The Journal of Social Media for Learning 2020

Escaping the inactive classroom: Escape Rooms for Teaching Technology.

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Abstract

This paper is intended to give you an insight into the pedagogy and technology used in creating the Free Ed workshop delivered at Social Media in HE (SocMedHE) conference in 2019, which utilised an Escape Room to deliver Microsoft Teams teaching. This paper aims to give you an insight into the workshop itself, what participants thought, reflections on delivering the session and finally, some key points for you to take forward if you would like to try this yourself.

Free Ed was a one-hour fun and interactive hands on Bring Your Own Device workshop which explored the functions necessary to build collaborative classrooms using Microsoft Teams.

Participants were faced with the following scenario:

"Your group has been locked in. The question is, can you escape? You will need to work together to find your way out and who knows, maybe you'll learn something on the way! Working together you will experience innovative scenarios designed to showcase some of Microsoft Teams features relating to collaborative classrooms. Utilising Microsoft Teams enables you to streamline collaboration including document sharing, synchronous and asynchronous communication, assignment handling, class notebooks and additional integration including Flipgrid, all in one app! But there's a twist, your group may have some virtual team mates too. Microsoft Teams isn't limited to the classroom and what better way to learn more about this than experiencing it for yourself. Can you work collaboratively to find your way out?"

This workshop demonstrated how Microsoft Teams can function as a seamless platform to streamline teaching workflows by creating a workspace for more robust collaboration between students.

Conference attendees were invited to participate in the Escape Room. In total, 20 educators from a range of professions and technology backgrounds with varied experience of Microsoft Teams completed the experience, divided into 4 groups.

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Keywords

Escape Room, video games, technology, active learning, Microsoft Teams

Introduction

Educators often face the challenge of promoting engagement for students in an authentic problem setting (Belland et al., 2017), which can at times feel sterile as it is hard to directly replicate authentic settings, or to keep the educational aspect at the forefront whilst maintaining focus on authentic experiences. This is an often-faced challenge in technology teaching, as it is typically a one-sided experience with participants completing exercises based on an educator showing and telling how to carry out specific actions. This is quite far removed from an authentic experience of utilising technology, given that the reality of using technology, is that there are often many ways to complete the same objective. So, for the educator, picking the method that will work for individuals and also be meaningful can be a challenge without an authentic context for participants to learn in.

A big challenge for technology teaching lies in one of its strengths – the fact that you can do things many ways. As educators, we frequently try to guess the answer to a question, before the question is even formed. This is something you've likely experienced yourself. That thing of not knowing what it is you needed to know, until you need to actually know it. However, once you realise this, you often don't know who to ask to find the answer which results in feeling stuck. This proves to be a quite a conundrum. How do you get somebody the correct answer to a question they haven't asked, before they need to know to ask it, preferably without them feeling stuck?

So, you may ask, how does this relate to technology teaching and how was it that we came to teach technology via an Escape Room?

At the time of writing, we (Scott & Rachelle) work as Educational Developers as part of the Centre of Innovation in Education in the University of Liverpool. Our role sees us supporting innovation in learning, teaching and assessment through enhanced curriculum development, by encouraging and guiding educators to critically consider technology as part of holistic curriculum-design processes.

Workshop delivery and teaching in relation to pedagogy, digital education and technology is a crucial aspect of our role and standing at the front delivering a PowerPoint presentation or demonstrating technology, has never really been our style. Where possible, we model best practice and aim to deliver authentic and practical experiences where participants can explore technology and become accustomed to utilising it in a way that suits them.

We take opportunities to model best practice but not in a way that is prescriptive or specific to our preference. Instead, the focus is on the participant working out how best to use the technology for them. The aim is that following a workshop, participants will feel they have gained practical experiences that can be applied to their own practices and will help them to hit the ground running.

This is where the Escape Room came in. It was our hope that by creating a fun challenge of completing an Escape Room, the pressure and fear often associated with learning new technology would dissipate, and by the end of the session the participants would feel more confident to try something new. So, rather than stand at the front for an hour to delivering a technology workshop, we conceived an Escape Room which, when completed, would teach users how to carry out key features necessary to create collaborative classrooms in Microsoft Teams.

Want to know how and if this worked? Read on to find out!

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Video and digital games in education

Over the last decade, increasing amounts of time have been spent on video and digital game play, positioning them as a prominent form of consumer culture, key for education and a common part of people's everyday lives (Noraddin & Kian, 2014; Hamari & Keronen, 2017). The 2017 UK games industry was valued at £5.11bn and the UK is now classed as having the 5th largest video game market in the world. It is estimated that 32.4m people in the UK engage in video and digital games (UKIE, 2018), representing around half of the population.

Recognising the holding power or compelling, exciting and engaging nature of video games and their potential to engage and motivate individuals to attempt challenging tasks (O'Brien, 2018), it is perhaps unsurprising that digital games have proven to be increasingly interesting to educators. Literature repeatedly describes and critically evaluates the potential of digital games in their capacity to transform education (Squire, 2003; Gee, 2007; Whitton, 2010; de Freitas, 2018) moving away from more traditional rote learning to something more experiential. Gee (2007) considered that games can be transformative and have potential to motivate a new generation of learners in ways that traditional education does not. However, adoption of such practices in HE is reported as being slow (Koh et al., 2012).

Recognising that enjoyment in games is derived from the associated learning process, proponents reflect on the role of learning in good game design. McGonigal (2011) proports video games as a productive way to spend time, while Gee (2004, 2007) reflects that games embody principles which trigger cognitive responses desirable for learning, thus games can teach in powerful ways (O'Brien, 2020). Schell (2008) describes games as a problem-solving pursuit with a playful attitude.

Further reflecting on the association of video games to learning, Barr (2019) posits that attributes such as player agency, self-reflection and problem solving can be mapped to contemporary learning theories (Schrader et al., 2006) such as active and experiential learning. However, Whitton (2007) warns against assumptions that those motivated to play games for leisure will also be motivated to learn with them. Effective game uses should include a clear rationale embedding sound pedagogical principles and be technologically appropriate. This is further supported by de Freitas (2018) who states that establishing the efficacy of learning is complex and should be contextualised in a wider understanding of how learning happens.

The practicalities of incorporating video games into education is a potential barrier to the inclusion of them and could account for the reported slowness of HE adapting to utilise such practices. Teaching with video games requires game worlds, consoles, a level of experience from both the teacher and participants and often elicits emotional responses. If we consider practices such as Game Based Learning which proposes digital educational games should be made for the classroom (Begg et al., 2005), this again comes with associated challenges, such as technical implications, time and cost involved in developing such resources and placing too much emphasis on 'fun' over learning (Begg, 2008; Dicheva et al., 2015), all of which could be off-putting to educators. There is also an association for many between video games and a perceived requirement of technology knowledge, understanding and ability, which for many is concerning and is often the biggest barrier (O'Brien, 2020).

If we instead shift the focus from the technological requirements of video games and instead look towards what can be learned from video and digital games, we can work towards informing education with gameplay experiences (Begg *et al.*, 2005). This may pose an opportunity to retain desirable features learned from video games, whilst preserving the importance of what is being learned and removing the pressure on needing specific technical prowess, game worlds, technology or the associated expense of building a bespoke product (O'Brien, 2020).

As has already been outlined, similarities between video games and contemporary learning theories makes this possible. However, as with learning theories, it is important to be mindful that using video games in education does not guarantee that students will be more engaged, more motivated to learn or will satisfactorily meet learning outcomes (O'Brien, 2020). The effective use of games requires careful pedagogical planning.

Escape Rooms

Taking their inspiration from video games, Escape Rooms or Escape Games, focus on the idea that a team of players should work cooperatively to solve puzzles, accomplish tasks and discover clues across a number of rooms, in order to progress and accomplish a goal or objective, sometimes in a specific time limit. Escape Rooms can happen in-person, or utilising technology but are differentiated from a video game as they do not tend to occur in a traditional video game setting, such as using a console.

Enjoyment of educational Escape Rooms has been developing in recent years, but the first physical in-person recreational Escape Room can be traced to Japan in the late 2000s. Following worldwide growth in popularity of Escape Rooms (Stone, 2016) there are estimated to be over 10,000 in-person Escape Rooms, spanning 75 countries. They are increasingly becoming a significant and profitable part of the leisure market and an exciting opportunity for education (Stone, 2016; Ferguson, 2019).

You may already be thinking that Escape Rooms sound pretty similar to active, problem based, collaborative activities that happen in the classroom. This is exactly why they have become so popular in education. Recent years have seen many educators adapting the concept, to fit the needs of their students, both in-person and in digital learning environments. The benefits of utilising Escape Rooms are twofold: they bring with them the exciting, engaging, compelling aspects commonly seen in video games and they are adaptable enough to keep the educational content at the heart of the activity. However, they have the added benefit though, of being immersive.

Unlike games which require the player to choose and play as an avatar, Escape Rooms put the player directly into the game, thus being truly experiential. This has added benefits where education is involved as well, as reducing barriers between the player and the experience, brings them closer to the learning. Also, the act of creating an Escape Room can be an enjoyable and fun experience for the educator.

Microsoft for Education

Microsoft products clearly have numerous benefits for use within education, Microsoft's products are widely used by business' and enterprises alike – why would we not we want our students to use products and platforms in their learning that they will likely go on to use in their further education and careers? There are also a lot of benefits that are not so widely known, some of which are the reason we personally use them. Microsoft 365 is cloud based, meaning the products within (Word, Excel, OneNote, Teams etc.) are easily accessible and compatible with mobile devices. Office online is also running web-based versions of the applications too, meaning no requirement to download products for those with little or no access to high-speed internet connections. Microsoft also provides free training courses, recognition of completed training, open materials and resources for teachers through the Microsoft Education Centre.

Within Microsoft 365, is Microsoft Teams. Advertised by Microsoft as a hub for Teamwork, this product brings together a combination of Microsoft products such as Skype for business, OneNote, Outlook, Word, Excel, PowerPoint and a number of other third-party tools and applications to create collaborative project spaces. For educational purposes, the product offers collaborative classrooms and a streamlined teaching and learning workflow.

Recognising the popularity of Microsoft Teams and experiencing the challenges our academic staff often face in practically using it as a tool, we set out to develop a workshop which taught the basic features of creating a collaborative classroom, but in a fun and engaging way.

Free Ed

The Free Ed workshop and was created to deliver a practical, fun and engaging hour of activities that provided participants with the opportunity to explore and experiment with Microsoft Teams. To inform our activities we looked towards video gameplay experience (Begg et al., 2005) and decided that an Escape Room fit our intentions. This came with the added benefit of being able to utilise features within Microsoft Teams, such as OneNote, to carry out the actual activities. Having made these decisions, we set about creating a workshop that would be self-directed for participants, could be easily accessed on their own devices and showcased basic and useful features of Microsoft Teams that would help with the creation of collaborative classrooms in the future.

The Escape Room aspect was built using Microsoft OneNote, which sits inside Microsoft Teams. This enabled us to keep everything contained within a Microsoft Teams workflow and to avoid unnecessary tabs or moving between windows. The OneNote Escape Room contained a number of problem-based activities that needed to be carried out in Microsoft Teams. It was planned so that successful completion of activities revealed clues or passwords that enabled participants to move forwards. Each activity was designed to showcase and demonstrate key features of Microsoft Teams and in completing the activities, participants were not only learning to use Microsoft Teams, but revealing clues and passwords that enabled them to move forward and subsequently complete the Escape Room. By the time participants had Freed Ed, they had worked through the following features of Microsoft Teams:

- Using OneNote and password protecting pages
- Synchronous and asynchronous communication
- Creating and managing channels, chats and video calls
- Document sharing and collaboration
- Assignment handing including setting and completing assignments and receiving feedback on submissions
- Additional integration apps, including Flipgrid and Microsoft Forms

Reflecting that Escape Rooms are founded in video gameplay experiences, we focussed our attention on adopting aspects and features of video games that would be beneficial pedagogically in this learning context. This included things like; creating a safe space for experimentation, reducing real world consequences so participants could take risks, plus adopting a narrative and encouraging participants to take on roles. Finally, we created challenging situations (or tasks) where problemsolving resulted in rewards, in this case clues and passwords which were needed to progress. To retain the importance of learning outcomes, we kept these at the forefront and referred back to them often, so the participants didn't lose sight of the workshop objectives.

The SocMedHE conference had a mascot, 'Ed' a gingerbread man, which afforded us an opportunity to theme the narrative of the Escape Room around a topic relevant to the conference, as well as giving us a way to motivate participants and contextualise tasks. The premise was that Ed had been kidnapped and the kidnapper was threatening to put Ed in the oven. Participants had the job of rescuing Ed before the kidnapper put him in the oven and he ended up as burnt gingerbread!

Free Ed workshop instructions

Below you will find the instructions given to participants.

What's happened?

Ed has been kidnapped and we're not sure where he has been taken. Can you rescue him before it's too late? Make sure you hurry; the oven is heating up.

What will you be doing?

This Rescue Mission is all about teamwork, communication and collaboration. During this mission you will explore and experience various aspects of Microsoft Teams and by the end of the session we hope that you will have had an experience of creating a collaborative classroom in Microsoft Teams.

How does this work?

This Rescue Mission is based on a real life interactive and intuitive escape game. In order to rescue Ed, you will need to work your way through a number of tasks, solve clues and carry out actions.

You will start with 'Pesky Presents' in order to escape from this room and move on to the next, you will need to complete a number of tasks. When you have finished with your tasks you will be given a clue. The answer to this clue is your password to the next room. If your password is incorrect, you will need to try again. You repeat this through the four zones until you have found all of the passwords.

Make sure you keep a note of your passwords though, this anagram forms a word which you will need to free Ed from 'The Oven'.

The map

There are four rooms to work through in total and four clues to answer. If at any point you get stuck, please alert either Scott or Rachelle via your team (or go old fashioned and beckon one of us over!).

Ready to begin? Have a look around OneNote for the tabs. The place they sit depends on the device you are using. They will either be on top, on the left or on the right - click where it says 'Pesky Presents' you will see it asks you for a password. Type ED (all capital letters) and hit enter. You've got quite a journey ahead of you, so best get started!

Good luck! P.S Below is the map of the sections you will be visiting



Figure 1: Map of sections visited in Free Ed Workshop

What our participants thought

"I attended Rachelle and Scott's session at SocMedHE conference on Building collaborative classrooms using Microsoft Teams. As a Teams user at work interested in using it for teaching, I approached the session expecting the standard 'presentation' style session with some mini exercises, however, I was pleasantly surprised at their approach. The session saw us put into four groups, each of which was added to a Teams space set up as an 'escape room'. As groups we had to work on tasks and discuss approaches to solve each of the problems posed using the clues given. This process saw us not only interact with different parts of the Teams space, but also included the use of apps embedded within Teams and surprisingly, calling colleagues of Rachelle and Scott on Teams to get additional 'clues' to help us to escape! The session was great fun, everyone got involved and the room was buzzing. Importantly, I not only had fun, but learnt a lot about the capabilities of the Teams space and what I may be able to achieve in my own teaching."

Claire Moscrop (BPP University)

Figure 3: Tweet from participants during the session



Rob Morris @Mr_RMorris · 19 Dec 2019 This is getting very competitive now. Really seeing the potential in @MicrosoftTeams #socmedhe19 **#freeed** #TELMe #SaveEd @edgehill

Miss Whittaker @MissTwhittaker · 19 Dec 2019

Taking part in an escape room to free Ed! Team Sleighmyname for the win ! Ran by @scottfarrow88 @rachelleeobrien @Mr_RMorris @Sarah_wright1 @neilwithnell @adeaves #freeEd #Socmedhe19



"Just a message to say how much I appreciated all your efforts in creating and delivering new materials for the training on Tuesday – great ideas and a lot of fun D.

I would love to try this with some of my international delivery but it's a question of whether they have access to Microsoft Teams and also whether students do too! It could be an idea, but they can't use it in their context. I might come back to you for advice if I find an institution that does have it!

For me being put in the role of a 'learner' was also a really useful experience – I learnt how competitive some people were! \odot As a consequence, it made me really think hard about my own practice.

(If you would be interested in comparing experiences of using competition in learning I'd be really interested in chatting with you about it to see how you manage this competitive streak)"

Kathy Wright (Advance HE)

Our experience of delivering Free Ed at SocMedHE

Planning ahead: What if people can't access Microsoft Teams?

Prior to the session, we met to discuss any potential challenges we might encounter. One potential difficulty was delivering the workshop outside of our University network. We had previously run an Escape Room session using OneNote on campus, with students, but all of the participants' accounts were internal to the University and had the same Microsoft 365 licence. Delivering the workshop for externals using Microsoft Teams meant we had to explore our institutions guest accounts, to make sure everybody was able to access the workshop. This also meant that we needed to create email accounts for any workshop participants that weren't Microsoft 365 users already, as they'd have no way to access Microsoft Teams otherwise. To make sure we didn't end up in a situation where some people couldn't access the workshop due to a lack of an email account, we created multiple spare email accounts to supply at the start of the workshop.

How many people should be in each group?

As the session was going to be run in groups, and we didn't know the number of workshop participants until the start of the session, we made decisions before the session about group size. We decided a minimum of two and a maximum of four groups would work, so on the day we would need to divide participants accordingly. This was to ensure we could manage support for the groups, but also to guarantee we had enough devices that could be logged into using our pre-prepared Microsoft accounts in case there were any issues with guest permissions or access. Unfortunately, we did face challenges with access, so we were pleased we had the foresight to have devices and spare email accounts on standby.

In order to be prepared for any worst case scenarios in terms of technical issues or access, we'd agreed prior to the session that participants should be divided into groups containing a mixture of experience using Teams and OneNote in addition to making sure each group had access to one University of Liverpool account and device, some Microsoft 365 users and some non-Microsoft users.

Scott's reflection on SocMedHE

As someone who has never experienced using or delivering with video gameplay experiences, I raised apprehensions leading up to the workshop about how participants would react to this kind of session and what to do if people didn't seem to enjoy it. Rachelle's experience of previous delivery reassured me people would enjoy the format and the initial feedback and observations proved this to be true.

During the session, once we'd introduced ourselves and started to get participants logged in, we ran into some issues with the guest accounts sign in details on certain users' devices. However, as planned for, we just redistributed the groups of those who could not log in, to work in groups and share devices with those who had larger screens on laptops, rather than smartphones and tablets.

As there were four tasks and rooms for users to work through in a limited time, I felt an urge to help and provide pointers to the slower groups, but decided not to step in. In hindsight I think by letting them work through things in their own time and not giving away any clues the session was more successful and beneficial to participants.

From my perspective everything played out how we'd expected it to, even the challenges we'd prepared to experience happened. The only element that I hadn't expected and prepared for personally, was the reaction to the format of the session and its light-heartedness. Competitive spirits were on show from most participants and verbal feedback during the session was that it didn't feel like they were participating in a technology workshop. There was also positive engagement online from participants both at the workshop physically and from some taking part remotely.

After the conference, having had time to reflect, I really valued delivering a session like this for a number of reasons. Firstly, it pushed me outside of my comfort zone as a presenter at a conference, but also put the emphasis back on the workshop participants, which suits me as I'm not always comfortable stood in front of an audience delivering. I also valued co-presenting with someone who held experience in workshop delivery, which is something I have never done at a conference, having someone else to bounce ideas off and have a second pair of eyes to spot potential challenges was really useful.

Feedback from one participant at SocMedHE led to us repackaging our workshop and delivering this at an AdvanceHE team away day for a Senior Leadership Team. This prompted us to consider how we would do things differently for next time and what we'd learnt. This resulted in us liaising with AdvanceHE's IT department in the weeks prior to the second delivery of the workshop to determine their user settings for Teams and OneNote. For me, I went into this latter session with much more confidence – firstly that it would be well received and secondly that there is always an accessible solution, should there be any technical hiccups on the day.

Rachelle's reflection on SocMedHE

Technology teaching is probably one of the aspects of my work I find hardest. The way I use technology works for me. But asking somebody else to understand my logic? That is a big challenge! I also lack confidence in my ability to problem solve certain things, so I was really grateful to be able to work with Scott to deliver the SocMedHE session. Scott's experience and understanding of Microsoft licencing, and also delivery of technology teaching meant that we were able to plan for eventualities before delivery of the session, which set us up well on the day as we experienced every eventuality we had planned for!

Following some initial hiccups with access and reassembling of groups, the participants dived straight into the experience. It's always quite tough with sessions like this to gauge the level of support to give, it's so tempting to help but from previous experience, it's always best to hold back and be available so that those participating can get the most from the session.

Over time and having gained experience of delivering sessions like this, it still surprises me just how engaged people can get. It's hard to say whether this is down to the way the session is built, delivered or the context it is delivered in or whether it's a combination of those things. There is always a concern at the back of my mind of what happens if people don't like it or think it's a waste of time? I think with this session though, we had made it and planned it in such a way that we had fall back activities, but we were glad these didn't end up being necessary!

Being invited to deliver the session for a second time to AdvanceHE really encouraged Scott and I to reflect on our experience of delivery and gave us the chance to make those changes we'd identified first time round and actually put them into practice. We were both much more relaxed during the second delivery as we knew the concept worked, and we were confident that we could find accessible solutions if necessary.

Two things that really stood out for me during the second delivery have become really key for me. Firstly, it feels really strange and uncomfortable to relax and let things happen but if you can get to the point where you feel comfortable with chaos, you can really start to see magic happen. I think I was able to get to the point where I felt like this because we had planned so much and felt confident with what we are delivering. We also relaxed into the fact that we aren't Microsoft Teams experts, we're just trying to give people an experience to help them to see how they can use it in their own context. This means they'll do it a different way to us, which is great, it means we can learn new ways to do things.

Secondly, sometimes you plan for something and you end up with a completely different outcome. Again, it was tempting to be conservative and just deliver a traditional technology teaching workshop. But we didn't, and what resulted was people gaining a level of confidence with a tool they had never used before that they were going above and beyond our instructions, to use it in ways that would work for them longer term... and to cheat so that they could win!

Benefits and challenges of using an Escape Room

Benefits of using an Escape Room

Highlights of the session came from the way in which participants not only engaged but worked together to forge an understanding of the narrative and complete given tasks (Nicholson, 2018). Generally speaking, participants appeared to be engaged and to enjoy the experience of taking part in the session. There was a lot of energy from participants both in-person and online, plus the Escape Room we had developed kept them motivated to complete all of the tasks set for them. Their enjoyment was further highlighted by the feedback we received, some of which was included above.

A benefit of delivering technology teaching in this way is in the ability to place the participant into the role of a learner, enabling them to experience Microsoft Teams from a different perspective. We found that this helped people to become more comfortable with the technology and as a result they were quicker to take chances and try out new activities. We also hope longer term that this will encourage reflection on how it feels to use Microsoft Teams as a learner, and this will inform their curriculum development.

Challenges of using an Escape Room

A challenge that often occurs in technology teaching is also present when teaching with games. This relates to the way in which people associate with and perceive both games and technology. Technology and games, especially video games, tend to be emotive topics and tend to instigate quite polarised views (O'Brien 2020) as to whether they are loved or hated. So, going into this workshop, combining both of these things, we genuinely had no idea whether or not participants would want to engage and how our plans would be perceived. This left us with a big what if. To counteract this, we made sure to plan well and create back up activities. We had made an assumption that participants could appear anywhere on a spectrum from concerned to curious, and our intent was to move as many participants as possible towards the curious end. We were fortunate that participants adopted a lusory attitude (Suits, 1978) towards the activities and 'suspended their disbelief' (Suits, 1978 cited in Whitton, 2018, p4) and immersed in the spirit of the activity.

A further challenge is the logic, planning and testing involved in creating a workshop such as this. Although this is not insurmountable, the requirement for extra preparation could be off-putting for some. However, if you are already planning based on not knowing how the audience will perceive what you are delivering, you are halfway there so might as well take the opportunity to try out something new.

A challenge for facilitating a workshop like this is knowing when to pause and hold back with support. A lot of the time participants were able to solve their own problems and didn't need us to step in. However, we were mindful about participants finding activities too challenging and therefore demotivating. This was a balancing act, which became easier to manage over time. We had concerns that if we'd have stepped in too soon, we could have stifled that desire to figure it out, which wouldn't have been helpful for either of us. Letting go and trusting the participants to figure it out themselves meant we were able to see the magic happen. In our experience, by thoroughly planning and preparing it enabled us to let things happen organically and for this workshop, this is what enabled us to achieve success.

Create a toolkit

As already mentioned, planning is key. If you have an idea and can take time to work through it, there is no reason you cannot create a simple and effective Escape Room, or similar for your own purposes. For this workshop we utilised OneNote because we wanted to showcase tools within Microsoft Teams. However, it is not necessary to use this specific technology. The principles of an Escape Room can be taken to any technology platform that allows for some form of adaptive release, such as a traditional Virtual Learning Environment (VLE). We have since replicated this concept in Canvas for example but using pre-requisites to unlock modules once a quiz has been completed. It is important to remember though, that autonomous technology is not necessary.

If you wanted to try this out with a class but didn't want to use technology at all, there are many ways to create puzzles for solving or codes to crack. It is also possible to utilise physical resources, including padlocked boxes which require a key, or a code. There are so many options to try out in your own classroom.

A huge benefit of using Escape Rooms is the problem-solving aspect, which lends itself really well to learning. We have utilised Escape Rooms for various purposes in education including as an alternative to Formative Assessment, as a way to learn how to utilise and become comfortable with various technologies and even as student induction or community building activity. Escape Room activities tend to be fast paced, energetic and can become competitive and frantic as a result. It is therefore really important to encourage and give opportunities for participants to reflect on the experience.

The best way to utilise video gameplay experiences in your own teaching is to create a toolkit for yourself. Have a think, what features of games do you enjoy? What might you like to include? You could perhaps start by thinking of a theme or a narrative. Beyond this, if you are interested in building an Escape Room, it may be beneficial to think about including the following features:

- Theme or a narrative
- Introduction of the rules and how to win
- Giving an allotted amount of time remember to start the clock! (this is the bit that adds pressure!)
- If stuck, consider mechanisms to ask for clues, hints or wildcards
- Choose an achievable goal to be completed in a given time
- Create clues, codes or passwords to unlock new areas or activities
- Create puzzles or problems to be solved

Most importantly, no matter how you decide to deliver an Escape Room or utilise video gameplay experience in your teaching, when you're delivering it, have fun!

Conclusion

In summary, this workshop was not only fun to develop and deliver, the feedback and comments from workshop participants demonstrated it was fun to partake in and improved participants' understanding of Microsoft Teams and the potential it has for enabling the development of collaborative classrooms.

Initially we had concerns about delivery and different technical abilities of participants, this proved to not be an issue as long as groups had members with varying abilities and level of experience. Although we found delivery to be effective in this format and context, it is important to be mindful that this may not be the case for every learning and teaching situation. It is therefore important to be mindful of pedagogy when planning activities such as Escape Rooms and to consider whether this type of activity will suit the learning and teaching you are hoping to achieve.

From experience, participants often come to technology workshops with a level of trepidation, because it is the unknown. By shifting the focus away from the technology and instead focusing on tasks to complete, and incorporating an element of playfulness, it appeared that it was possible to reduce this trepidation. This could have been down to many factors, such as the audience who elected to attend, the fact that delivery was at a conference, so it was voluntary. Or perhaps the work we put into creating a safe-space and immersing participants into the activity from the moment they entered the room could have played a part.

How was the time element playing a part here, was it that the fast-paced nature made it more difficult to overthink decisions and kept participants motivated because they knew they needed to progress?

Several interesting questions resulted from the delivery of this workshop. In the future we hope to explore these questions in more detail, to gain a deeper understanding of why this workshop was successful. Capitalising on these aspects will subsequently allow us to enhance our future practice.

Based on these factors, we feel it would be beneficial to deliver in this way again, especially for technology teaching. The collaborative and video game elements enabled us to shift attention away from the technology focus but retain the connection to the learning outcomes and to deliver a fun experience for participants to learn how they would like to develop creative classrooms utilising Microsoft Teams for their own delivery.

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Disclosure statement

No potential conflict of interest was reported by the authors.