

Let's Go on An Adventure!

How to Gamify Your Class and Engage Your Online Students

Abstract

Gamification is a powerful way to engage students in their learning processes, especially with the aid of technology in online and hybrid classes. In this PDW, we will address the main design principles in gamifying a class, drawing from Kolb's experiential learning theory and learning cycle. We provide specific examples from our successful experience in a gamified master-level statistics course to show how gamification can turn a typically dreadful topic into "fun." Participants will walk away with a rough plan and a to-do list to deploy their new understanding and experiences in their own classrooms.

Keywords

Gamification, online learning, experiential learning

Introduction

Gamification is a great way to engage students, especially with the help of technology in online and hybrid classes. Defined as “the application of game features, mainly video game elements, into non-game contexts for the purpose of promoting motivation and engagement in learning” (Alsawaier, 2018), gamification is a step further from game-based learning that many management educators are used to. Game-based learning uses games as vessels for learning topical content (Issacs, 2015; Keeler, 2014), and student interests usually come to an end after they have completed the games (Folmar, 2015). In contrast, gamification uses game elements in educational settings to create a playful atmosphere conducive to learning (Issacs, 2015; Keeler, 2014) and to generate long-lasting motivation and engagement among learners (Folmar, 2015; Simões et al., 2013). Explained in terms of Kolb’s (1984, 2015) experiential learning theory, in game-based learning each game or activity takes students around one learning cycle; whereas in gamification, the whole class design is one comprehensive experiential learning cycle. This all-encompassing inclusiveness of gamification helps to sustain student interests throughout the course, especially in online classes where student engagement tends to be an issue (Arbaugh, 2001, 2002) and even more so in asynchronous classes, where instructors and students are not required to meet at the same time.

In this PDW, we aim to provide higher educators, especially those who are teaching hybrid or online courses, with insights regarding how to gamify their classes. Drawing on Kolb’s experiential learning theory and learning cycle, we discuss the main principles in gamification as well as the roles of the course design, the instructor, and the learners as embedded in this context. We will provide concrete examples from our gamified statistics class to illustrate these design principles. Educators will be able to participate in a rich discussion and walk away with a

checklist of the specific steps they need to do to gamify their own classes. This PDW aligns with and contributes to the conference theme, “Tradition Meets Technology: Finding Ways Forward.”

Learning Objectives, Engagement, & Takeaway

Learning Objectives

At the end of this PDW, participants will be able to:

- Differentiate between game-based learning and gamification
- Identify the main design principles of a gamified course
- Evaluate the possible effectiveness of gamification in their own classes
- Choose the design elements that are most appropriate and most feasible to use in their own classes
- Create a to-do list to gamify their own classes

Engagement

This PDW will use a combination of presentation, reflection, and discussion to engage the audience and walk them through a complete experiential learning cycle. The format and timeline can be found in more detail in the “PDW Overview” section below. Here we present the activities associated with each learning mode.

- Thinking: Participants will listen to two brief presentations on (1) the gamification elements and (2) the educator roles in a gamified class. These presentations will inform them of the design principles and things to consider while gamifying their classes.
- Reflecting: In two separate thought exercises, participants will reflect on how gamification would work in their classes and how they would need to adjust their educator roles to moderate such a class.

- Experiencing: In two discussions with the authors and other participants, they will actively further develop their understanding of gamification as well as propose and imagine different ideas in the presence of like-minded colleagues.
- Experimenting: They will sketch out a rough plan and create a to-do list to implement what they learn from this session and gamify their own classes.

Takeaway

Participants will gain a theory-driven understanding of how gamification designs can improve student engagement in online or hybrid classes. They will gain knowledge of specific steps to do to cultivate connection and improve attentiveness, even in asynchronous classes. In this spirit, participants will spend 90 minutes having fun connecting with peers and being inspired by new ways of approaching online classes as playful and fun environments.

PDW Overview

We propose a 90-minute PDW session with the following format:

Introduction	10 minutes	Introduce ourselves and our experience with gamification Check in with the audience about their experience with game-based learning and gamification
Presentation 1 - Gamification Elements	15 minutes	Present the elements and design principles in gamification (see Appendix 1 and 2)
Reflection 1	5 minutes	Ask the audience to select a class they would like to gamify and sketch out a rough plan for gamification

Discussion 1	20 minutes	Engage the audience in a discussion about gamification elements
Presentation 2 - Educator Roles	10 minutes	Present the educator roles (and students' roles) in a gamified course (see Appendix 3)
Reflection 2	5 minutes	Ask the audience to identify how they plan to adjust their educator roles in their soon-to-be-gamified classes
Discussion 2	15 minutes	Engage the audience in a discussion about roles
Wrap-up	10 minutes	Ask the audience what they plan to do in their classes and wrap up

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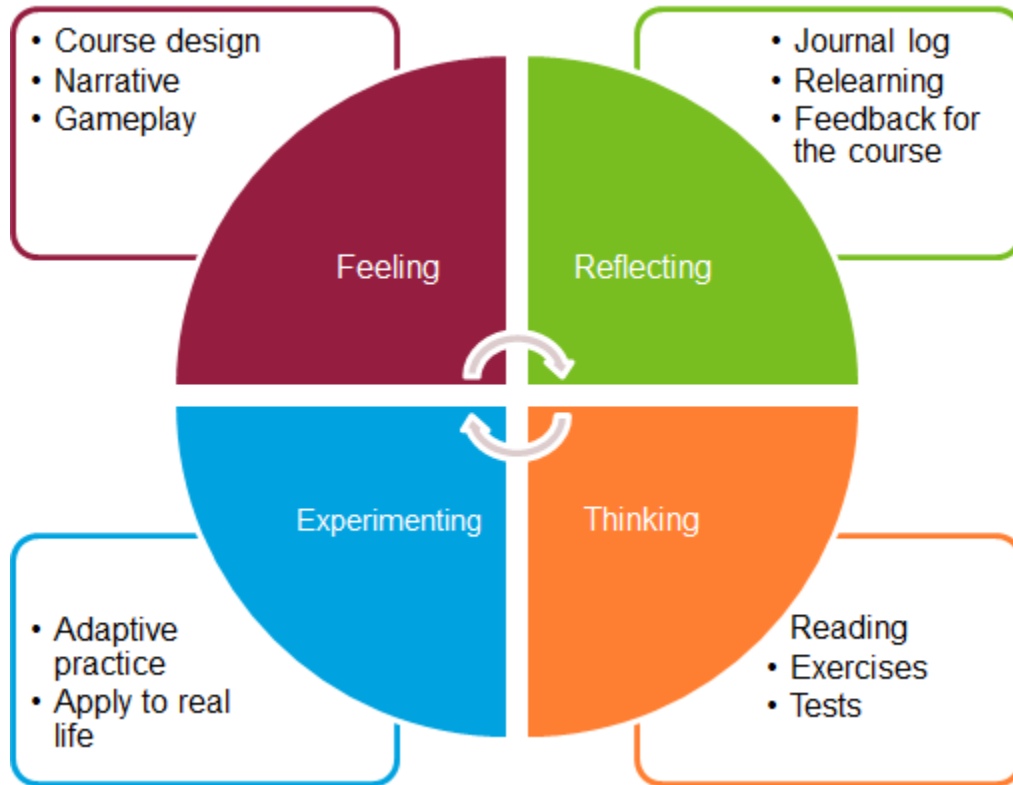
Appendix 1

Course Gamification Checklist

- Identify the course learning objectives
- Identity an overall theme for gamification
(e.g., history, world travel, fashion, build an empire, run a business, dragon slayer)
- Develop a narrative and **concrete** final outcome(s) for the game
(e.g., create a company and earn \$1M, develop a pool of 12 talents, go on an adventure and save the princess)
- Define gameplay elements, aligned with the course learning objectives
(e.g., students will complete quests to progress, earn coins to buy items, spend items to improve scores)
- Develop a scoring system and currency
(e.g., earn 9 out of 10 badges or earn \$900,000 to get an A in the course)
- Identify interaction activities among students
(e.g., fellow students can help each other on collaborative quests but not individual quests)
- Create learning activities and assignments
(e.g., lecture videos, readings, quizzes, writing assignments, discussions)
- Create an item shop with items for sale
(e.g., items to waive late assignments, improve test scores, extend deadlines, provide correct answers)
- Decide your educator roles and how much you want to be involved
- Give students clear instructions on how to play the game
(e.g., a rule book, list of quests, timeline, explanations of items and badges)

Appendix 2

Gamification Elements in the Experiential Learning Cycle



Appendix 3

Educator Roles in a Gamified Class

