Gamification in Education

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In digital education, online learning has become more significant and convenient. However, staying long hours online is challenging for both the teachers and students. Many educators are turning towards gamification to make virtual learning more engaging and easily understood. In this case, the question is not only what gamification is but also why it is used in education.

To define it simply, gamification is about implying game-like elements, such as tasks, challenges, and interactive activities, into the learning process. The purpose of gamification is to promote education and games, both hand in hand. Let us dive into this article about gamification in depth. The basic idea is that while students participate in these activities, they also absorb academic concepts more engagingly.

The instructors and educators, day by day, seek a new innovative system to build on the learners' intellectual level and enhance their learning experiences based on their curiosity. It is the responsibility of the instructors to ensure that every individual learner gains or obtains the appropriate skills they teach. The teaching approaches should be accessible and fulfil every learner's needs. By using digital technology in the teaching method, multitudinous educational preceptors believe that it will grasp learners' attention quickly and give them a chance to satisfy their needs for knowledge. Every individual's knowledge needs to be a transitional bone. To solve this kind of transition, they promote the games to further knowledge and experience in the various knowledge approaches. By promoting the process of gamification in the education field, the first thing the learners tend to cherish is entertainment inside the classroom. Their mind mostly, the way of allowing to learn won't be thwarted goods. Nick Pelling coined the term gamification. So, what is the exact description of the term 'Gamification'? Some experts state their opinions about gamification. First, the gamification guru Bertalan Mesko denotes it, 'gamification might be the key for a broad range of issues for which we currently have no good solutions'. Then, in 2014, Gartner defined gamification as 'the use of game mechanics and experience design to digitally engage and motivate people to achieve their goals'. Gamification of education is a strategy for increasing engagement by incorporating game elements into an educational environment (Dicher & Dicheva, 2017). According to Kapp, Gamification is 'using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning, and solve problems' (Kapp, 2012).

Overall, above the delineations, it's clearly stated that gamification is the kind of approach that has the entertainment exertion rudiments to fit into the knowledge settings in an academic institution. Generally, everyone enjoys playing games because they believe that games are not only fun but also refresh our minds, reduce stress, and shape the body to be healthy. Playing games helps develop thinking capacity and enhances creative behaviour. Some educational proponents believe that the main intention of gamification is to increase interest in learning by using objects that promote the creative idea of the purpose of learning. The main pretensions of gamification are to enhance certain abilities, introduce objectives that give learning a purpose, engage students, optimise learning, support behaviour change and socialise

One of the results of gamification is the development of the learner's social and communication skills, which eventually leads to the development of leadership qualities. Gamification can be introduced in education through two methods: structural gamification and content gamification.

- Structural Gamification No change in the subject matter by applying the game elements and mechanics. (Ex:- Points, badges, leaderboards)
- Content Gamification Add some changes to the content by applying game elements and mechanics to make learning more interactive.

What are the game mechanics?

Some salient features of the game mechanics play a vital role in the gamification.

- Users The participants include students
- Challenges or tasks Action is performed by the participants.
- Points Get appreciation by performing the task and help to forward the next task.
- Levels Using the points to unlock the next stage, which is a new adventure.
- Badges For completing the given tasks. It is a kind of recognition that motivates the participants.
- Ranking Ascending order of the participants by their achievements.

The concept of gamification is a traditional methodology in education. To encourage the learners, they conducted quizzes and competitions for intellectual development. However, in modern digital education, there is a lack of interest in the learning process, and it is not easy to encourage students to participate in activities to develop their learning skills. Hence, every educator or tutor injects these kinds of game mechanics into gamification by depending on their innovative ideas. Gamification is not directly associated with knowledge and skills; rather, it affects students' behaviour, commitment, and motivation, which can lead to the improvement of knowledge and skills.

Whenever the instructors or the preceptors introduce new teaching approaches or methodologies to the learners, they should ensure that the new ideas or skills required by the learners are suitable for them or not. It is their responsibility to achieve the planned objectives, which differ from one another. However, it should confirm the goal of learning. Students' motivation to participate in training depends on the context of the learning process and what follows from their achievements.

The learning objectives should be precise and clear. The learner has to understand the purpose of their learning, which is not only to attain the learning objectives or goals but also to get a chance to gain experience in their life. Education is not only to educate the principles of academics; the primary intention is to polish every individual's life. So, the preceptors should keep all these factors in mind while defining the learning objectives. The educational content should be interactive, engaging and rich in multimedia elements. The training activities should be developed tailored to the learning objectives and allow. These are some of the tools or applications to promote gamification in learning. Some of them are web-based cloud services that do not require any installation and allow access at any time and anywhere. Some of the applications require the installation of special software free of cost or paid. The most popular gamification tools and applications are Socrative, Kahoot!, FlipQuiz, Duolingo, Ribbon Hero, ClassDojo, Goalbook, The Boy Scouts, Pokemon Go, Foldit, Liveops, Minecraft, Second Life, Coursera, Brainscape, Credly, Open badges and TopHat.

Some of the gamification tools and apps have unique features:

- Duolingo Uses gamification to make learning multiple languages fun. It has interactive tasks and challenges, which help users build vocabulary, improve grammar, and refine pronunciation. By completing these activities, learners earn points and move to higher levels, making the experience both educational and rewarding.
- Coursera Educational platform where everyone learns their desired courses and skills. After completing the course and giving assignments, they get a certificate in the name of appreciation.

These examples make it clear that gamification makes learning more exciting and engaging, so the learners are not bored. The scores, rewards and feedback motivate the students to participate in such activities. After they realise that through such applications in learning, they get an opportunity to learn how to figure out, explore, and rectify challenges and thereby apply them in their lives.

In today's generation, learners are completely different from those of earlier generations. In short, this generation is called Gen Y and Z learners who expect a digital-oriented way of learning. They believed that it would become more comfortable than the ancient way of blackboard teaching, which was tedious and ineffective. Hence, it is a difficult challenge or task for all instructors or preceptors to engage the learners and achieve the learning outcomes. There is a high chance of being demotivated and less engaged in learning. So, the usage of gamification is better learned in education.