

# **Using Gamification to Engage Final Year Accounting Students in their Learning**

**Summer Wilson, Barry Avery and Becky Lees**  
**Kingston Business School**

# Module information

BSc Accounting & Finance

L6 core module: Theory & Practice of Financial Reporting

**Assessment:** 50% Exam : 50% Coursework

Approx. 70 students

## Coursework:

20% series of in-class MCQ quizzes

30% Experts & Novices project

**Gamification**

# What was the problem?

- Students returning to face-to-face teaching post Covid
- Disconnected and de-motivated
- Stressed and less engaged (Sangster et. al., 2020)

## **Anticipated:**

- Weak attendance
- Poor time management skills
- Knowledge gaps
- Apathy

# What did we want to improve?

- Motivation and engagement
- Time management
  - attendance at teaching sessions
  - quality of their coursework
- Fill knowledge gaps
- Build confidence, reduce stress and achieve more

# Possible solution in gamification?

Gamification = using game elements in non-game settings


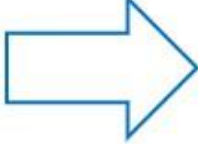
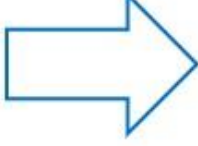

- Rewards system or playing a game

## **Pedagogic literature:**

- Promote student attention and engagement
  - Trigger commitment
  - Foster a positive attitude towards learning
- 
- Jmaluddin et.al. (2020)
  - Queiro-Ameijeiras et.al. (2019)
  - Rincon-Flores & Santos-Guevara (2021)

# Types of rewards

Four distinct strategies to improve:

- |  |   |                           |
|--|---|---------------------------|
| 1. Poor attendance                     |    | <b>Punctuality reward</b> |
| 2. Time management & CW quality        |    | <b>Assessment reward</b>  |
| 3. Self esteem & self confidence       |   | <b>Peer reward</b>        |
| 4. Peer-to-peer learning / interaction |  | <b>Competitive game</b>   |

# Data gathering and analysis

- Survey instrument
- Attendance data
- Focus groups
- Thematic analysis methodology

# Punctuality reward – earn time

Tethered to the **in-class tests**

## How to earn the reward?

- ✓ Be **on time** for two consecutive tutorial sessions
- ✓ Get signed in within first 5 mins (speed check-in system)

## What do you “win”?

- ✓ Win an extra five minutes in an in-class test

## Survey findings

- ✓ 74% said ***attendance improved***
- ✓ 25% said *no improvement (but had received the award)*
- ✓ 30% cited *time as their favourite reward*

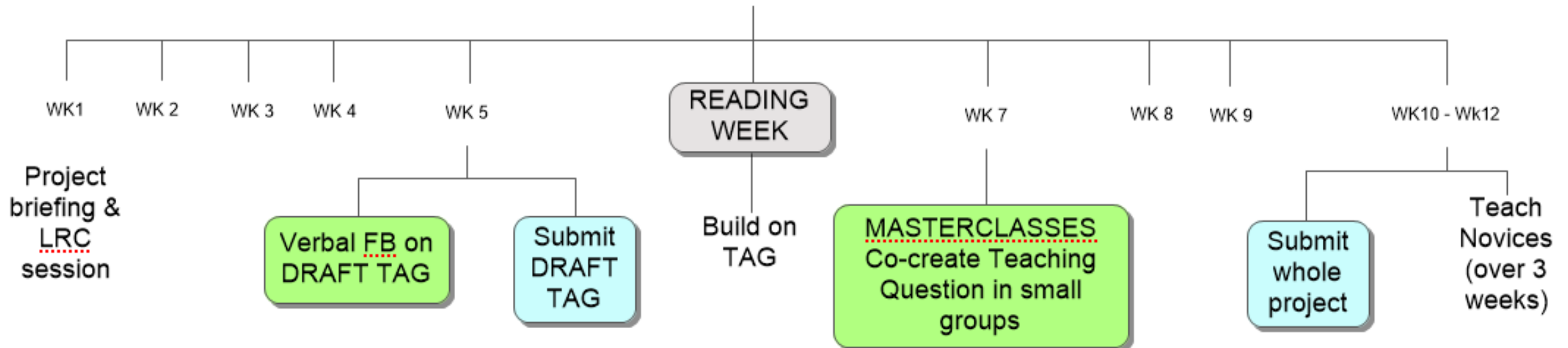


# Assessment reward (context)

## Experts & Novices Project

- Mini-literature review in area of their choice
- Identify a theme (become an Expert) to teach to their peers (Novices)
- **Co-create** a teaching question to hang knowledge on (Masterclass)
- Students typically underestimate the time it takes to read journal papers

### EXPERTS & NOVICES TIMELINE



# Assessment reward – earn marks

Tethered to the **Experts and Novices Project**

## How to earn the rewards?

- ✓ Submit draft Thematic Analysis Grid (TAG) before reading week

## What do you “win”?

- ✓ Bonus marks (half mark for each paper logged with notes in TAG)

## Survey findings

- ✓ 77% submitted draft TAG thereby starting early
- ✓ 87% said **time management improved**
- ✓ 10% cited bonus marks as their favourite reward

# Assessment reward – earn marks

Tethered to the **Experts and Novices Project**

## How to earn the rewards?

- ✓ Co-create the “teaching question” the week after reading week (need to have completed most of the TAG to be able to do this)

## What do you “win”?

- ✓ 5% uplift on final project mark if co-creation complete

## Survey findings

- ✓ 14% *had read enough to co-create the teaching question*
- ✓ 48% *said **class engagement improved***
- ✓ 30% *cited the uplift as their favourite reward*

# Peer reward – earn a voucher

Tethered to the **Experts and Novices Project**

## How to earn the reward?

- ✓ Novices vote for their favourite Expert and give reasons
- ✓ All comments are typed and distributed in mini-ceremony

## What do you “win”?

- ✓ Experts with most votes in each session earn £20 Amazon voucher

## Survey findings

- ✓ 60% said confidence improved
- ✓ 3% cited this as their favourite reward

# Game – earn kudos

Tethered to the **In-class tests (revision)**

## Connect-4 Game

- ✓ 50 practice questions distributed at start of term (no answers)
- ✓ Students put in teams
- ✓ Try to find solution, but must teach ALL members
- ✓ I pick who answers
- ✓ If incorrect – the floor is open
- ✓ If correct, can put a counter in the Connect-4 grid



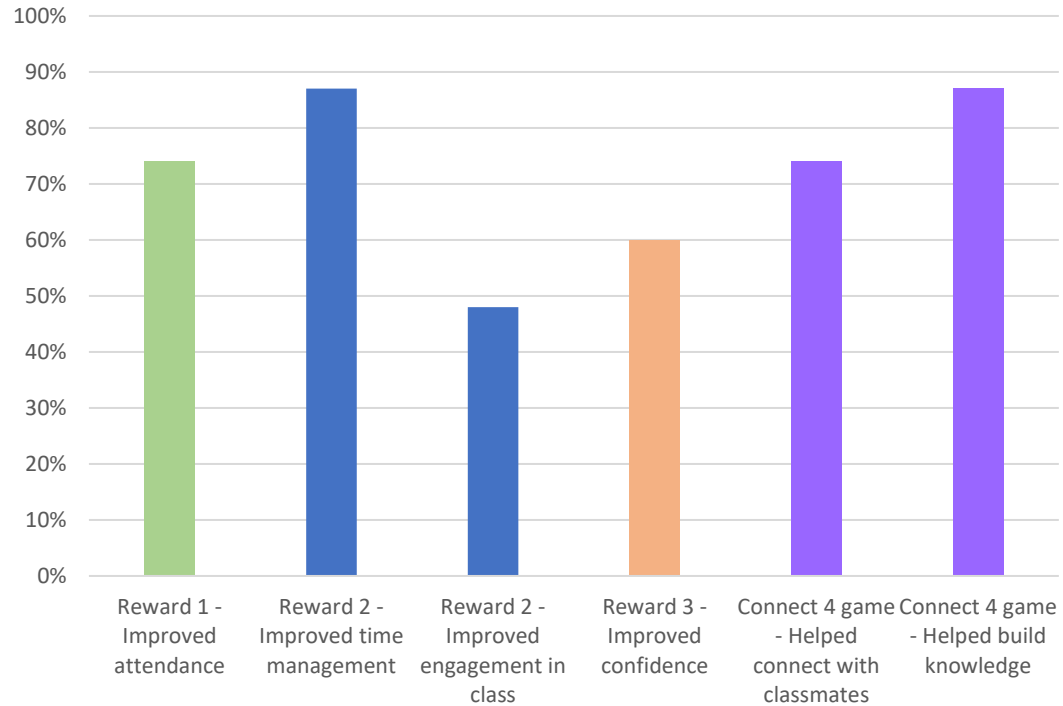
# Game – survey results

## Survey findings

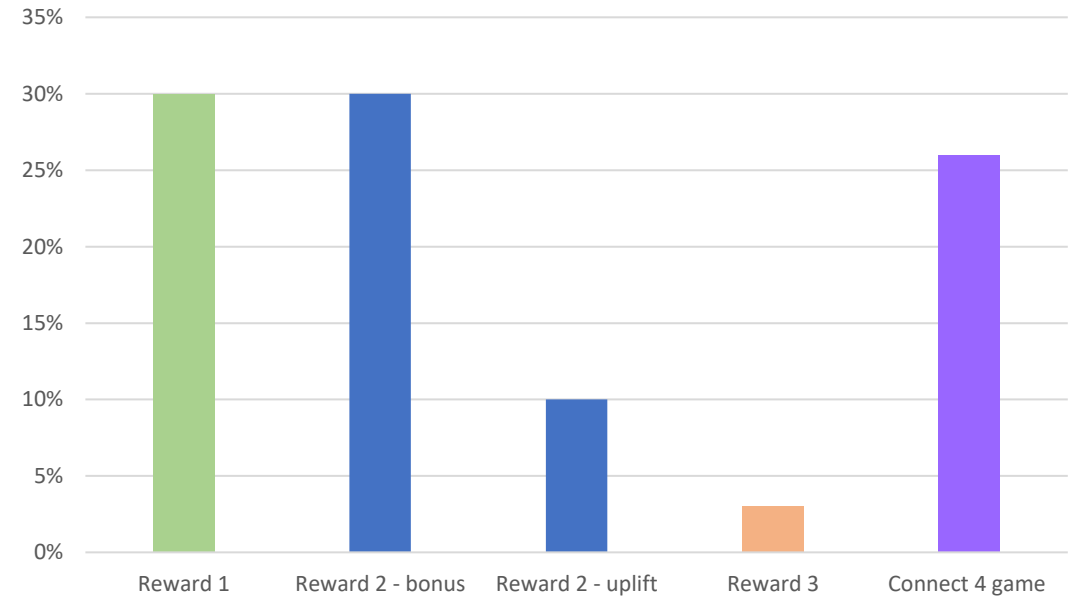
- ✓ 74% said it helped them to connect with classmates
- ✓ 87% said it helped them to build knowledge
- ✓ 30% cited the game as their favourite gamification element

# Summary of survey results

Comparative Success of Rewards



Student Favourite Rewards / Gamification Element



# Emerging themes – focus groups

## ✓ Physicality of the game

*“The fact that you’re **not** doing it on Kahoot is one of the reasons I actually enjoyed it. If you did it on Kahoot, I’d probably walk out by the break time.... Anyone could do anything on their phone calculator, but actually writing it down as a working – not as easy as it sounds...”*

*(G3 Speaker 4)*

*“We obviously had to, like, talk to each other. Teach! Yeah, it was good.”*

*(G3 Speaker 7)*



# Emerging themes – focus groups

## ✓ Unintended consequences / importance of a name

*“It just shows - that if you know my name. you genuinely do care... you know, my name. We’re able to joke around. You know, **me**. Know my personality... Stuff like that. So.... you're not just an academic lecturer to us, but when you know someone's name, you automatically become friendly.”*

*(G1 Speaker 4)*

*“.... going back to the bond and relationship aspect, I - everyone would be able to say - that the relationship we have with you, we’ve never been able to form that with any of our other lecturers..”*

*(G1 Speaker 6)*

# Emerging themes – focus groups

## ✓ Response to Gamification in the module

*“It definitely does make you enjoy the module, **more**. I think out of all the modules, I probably like your module the most...”*  
(G1 Speaker 6)

*“.... you could be ill, you can have some drama going on.... Oh I might as well just drag yourself in... and [we] just do it. That's how I always feel... Your module is like, it's not a burden...”*  
(G1 Speaker 3)

*“We never got the full 9-5 uni experience. This was our first year. So knowing that, we get a couple of extra things.... Yeah, it's good.”*  
(G3 speaker 4)

*“[this module].... It has a special place in my heart [laughter] – seriously...”*  
(G3 Speaker 3)

# References

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Rincon-Flores, E.G. and Santos-Guevara, B.N. (2021) Gamification during Covid-19: Promoting Active Learning and Motivation in Higher Education. *Australasian Journal of Educational Technology*, 37 (5), pp.43-60

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**Thank you  
Questions?**

