

# PURDUE REPOSITORY FOR ONLINE TEACHING AND LEARNING

# Gamification in Online Teaching

#### 1 What is it?

Gamification is the use of video game elements like earning rewards that help improve user experience and user engagement in non-game services and applications (Deterding et al., 2011). We are all familiar with earning frequent-flyer rewards, moving from Silver membership to Gold membership, earning badges on Fitbit, etc. - and these are examples of gamification in marketing. Similarly, gamification can be used to enhance learning environments because it keeps learners engaged and motivated, apart from improving learning productivity, in a fun way. Gamification is especially helpful in learner assessment through games, polls, and surveys.

# **2** Why is it important?

Gamification leverages people's natural desires for socializing, learning, mastery, competition, achievement, status, and self-expression by framing a learning situation as a game or play (Lieberoth, 2015). Gamification is especially useful in online environments because learners across the globe can be engaged by the instructor on the same platform in real time (when possible). It enhances class communication and collaboration. Moreover, gamification tools can be accessed on mobile devices ensuring learner engagement on the go. Automatically generated performance reports help instructors to assess individual students, or the whole-class. Some online games can be played many times to learn content (e.g., Quizlet, Kahoot). Beating one's own scores serves as motivation to keep playing the game until learners master the content.

## **3** How to do it?

- Energize learners with rewards for accomplishing tasks. E.g., Give bonus points for regular on-time submissions or give exemption from one submission.
- Engage learners by creating a competitive environment. E.g., Create online polls to vote for ideas proposed by students.

- Encourage players to compete using leaderboards.
- Gamify questions into multiple choice, word cloud generator, image choice, graphs, or polls using Kahoot, Mentimeter or Poll Everywhere.

#### Tips and Tricks

- Share games on social media or via email.
- Assess student performance in a fun way.
- Quiz students every week interactively.
- Types of rewards: Digital badges or printable achievement certificates.
- Share leaderboards with the class.
- Reports can be generated and saved for your records from online tools.

#### 4 Additional Resources

- 5 Tools to Help You "Gamify" Your eLearning Content
- The science and the benefits of gamification in eLearning
- Mentimeter.com (free): Can be used to create quizzes and polls.
- <u>Kahoot!</u> (free): Can be used to create quizzes and polls. It is also useful for revision and reinforcement of concepts when given as challenges.
- <u>Poll Everywhere</u> (free polling tool): Can be used to create polls, including real-time polls.
- <u>Smartbuilder</u> (30 day trial version): Smartbuilder is an elearning authoring tool. It can be used to create small drag and drop quizzes for practice.

## 5 References

Deterding, S., Sicart, M., Nacke, L., O'Hara, K., & Dixon, D. (2011). Gamification. using game-design elements in non-gaming contexts. In CHI'11 extended abstracts on human factors in computing systems (2425-2428). ACM. <a href="http://gamification-research.org/wp-content/uploads/2011/04/01-Deterding-Sicart-Nacke-OHara-Dixon.pdf">http://gamification-research.org/wp-content/uploads/2011/04/01-Deterding-Sicart-Nacke-OHara-Dixon.pdf</a>

Lieberoth, A. (2015). Shallow gamification, testing psychological effects of framing an activity as a game, games and culture, 10 (3), 229 - 248.