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### Article:

## **Escape [to] the Library: Reframing the Library Induction** (Short title: Escape [to] the Library)

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# Escape [to] the Library: Reframing the Library Induction (Short title: Escape [to] the Library)

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#### **Abstract**

Piloting the use of an escape room activity as a subject specific library induction provides an opportunity to advance beyond imparting knowledge to demonstrating the attainment of higher order thinking skills, such as, analysis through engagement with the puzzles, and evaluation and reflection from the debrief following the success (or failure) of the activity. Gamification is generally used to encourage extrinsic motivation through rewards, though the overwhelmingly positive feedback from the pilot shows that using game design elements helps encourage intrinsic motivation where playing the game is its own reward. Whilst successful, the pilot came with challenges and limitations, such as, scheduling and timing, though still begs the question, is this the future of library induction?

**Keywords:** Escape Room, Library Induction, Gamification, Gamified Learning

### **Context and Objectives**

### "I want to play a game..." - Jigsaw

Perhaps an unusual place to start with the idea of reframing a library induction, but this quote from the 2004 horror film, *Saw*, inspired my love of escape rooms and many commercial escape rooms riff off this as well as *Cube* (Nicholson, 2015) creating an atmosphere from those films without fatal consequences. Libraries lend themselves well to the escape room environment, encouraging exploration, which is part of the fun of an escape room. Through this paper, I will reflect upon my experience of developing the escape room activity as a subject specific library induction for forensic science students, looking at the role games can play in developing a higher level learning experience and consider the future of this activity beyond this pilot.

Instead of a standard induction for first years, the forensic science department requested a treasure hunt to familiarise them with the Library through finding and solving clues. I wanted to develop a crime scene game to make the induction subject specific, so with my love of escape rooms, games and the offer to buy any equipment I needed, it provided an opportunity to develop an escape room activity.

Escape rooms are typically about escaping a room, so I developed this as an escape room type activity helped by the purchase of safes and black lights (ultraviolet light torches). Solving puzzles to unlock items is a key part of an escape room, so having this equipment gave me the greenlight for developing this using those tropes.

#### Method

An advantage (?) of the traditional library induction is that it is an effective way to impart knowledge to hundreds of students in a lecture environment. This involves delivering a subject specific presentation and demonstration of the library service and relevant resources in under an hour. However, delivering an induction that is an immersive experience requires planning and flexibility within the academic timetable. The inductions would take place over four weeks covering 96 students, though timetabling sessions proved a significant limitation to my planning with clashes limiting each session to an hour. A typical escape room is 60 minutes - though a blog post by Room Escape Artist (2017) suggests puzzle design should define timing. This being an educational experience rather than a commercial, paid for escape room, I wanted to run sessions for two hours to include a briefing, an ice breaker activity to encourage and develop teamwork – a key part of completing the challenge – and 75 minutes for the activity with time for debriefing and reset for the next groups. I would now have to cater for four groups of seven students per session in order to cover 96 in three weeks due to my own timetabling clashes (the day job still goes on). This presented my first significant challenge. Seven students per group would be too many and four groups in the room at one time would mean I could not use the safes to advance the activity, as they would be working simultaneously. I would have to develop four different routes to avoid groups running off with each other's clues and, to avoid groups spoiling things for the subsequent groups, four different routes each week!

The activity would take in all areas of the Library not just forensic science texts and involved finding items on the shelves, requiring use of the library catalogue and the Library of Congress classification scheme; finding and accessing electronic journal articles to find information from the full text; and accessing the reading list system.

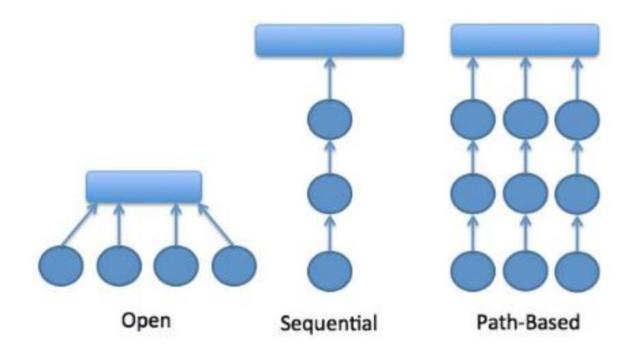
To avoid creating multiple paths per session, I provided four ways to open a safe with solving the mystery just one. Others would be found from clues, which would need to be solved in order to understand the combination and safe it referred to. Three safes could be opened without completing the main activity, which would still count as a success.

#### Results

No team managed to complete the challenge in the time provided, but the feedback received during debrief was overwhelmingly positive with comments about the activity being: "more engaging than a lecture"; "an engaging and creative way to use the library"; "frustrating, but in a way that challenged the mind". One student commented: "I thought you were just going to talk at us for an hour, so it was nice to get out and about".

Some students indicated the activity was too hard and they did not know where to begin and many commented that they wanted more time, which I agreed with. Progression was dependent on finding items like batteries for the black lights as this provided hidden information. These could be found from deciphering the letter

provided. I deliberately created a multiple puzzle path, which is the most commonly used form of puzzle organisation for escape rooms as discussed in Nicholson's white paper on commercial escape rooms (see Fig I below). I chose this because, with multiple groups working at the same time, it was important they could work independently. This resulted in not having to create multiple versions for each session, which worked surprisingly well, though I am disappointed not to make more use of the safes to advance the activity as many escape rooms have you unlocking things to find more clues or puzzles.



### **Discussion**

### It's Time to Play the Game

Reframing a library induction as an escape room takes the typical induction set-up, which would not normally involve more than providing students with knowledge of library services, and provides an opportunity to deliver an active learning experience (Petty, 2015) encouraging problem-solving and critical thinking through engagement with puzzles. Developing subject specific activities allows for student role play, such as, playing detective to solve a mystery – something forensic science students should find relatable and engaging.

Looking at it in terms of Bloom's taxonomy of educational objectives, (as seen from Persaud's (2018) guide), knowledge only forms a first level of cognitive development, so a well-designed escape room activity can potentially reach higher levels of learning. Application, in using library catalogues, reading lists and electronic journals, as well as analysis in terms of assessing the problem and puzzles and utilising library and game tools in a way that will help get to the solution. The final debrief following the success (or failure) of the activity provides an opportunity for evaluation and reflection of the techniques used, the knowledge gained and the

application towards achieving the goal, making the escape room activity a more effective learning journey than a standard library induction.

Unsurprisingly, using games and game elements within higher education is not a new concept with many case studies available of 'gamified learning' (Subhash and Cudney, 2018). Gamification is a term that arises when using games in education, defined by Deterding, et al. (2011) as, "...the use of game design elements in nongame contexts." (p.1), though gamification is not about designing games, (Dichev, et al., 2004) but rather using reward systems familiar to games (badges, awards, points, achievements). Gamification is often used in retail marketing to develop loyalty through reward and incentive schemes and provides rewards driven, extrinsic motivation to achieve something (Dichev, et al., 2004), so even if you have never played games you will be familiar with the systems retailers use to keep you shopping. In developing the escape room, I was keen to create something that relied more on intrinsic motivation, where the love of the game and the experience and challenge are the motivators. I set out to develop a game underpinned by the concept of a subject specific library induction, which Dichev, et al. (2004) refers to as 'gameful design' – designing gaming activities for a learning environment.

### The Best Laid Plans...

As Liaison and Research Support Librarian, I already have knowledge of the library services and subject resources for the areas supported, so the key was to cover what I normally cover differently. I began by seeing if other libraries had tried this technique and a number in America and the UK have, though these are room escapes rather than library explorations. Nicole Scherer's manual, *Do (n't) panic! A manual for original library escape room events* (2016) provided a good place to start planning and thinking about the goal and structure of the session particularly the idea of working backwards. A 2017 blog post by *Dig-It Games* alerted me to *Breakout Edu* who have developed toolkits for educational escape rooms with some of their games available open source and equipment available to purchase, which could be worth considering in developing future activities.

Normally, with induction, I demonstrate how to use resources, but students would need to work this out themselves. Would that put them at a disadvantage? This raised some concern as I did not want students to feel completely lost, but the library systems are readily available to access and with sessions taking place from week five, they may have developed familiarity with them. On the plus side, in addition to the higher learning skills, a task such as this would test and develop skills a standard library induction would not. A blog post by *Other World Escapes* (2018) details why escape rooms are the best form of team-building activities and cover skills, such as, communication, collaboration, creative thinking, problem-solving, time management and decision making. According to *Prospects* (2019) job profile, these are key skills forensic scientists should possess and ones students should be interested in developing when thinking about careers. With sessions taking place between weeks 5-8, I felt students should have developed a good working relationship with most of their peers. How wrong I was...

### The Devil is in the Detail

I am not going to talk too much about the puzzles, as a magician never reveals their secrets, but I wanted to incorporate cryptic puzzles and activities, which would be paper based, as opening a safe would have to be the goal. With four groups, I used four safes and chose a six-digit combination, made up from numbers in library book classmarks and from finding information in electronic journal articles. I put A3 versions of journal articles on the wall as clues. This was an idea I liked from seeing large A1 sized versions of articles on the walls in the forensic science department. It was a useful way to relay information about the mysterious benefactor and present red herrings to throw teams off track, so students had to develop theories using evidence and a process of elimination – again, key skills for forensic science students (Prospects, 2019).

Escape rooms love using light as puzzles, once again demonstrated in Nicholson's (2015) white paper where this was the third most commonly used puzzle type – 58% of rooms used light. With this being a forensic science induction, it made thematic sense to use black lights, so I wrote messages and clues in invisible ink – one was the order for the safe combination. The black lights were in the room but without batteries. Teams would need to find batteries before they could use the lights.

### Let the Games Begin!

I ran a trial with my team and as library staff, they had an advantage over the students since they know how to use the catalogue and are familiar with library layout – but they still did not solve the quest in time. My team suggested a hint system, which I was initially hesitant about, but agreed to two hint tickets, which teams could trade in by asking a specific question (but not the combination to a safe). Some groups did not know what to ask, which made the hint ticket redundant and as I did not want to make it easy for them that was the only system of help. In hindsight, the teams could have done with more direction and this is something I will consider for future activities in my role as gamesmaster as Nicholson (2015) refers to a balance between giving hints to avoid frustration and not giving hints when teams are close to working things out, so as not to derail 'ah ha' moments.

Allowing for absences, I was able to split the first group into three teams of five and, as previously alluded to, I expected students to be comfortable with one another, but they were reluctant to talk. To be successful at an escape room, teams need to work together and communicate, qualities expected in employment as a forensic scientist (Prospects, 2019). An icebreaker activity would help establish team dynamics, but with limited time that was not possible. I put subsequent groups into teams straight away and arranged furniture to encourage teamwork. This seemed to work better as teams started analysing the letter containing cryptic clues as to how to begin the quest.

Some teams took time to process what they needed to do and others completely missed information on the wall or did not look at safes where the black lights were. Some knew they needed to use the catalogue to find books, but by ignoring the wall, they missed key clues and attention to detail is a strong attribute for forensic scientists (Prospects, 2019), though this is perhaps something that will develop over the course of their studies.

After week one of the activity, I was delighted that no one had completed the quest, which made this a challenge and not just a library induction. I promoted the outcome

of the sessions via our social media channels challenging next week's groups to do better. One group came close to completing the activity (too close!) and many students wanted to try again with comments such as, "A lot of fun – best library induction I've been to. Would love to do it again with more time."

#### Conclusion

Although no team successfully managed to solve the mystery in time and some students appeared frustrated by the experience, feedback was overwhelmingly positive during the debrief demonstrating the effectiveness of delivering an induction in this way. Pulling the activity together in four weeks was challenging and timetabling restrictions were frustrating, though I overcame this through problem solving.

Library induction can be a tick box exercise and the ability to deliver it to hundreds of students simultaneously is an appealing prospect within some modules and perhaps the best option with large cohorts. Though, as gatekeepers to learning, offering an immersive experience that reaches the higher order levels of learning is the preferred option than simply imparting knowledge, but that needs planning and flexibility in terms of time and delivery. I am keen to develop this activity further and utilise the safes to advance the activity, though this means having only one group at a time, which may prove difficult within the confines of the academic timetable.

Is this really the future of library induction? There is still work to do before answering that question adequately, but I plan to extend this to other subject areas if there is interest in developing some 'outside the box' delivery and a desire to escape to the Library.

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### References

Deterding, S., et al. (2011) Gamification: toward a definition. CHI 2011 Gamification Workshop Proceedings, Vancouver, BC, 7-12 May 2011, 1-4. [online] Available from: http://www.academia.edu/33801825/Gamification\_Toward\_a\_definition [Accessed: 30 November 2018].

Dichev, C., et al. (2014) From gamification to gameful design and gameful experience in learning. Cybernetics and Information Technologies, 14(4), pp. 80-100.

Dig-It! Games (2017) *Breakout of your old lesson plan!* [online] Available from: <a href="https://dig-itgames.com/breakout-lesson-plan-escape-room/">https://dig-itgames.com/breakout-lesson-plan-escape-room/</a> [Accessed: 12 November 2018].

Nicholson, S. (2015) Peeking behind the locked door: a survey of escape room facilities. [online] Available from: <a href="http://scottnicholson.com/pubs/erfacwhite.pdf">http://scottnicholson.com/pubs/erfacwhite.pdf</a> [Accessed: 12 November 2018].

Other World Escapes (2018) 10 reasons an escape room is the best team building activity. [online] Available from: <a href="https://www.otherworldescapes.com/blog-post/best-team-building-activity/">https://www.otherworldescapes.com/blog-post/best-team-building-activity/</a> [Accessed: 12 December 2018].

Persaud, C. (2018) *Bloom's taxonomy: the ultimate guide.* [online] Available from: <a href="https://tophat.com/blog/blooms-taxonomy-ultimate-guide/">https://tophat.com/blog/blooms-taxonomy-ultimate-guide/</a> [Accessed: 30 November 2018].

Petty, G. (2016) *Active learning*. [online] Available from: <a href="http://geoffpetty.com/forteachers/active-learning/">http://geoffpetty.com/forteachers/active-learning/</a> [Accessed: 10 December 2018].

Prospects (2019) [online] *Job profile: forensic scientist.* Available from: https://www.prospects.ac.uk/job-profiles/forensic-scientist [Accessed: 5 February 2019].

Saw (2004) [film] James Wan. (Dir.) USA: Lionsgate.

Scherer, N. (2016) *Do (n't) panic! A manual for original library escape room events* [online] Available from: https://libraryladynicole.com/programs/escape-room/ [Accessed 19th September 2018].

Spira, D. (2017) *Escape Room Game Length [Design Tips]*. [online] Available from: <a href="https://roomescapeartist.com/2017/05/01/escape-room-game-length-design-tips/">https://roomescapeartist.com/2017/05/01/escape-room-game-length-design-tips/</a> [Accessed: 10 December 2018].

Subhash, S. and Cudney, E.A. (2018) *Gamified learning in higher education: a systematic review of the literature.* Computers in Human Behavior, 87, pp. 192-206.