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## GAMIFICATION: AN INNOVATIVE WAY OF TEACHING LEARNING STRATEGY OF NEW NORMAL

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**Abstract:** As the pandemic situation is worsening day by day and estimated to be continued for next few months, so digital mode of learning has necessity of the present day. New Education Policy 2020 has also stressed on the necessity of digital education. Keeping this in context entire education sector have shifted to emergency remote teaching mode from traditional mode. However teachers are wisely making use of new practice of teaching during new normal time. They have responded brilliantly to the change. At the same time it has become a challenging task for a teacher to deliver effective teaching. There for more innovative teaching strategies need to be adopted to make e- learning course successful and effective. Gamification can be the one of the effective methodology in teaching for increasing learners' motivation and engagement by incorporating game design elements in educational environments **Key words:** Gamification, Digital game,

### INTRODUCTION

From the end of the last year entire world is suffering from COVID-19 pandemic. The disease which has affected almost all countries across the world infecting more than 46,210,349 people and causing 1,197,805 deaths by the end of October 2020. This has put the entire world in lock down situation resulting crises in the entire sector including education. Due to this outbreak the government across the world temporarily closed educational institution in an attempt to contain the spread of the disease. According to UNESCO report 1 billion students and youth across the planet were being affected by school and university closures due to the COVID19 outbreak. In India too, the government as a part of nationwide lock down has closed all educational institution. which has affected the future of large number of students ranging from primary to higher education. This put the entire student fertility in the situation of dilemma regarding their future education. In order to keep the continuity in learning, Indian government and education system has launched many of the educational programme such as home schooling, remote learning, PM e VIDYA, One Class One Channel, DIKSHA portal, SWAYAM, MOOCs etc. at the comfort of learners home.

Online teaching has become the new reality of the present day. Teachers being the warriors of next level shifted to emergency remote teaching mode from traditional one. They are brilliantly responding to the new practice of teaching. At the same time it has also become a challenging task for a teacher to deliver effective

teaching since continuous exposure to the screen makes class monotonous resulting in lacking student's interest. It is renowned fact that pandemic has significantly affected the mental state of the students and they are also in the dilemma of being infected with this unfortunate pandemic virus. This has pushed them in the state of stress and anxiety, They seek teachers socio emotional support. So teacher need to adopt new strategies of teaching which are more effective ,interactive and experience based which can actively engages students in learning process and make them mentally socially and emotionally strong. In this context Gemification can be one of the effective teaching approach that teacher can adopt in teaching learning process. Teaching textual concept through digital games add fun to the learning process and makes learning more enjoyable and more effective.

#### CONCEPT OF GEMIFICATION:

Games are the universal part of human experience and have been existed across all the culture. It is the voluntary and enjoyable activity in which challenging goal is pursued according to agreed rule (Kinzie & Joseph). As the game mechanics begin to gain its recognition over last few year, people started to consider game as a way to increase productivity and hence were used in nongame scenarios such as business, environment, recruitment, training development, and motivational processes. This lead to originate the term Gemification. In simple words 'Gamification' means integration of the existing environment with the game mechanics to motivate participation, engagement and loyalty. Here a typical game playing elements such as points, scoring ,competition etc. are applied to other areas of activity.The term was first coined by Nick Pelling in 2002 and defines it as. Applying game-like accelerated user interface design to make electronic transactions both enjoyable and fast.”Over the year many alteration was made with respect to its definition, in 2014 Gartner, redefines it as “The use of game mechanics and experience design to digitally engage and motivate people to achieve their goals” The key elements of this definitions are,

- **Game mechanics:** This describes use of game elements such as points, badges and leader boards.
- **Experience design:** This explains elements such as game play space and story line.
- **Digitally Engage:** Here the player engages with any digital devices such as computer, smart phone or wearable monitors
- **Motivation:** Motivates players in developing skill or in developing behaviors.
- **Goals:** It enables the players to achieve their goal.

#### GAMIFICATION IN EDUCATION:

Gamification in education is an approach of using game elements and video game design in learning environment to motivate students in learning. Its main objective is to maximize engagement and enjoyment of learner in teaching learning process by capturing their interest. It can be defined as the process of transforming typical academic component in to gaming themes.

Though the gemification in learning is a new concept but we find its roots in Indian culture.

Concept is based on the fact that 21st century pupils are are the active learners rather than passive recipients of information. Todays younger generations have little tolerance for our carefully scripted lectures. There for gemification can be one of the best approach of present situation where in teachers are finding difficulties in capturing students attention and ensure they attend to the right aspects through online mode of teaching. As the digital games have fantasy element that engages players in a learning activity, so the learning can be more fruitful and effective.They not only improve learning achievement but also encourage creative expression,confidence,self efficacy and motivation.(yien,et al.2011 Hung,et al.2014). Concept of gemification correlates with tenets of constructivism i.e.learning through exploration,social interaction and by collaboration. Constructivist views learning as an active process where learner construct their own new

knowledge based upon current understanding. The complex challenges associated with games insist individual to try out and get feedback on their assumption and strategies (Prensky 2006). Which is the new cognitive way for learner to acquire knowledge and skill in a constructivist fashion (Gee, 2005).

## PRINCIPLES OF GAMIFIED LEARNING

Gamified learning has following principles

- a) **Empowerment**- Gamified instruction empowers students to own their learning
- b) **Persistence**- Students who learn in a gamified classroom have a better capacity for persistence.
- c) **Self direction**- Self direction is obligatory in a gamified class room and is developed by all games
- d) **Social skill**- Gamified instruction develops social skill.
- e) **Learning communities** : Gamified instruction encourages students to build self directed learning communities.
- f) **Risk taking** : Risk taking is encouraged by the democratic and meritocratic nature of gamified instruction
- g) **“Play with” ideas**: Play full approach to learning is a natural consequence of gamified instruction
- h) **State of flow**: Powerful sense of flow is an inherent part of gamified instruction.

## STRATEGIES OF GAMIFICATION IN EDUCATION

Effective strategy of gamification in education involve following steps:

**I) Determination of learners characteristics**: This is the first step in which the teacher has to determine students need and interest to select appropriate gamification technique so that students can participate in learning with full competitive manner.

**II) Defining learning objectives**: Learning objectives are the goals which help the teacher to structure plan and also to sequence learning activity to establish the desired result. In gamification learning objectives include selection of the appropriate digital game, which should be user friendly and also, should have entertaining and recreational value.

**III) Creation of Educational content and activities** : Educational content and gamification activities should be selected by considering affective, cognitive and psychomotor domains of the learner. It must foster motivation, behavioral changes and inculcate healthy competition among learner. Learning activity should include

a) **Multiple performances**: There should be scope to perform activities repeatedly upon unsuccessful attempt. Repetition may lead to develop in depth knowledge and skill as well

b) **Feasibility**: Learning activity should be adopted according to skill and potential level of the students and also it should be achievable. For every correct response learner should be awarded with points.

c) **Increasing difficulty level** : Complexity of the task should be increased with increasing level of the content. It should follow the learning maxims like, simple to complex and easy to difficult.

d) **Multiple path**: The activity should allow students to build their own strategies so that diverse skill can be developed.

**IV) Adding game elements and mechanics:** The key elements of gamification is the inclusion of learner in learning task. The performance of task include accumulation of points ,moving to higher level and winning the awards. All these action are aimed at achieving pre determined learning objectives.

**ADVANTAGES OF GAMIFICATION IN EDUCATION** Owing to the popularity of gemification in teaching learning processes, many studies have been conducted to analyse its advantages they are as follows,

1) **Makes teaching more effective and fruitful:** Teaching through digital games gives more opportunity for learners engagement in teaching and thus learning will be more effective and fruitful. (Dominguez, Adrian 2013). Serious game environment can promote learning and motivation in (Erhel and Jamet 2013) and thus application of gamification in a pedagogical context promotes students motivation and engagement in learning and in schooling system as well ( Raed Alsawaier 2017

2) **Enhance Students active participatin in teaching:** Teaching through Digital game draws students into teaching learning process more actively then the conventional one (Cosker 2015). It play a non human role in learning environment and helps to engage pupil in learning by maintaining democratic environment and thus makes teaching more effective (Siguroardottir 2016).

3) **Develops students analyzing ability:** Gamification strategy of teaching develops student analyzing abilities in terms of achieving goals through a healthy competitive sprit and that makes them feel like they are progressing in the learning process. (Hitosugi, et, al. 2014)

4) **Individualised teaching is possible:** As the learner plays the game at various level of challenges hence this technique of teaching meets individual learning differences through personalized learning opportunities. The technique also manages learners learning pace, and improve students' intrinsic motivation for lifelong learning and promotes creativity.

5) **Develops leadership skill:** Learning through gemification makes students more confident, and independent thinkers. It help them to learn how to deal with conflict situations. (Li, Feb 2013). Digital game can be utilised to promote scientific learning (Squire et al 2013) It helps learner to learn more and also to see and understand the problem in different way and to become different kind of people.

6) **Strengthenes problem solving skill :** can be used to help users solve problems more effectively and quickly. Girared (june 2013) thus it strengthen problem solving skill and has positive effect on learning compared with other type of training.

7) **Develops confidence among the students:** digital game in teaching make significant improvement on students performance and confidence. Ku, et al. (2014)) It assist in the acquisition of knowledge related to learning concept and also develops interest in the learning. (Liu and chen 2013).

8) **Helps to retain the learned concept for longer time:** students' engagement and knowledge retention is a serious problem that the teachers face frequently. Gamification represents a effective and new tool to increase students' learning outcomes with respect to retain the learned concept for longer time (Maria Putz, Schmidt-Kraepelin, Treiblmaier, Sunyaev 2018). When instructor introduce gamification features in teaching the gaming elements used for teaching helps in retaining the learned concept of subject matter for longer period.. (Krause, 2015). In comparison to traditional teaching game based teaching improves learning effectiveness and retention as well (Bahrami, et al., 2012)

**9)Enhances students academic achievement :** Gamification method adds positive value to the students achievement and also develops students' attitudes toward lessons taught (Ibrahim Yildirim 2017). This kind of teaching results in deeper learning and also enhances in the learning achievement Hung,et al.(2014),Gökçe Pelin Türkmen and Danyal Soybaş 2019).

**10 Fosters Student Retention in online education:** Retention is a major challenge of online mode of education.The feelings of isolation and lack of interactivity in online teaching attributes to high drop out.The social game elements of gemification technique strengthen social engagement of students in online courses. (Markus Krause,et.al.2015)

## CONCLUSION

Learning involves four essential functions namely Attention, active engagement, error feedback and consolidation. Which are considered as the four pillars of the learning.. In gmification,a well designed game motivates learner to achieve goal for a sense of reward and fulfillment. Thus it helps students to be more attentive throughout the learning process by active engagement.Gamification elements actively engages learners with the material being taught, thus it last impression for longer period in the minds of learner. This strategy of teaching is positively associated with experiences of affective feedback which improve learners performance and through regular practice students can consolidate knowledge by reviewing previous learned concept.

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