in learning
- Empower students
- Enhance Motivation for learning and better performance
- Cooperation among students as players

- Motivates to complete task like assignment and projects
- Behaviour modification
- Incorporate teamwork
- Make learners to assess their progress and how to improve it
- Healthy competition
- Boost up the learning environment
- Bring the parent involvement
- Successful platform for online leaning.

The GMAT 370% higher user engagement and DELOITTE 46% higher user engagement are one of the many online education examples of educational websites who have used Gamification Strategy and achieved success in higher student engagement and motivation in more learning among learners. Even Byju's, Khan Academy, Duolingo, Gimkit, Class-Craft and Classdojo are some of the gamification apps popular among students in present days. Based on the requirement that the documentation reports return on investment metrics, Yu-Kai Chou, a well-known expert in gamification, compiled and released a list of 95 verified gamification cases (Chou, 2017). These examples demonstrate how gamification may significantly improve efficiency and satisfaction across a range of activities.

Some noteworthy gamification statistics in the education sector include the fact that online learning is becoming increasingly popular. The education sector will increase from USD 450 million in 2018 to USD 1.8 billion by 2023. Its market will grow to \$1.5 billion by 2020. A gamified course was rated more effective than a conventional one by 67% of students.

Only when students play for an extended period of time, processing enough (new) knowledge for learning to occur, can gamification in learning be successful. This indicates that learning spread out over several days in little quantities is more efficient than learning in a single sitting.

Conclusion: In this paper, we have discussed the Gamification strategy and its use in education for student engagement, and motivation, to promote learning and problem-solving. Many instructors are spending money on instructional games due to the rising demand for them. It increases learning enthusiasm and interest. Educational apps that incorporate gaming foster a passion of learning. This encourages students to accomplish

their learning objectives, provide the desired results, and improve efficiency. The future of gamification holds that we'll start to see more full-fledged serious games which are going to open interesting ways to engage, motivate and train students. The area of gamification is still in its infancy, but it's developing quickly. Gamification has a lot of potential to engage people as well as students all over the world. GAMIFICATION is a very new and young platform in learning, so it still has scope for much development and discovery.

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