

# ET60012 FOUNDATIONS OF EDUCATIONAL TECHNOLOGY

Dr. Kaushal Kumar Bhagat
Centre for Educational Technology
Indian Institute of Technology Kharagpur

# Gamification

#### Games Keeps Children Engaged for Hours

• Design Right - Elements of Interest for a Good Game

• Experience Design - Exploration, Hunting, Adventure, etc

### What is Gamification?



Application of game-design elements and game principles in non-game contexts



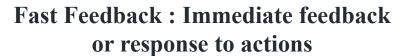
- Benefits
- Socialization
- o Learning
- Competition
- o Achievement
- o Reward



- Digital Content
- o Interactive Learning
- o Beyond the classroom
- o Tracked content
- o Another angle

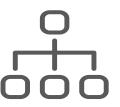
#### **Mechanics**







**Transparency: Where everyone stands** 



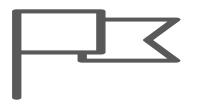
Goals: Short term and long term

Encourage users to continue or adjust their activities with onscreen notifications, text messages or emails.

Show users exactly where they stand on the metrics that matter to you and to your audience.

Missions or challenges give users a purpose for interaction, and educate users about what is valued and possible within the experience.

#### **Mechanics**







Leveling up: Status within the community

An indicator of accomplishment or mastery of a skill is especially meaningful within a community that understands its value. Often used to identify skills and expertise within a group.

Levels indicate long-term or sustained achievement. Used to identify status within a community and to unlock new missions, badges, activities, and rewards.



### Onboarding: An Engaging and compelling way to learn

Video games train you how to play as you play – users learn by doing. Simple missions help new users become engaged immediately as they master basic tasks, rather than being stumped by an unfamiliar interface or a detailed manual.

#### **Mechanics**

## Points: Tangible, measurable evidence of my accomplishments



Used to keep score and establish status or accumulated to purchase virtual or real goods. Earn points through activities, sharing, contributing, or by creating something useful to others.



## **Community: A context for achievement**

Community gives meaning to goals, badges, competitions, and other mechanics. Sharing participant achievements creates energy in the community by making people aware of what others are doing. They learn about goals, badges, and rewards that they may want to pursue.



## Competition: How I'm doing compared to others

Raise the stakes for accomplishing a goal by showing users how they compare to others, as individuals or in teams. Encourage competition with time-based, team and individualized leaderboards. Where do I rank? How can I overtake my closest competitor?



Connect users as a team to accomplish larger tasks, to drive competition, and to encourage knowledge sharing. Show team members how they are contributing to the group's success. No one wants to let down their team members.

**Progress Game Dynamics** Competition Collaboration Community Collection Achievement Surprise **Exploration** (emotional) **Points** Levels Missions (individual & team) **Badges** Game Mechanics Leaderboards (individual & team) Unlocks 4444 **Events Feed Notifications** Quiz Progress (visual)