

Escaping the Ordinary: Developing and Implementing an Escape Room Activity for Online and Face-to-Face Classes

Abstract

This class activity session will focus on the use of an escape room activity that can be run in both online and face-to-face classroom settings. Incorporating elements of gamification, game-based learning, and technology enhanced learning, this activity provides students with a novel experience that improves engagement and generates positive student experiences. By utilising free online platforms, immersive activities can be developed that are specific to any course content, and are readily accessible to students in class, online, or even a combination of both. This session will provide attendees with an opportunity to participate in the escape room activity, as well as discuss the development process. While the session will mostly focus on the implementation of the escape room activity, there will also be discussion of the challenges encountered during development and barriers that can hinder wider uptake of the activity.

Keywords: Escape Room; Student Engagement; Gamification; Technology Enhanced Learning

Introduction

There are two clear messages that resonate from existing literature on student experience and engagement: 1) Students who have a more positive experience in the classroom are more motivated, perform better, and have higher levels of overall well-being (e.g. Boulton et al., 2019; Kahu & Nelson, 2018); 2) The delivery of learning content is critical when it comes to improving the student experience, and in many cases, the delivery of material in university classrooms is failing to provide a positive experience for students (Ongeri, 2017). This is particularly the case in online classrooms, which often suffer from reduced student

engagement (Martin, 2019), detracting from a positive student experience. Accordingly, and exacerbated by the recent increase in online education following the COVID-19 pandemic, there is a pressing need for class activities that improve the student experience in both face-to-face and online classrooms. This class demonstrates the delivery of an online escape room, a technology-enhanced learning (TEL) activity designed to create a more positive student experience and better engagement with the learning content. Escape rooms have recently been trialled successfully in physical classrooms and practical disciplines (e.g. nursing), but their application to business and management education remains largely unexplored (Chapman, Macht & Beattie, 2019). Moreover, the use of escape rooms in an online learning environment is a very new field, with nearly all studies in this area emerging since 2021 following the impacts of the COVID-19 pandemic (e.g. Hursman et al., 2022; Manzano-León et al., 2021). While the class being demonstrated here is designed for a postgraduate management course, the activity can be easily tailored to suit virtually any cohort of students.

Theoretical Foundation and Teaching Implications

The modern student cohort is characterised by a desire for enjoyment and fun, with little tolerance for boredom (Lee, Chang, & Samanta, 2023; Sandeen, 2008). To address this, various examples of gamification (Buil, Catalán, & Martínez 2019; Lin, Hwang, Fu & Chen, 2018) and game-based learning (Boller & Kapp, 2017; Farber, 2017) (e.g. simulations or role plays) have been developed for use in educational settings. These fields of literature, along with the field of TEL (Dunn & Kennedy, 2019; Flavin, 2016), form the theoretical foundation for the online escape room class activity.

Gamification in education is an emerging field, but extant literature suggests that gamified classroom activities can result in more positive student experiences, more active and deeper learning, as well as better development of specific skills (Dias, 2017). However,

research and best practice in the context of more novel and innovative approaches, such as the use of online escape rooms as a form of TEL, is a very new area. Given the sudden shift across the university sector to a delivery model almost exclusively reliant on online delivery, there is a greater need than ever to invent, trial, evaluate, and improve such novel and innovative approaches.

Game-based learning incorporates game design principles into learning activities, such as interactivity, exploration, and strategic decision making (Boller & Kapp, 2017). While similar in some ways to simulations, game-based learning uses stylisation and symbolic game language that would seem out of place in traditional simulation activities. However, when participants agree to ‘play by the rules’, a heightened focus on core learning activities can be achieved, facilitating quicker uptake for learners. An online ‘escape room’ (Nicholson, 2018) activity fits this description, with students asked to immerse themselves in the activity (solving a series of puzzles as a team, with the goal of ‘escaping’ a virtual room), and by doing so, benefit from a more positive learning experience.

Escape rooms have become popular recreational activities around the world, but they have only recently been applied to education, with a small number of very recent studies reporting on escape room styled learning activities being used to teach skill-based curricula (Gordon, Trovinger & DeLellis, 2019). The ability to modify nearly every element of an online escape room (e.g. the content of the puzzles, the context of the scenario, the degree of interactivity, the extent of game elements used, etc.) makes it ideal as a form of TEL. With a high degree of flexibility, individual educators can determine the most suitable way to deliver their learning content (Serrano, Dea-Ayuela, Gonzalez-Burgos, Serrano-Gil & Lalatsa, 2019).

Escape rooms combine fun with the development of skills and attributes required by graduates in the 21st century. These skills include: problem solving; teamwork;

communication and cooperation; creativity; high-pressure decision making; leadership; and lateral thinking. Importantly, Plump and Meisel (2020) suggest that focusing an escape room activity around specific themes allows participants to develop their knowledge of the subject matter relating to these themes. These authors, who have provided one of the few studies that specifically examine the use of escape rooms in the field of management education, emphasise that a well-designed escape room activity will improve engagement regardless of the underlying discipline context.

TEL refers to the use of technology as a tool for learning, or as the medium through which learning takes place (HEA, 2019). An increasing number of academics in management education are embracing the opportunities that technology can offer both inside and outside of the classroom. This increased uptake in TEL is also accompanied by exponential growth of research interest in TEL since 2004 (Shen & Ho, 2020). The COVID-19 pandemic has further boosted the move towards technology as the requirement to conduct teaching and learning online has made technology no longer optional (Al-Ataby, 2020).

TEL can refer to any Information and Communication Technology (ICT) tool being used in an educational context (Rodríguez, Nussbaum & Dombrowskaia, 2021). This includes tools as diverse as augmented reality (Fonseca et al., 2014), e-portfolios, simulations, and blogs (Campbell & Tran, 2021), and social media (Penchenkina & Aeschliman, 2017). Evidence as to whether TEL activities facilitate better academic performance in students is inconclusive (Dunn & Kennedy, 2019; Shen & Ho, 2020), although students generally have positive attitudes towards TEL (Kennedy & Dunn, 2018), which may suggest that TEL has benefits for student engagement (Serrano et al., 2019). Much extant literature on TEL in management education has focused on establishing the usage of TEL amongst students, while there is a marked lack of literature focusing specifically on engagement through TEL (Dunn & Kennedy, 2019).

Learning Objectives

- Gain a greater understanding of the United Nations SDGs;
- Build knowledge of how the SDGs are being applied in real world settings;
- Improve teamwork skills by working cooperatively in a team, using problem-solving skills and communication strategies;
- Demonstrate an increased level of engagement with the unit content.

Exercise Overview

When run in a class during the course of a regular term, the activity typically takes place in the second last week of the term. This is because the activity generally works as a form of revision, allowing students to use the knowledge they have gained across the term to successfully navigate the challenges of the escape room. Students are informed of the activity in the weeks leading up to the class, as this helps to maximise student involvement. Students who are enrolled on campus are able to attend their regular class, and are asked to bring in laptop devices if they are able. Only one laptop is needed per group of 4-5 students, so this requirement has not been a barrier to successful implementation. Students who are enrolled online, or who are attending on another campus, are able to join the activity virtually, by signing onto a zoom meeting that runs synchronously with the class.

At the beginning of the class, students are organised into groups of 4-5, with the preference being that on campus students will be in groups with each other, and online students will be in groups with each other, but there is nothing to stop groups being a mix of on-campus and online students if that is preferred. Once groups are formed, each group is emailed a unique link that allows each member of their group to access the escape room. For on-campus groups, students often choose to have just one laptop accessing the room, and have all students work together on that computer, but again, the design of the activity allows

each student to access the activity via their own computer, which is necessary for online students.

With students now able to access the escape room, a brief tutorial is provided, with the instructor outlining how to navigate the escape room, and providing several tips that help students avoid common mistakes and misunderstandings. Once the tutorial is completed, students have an opportunity to ask any questions they may have, or seek further clarity about any aspect of the activity. Following this, students begin working in their groups in an attempt to be the first group to successfully ‘escape’. To do this, students have to ‘explore’ the virtual spaces shown in the escape room activity. In doing this, they will find puzzles, clues, and questions, which if they interpret and solve correctly, will result in a series of 4 digit codes that will enable them to progress through the activity.

Throughout the activity, the instructor is able to monitor student progress, both in class and online, as they can simultaneously see each of the rooms if they have each one open on their personal computer. If a group appears to be struggling to understand the activity, or stops demonstrating signs of progress throughout the duration of the class, the instructor is able to provide individual help to that group, usually in the form of a hint that will help them to solve the puzzle they are currently stuck on and continue progressing through the activity.

To solve the puzzles, students need to demonstrate knowledge of the unit content, as well as work collaboratively with their team, as the puzzles often involve looking at something in a different way, and the more perspectives that are shared, the more likely the solution will be found. Eventually, groups will begin to complete the task. Once a group has finished the task, the instructor provides a quick debrief, asking the students if they had any questions about the activity, or any other questions or concerns they may have about the unit in general. After this, groups are free to leave, or stay while other groups finish the task.

Session Description

The MOBTS conference session will involve a short version of the online escape room activity. Rather than having the activity revolve around specific unit content that attendees may not be familiar with, the activity will instead focus only on the United Nations Sustainable Development Goals, as most attendees will likely have at least some knowledge of these, and if necessary, will be able to easily look up any required knowledge quite quickly.

At the beginning of the session, I plan to provide a quick overview of what an escape room is, and how this activity was developed (the level of detail provided here can be tailored to the level of knowledge and experience of the group of attendees). Following this, I plan to use most of the session time allowing the attendees to actually engage with the online escape room activity, and work in small groups to attempt to finish the task. While it can be difficult to predict exactly how long groups may take to finish this kind of activity, my plan is for the task to take between 30-40 minutes, allowing for a 10 minute briefing at the beginning, and a 10 minute debrief at the end.

The activity itself will hopefully run in a very similar way to how it runs with students, with a quick tutorial at the start, and the capacity to monitor the progress of each group live. The only element that may be slightly more time consuming is that I will need to get the email addresses of the attendees at the time of the activity in order to be able to send them the link for the room, instead of already having the addresses ready to go like I would with students. However, I don't think this will be a significant concern in terms of timing.

In the activity debrief, ideas for how the activity could be implemented across different classes or disciplines can be discussed, along with techniques for addressing the challenges and barriers that exist when running this kind of activity.

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