

Research Support Games Day - Notes

The purpose of this event was to give support staff the opportunity to experience different games or games-based tools that could be used with researchers for educational or training purposes. The day was very successful with lots of positive feedback - there is definitely interest in organising a similar event in the future. The notes below are divided into two sections: a review of the sessions that ran at this event and a summary of the brief general discussion at the close of the day.

Review of Games and Workshops

This section provides basic information about the games and workshops that were showcased during the day. The information includes contact details for the people who facilitated the sessions and also - where possible - a link to where you can obtain your own copy of the source material. Comments from people who attended the sessions have been amalgamated and edited prior to inclusion here, to help ensure anonymity. Check out Twitter using the hashtag **#ResearchSupportGames** (<https://twitter.com/search?f=tweets&q=%23ResearchSupportGames>) to see more comments from some of the attendees and facilitators.

CURATE! The Digital Curator Game

<i>Produced by</i>	DigCurV
<i>Sessions facilitated by</i>	Leo Konstantelos and Yunhyong Kim (yunhyong.kim@glasgow.ac.uk) from the University of Glasgow
<i>Available from</i>	http://schreibman.eu/digcurv/curate-game/
<i>Game summary</i>	Participants handle digital project scenarios that focus on the issues and challenges encountered by institutions when they engage with digital curation and preservation. The game mainly covers the skills required by digital curators, and facilitates discussion around training needs at both the institutional and individual level.
<i>Participant comments</i>	<p>Excellent tool for training sessions with library staff and others supporting digital projects, but the original game is less relevant to researchers. The game could be customised to make it more immediately useful to researchers (e.g. preservation of research data), or perhaps to broaden the scope of the game to make it a tool for general project management.</p> <p>Very good at enabling conversations that raise awareness of important strategic questions for digital projects, including key factors affecting a project's success or failure. Participants work together to answer questions, so the game is also good at encouraging teamwork as a means to achieve best practice.</p>

The Game of Open Access

<i>Produced by</i>	University of Huddersfield
<i>Sessions facilitated by</i>	Catherine Parker (c.s.parker@hud.ac.uk) from the University of Huddersfield
<i>Available from</i>	https://hud.libguides.com/openaccess/GameOfOpenAccess
<i>Game summary</i>	Participants work through a metaphorical journal article submission. Along the way, the game creates opportunities to discuss various aspects of the publication process and Open Access, while the participants compete to answer as many question cards as possible.
<i>Participant comments</i>	<p>Great tool to use during introductory sessions for researchers who are learning about Open Access. The level of information that the game covers is detailed enough to be useful while not being overly complicated - perfect for people that need to know about Open Access but who don't need to think about it all the time.</p> <p>The question cards are excellent starting points for discussions that get participants thinking. The simple format means that it requires very few instructions before getting into actual gameplay. It can also be flexible in duration, so it is possible to fit an entire playthrough into only 15 minutes. The original game was designed specifically with the University of Huddersfield in mind, so some work may be required to customise certain details to better fit local circumstances and policies.</p>

The Impact Game

<i>Produced by</i>	Cranfield University
<i>Sessions facilitated by</i>	Emma Turner (e.turner@cranfield.ac.uk) from Cranfield University
<i>Available from</i>	https://www.ivorygraphics.co.uk/shop/games/3075/the_impact_game
<i>Game summary</i>	In this game, participants compete to be the first to reach the end of a game board in the style of "Snakes and Ladders". Along the way, they must answer various questions around research data management, research impact and Open Access.
<i>Participant comments</i>	<p>Really good way of generating discussions - both around the specific question cards that come up during play and also on broader topics. May need some customisation to make certain questions better fit local circumstances.</p> <p>Gameplay is very simple and the game works well with relatively short sessions - anywhere between 15 to 30 minutes is enough for an entire playthrough that will still cover a variety of topics.</p>

LEGO: Metadata for Reproducibility

<i>Produced by</i>	University of Glasgow
<i>Sessions facilitated by</i>	Mary Donaldson and Matt Mahon from the University of Glasgow (research-datamanagement@glasgow.ac.uk)
<i>Available from</i>	https://doi.org/10.36399/gla_pubs.196477
<i>Game summary</i>	Participants work in teams to document the construction of a simple LEGO model, before attempting to follow a different team's documentation to recreate theirs. Discussions throughout the workshop highlight various challenges in using metadata to enable reproducibility or transparency of research data.
<i>Participant comments</i>	<p>Excellent and highly engaging "hands-on" tool for getting people to think about metadata standards and open research. Could be especially good to run sessions with researchers from different disciplines, as they will have very different ideas about what makes good metadata. The game is abstract enough to be relevant to a varied audience, but concrete enough to get the important points across easily.</p> <p>Needs at least 30-45 minutes for a full session, but could perhaps be customised to adapt it for shorter durations. Regardless of session length, the time limit is also an effective way of emphasising the importance of clarity and efficiency in communication/documentation.</p>

Open Access Escape Room

<i>Produced by</i>	University of Essex
<i>Sessions facilitated by</i>	Katrine Sundsbø (ksunds@essex.ac.uk) and Hannah Pyman (hpyman@essex.ac.uk) from the University of Essex
<i>Available from</i>	https://figshare.com/projects/Open_Access_Escape_Room/56915
<i>Game summary</i>	Participants work together to complete a puzzle-solving challenge in the shortest possible time. During play, participants will also learn about the main ideas and issues involved in Open Access, which forms the focus of the puzzles and the overall theme.
<i>Participant comments</i>	<p>Great for engaging with different audiences. The strong teamwork aspect may also help develop connections within the research community. A very fun way of introducing people to the basics of Open Access, with plenty of opportunities to go into more depth during the discussion afterwards.</p> <p>Has the potential to be highly customisable in terms of which aspects of Open Access you want to focus on, but the complexity of the game's structure means</p>

	that customisation could be time-consuming. The game can be used in a variety of spaces, but requires flexibility on the part of the facilitator to make it work well in a space that is not ideal.
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The Publishing Trap

<i>Produced by</i>	UK Copyright Literacy
<i>Sessions facilitated by</i>	George Bray (g.r.bray@rgu.ac.uk) from Robert Gordon University
<i>Available from</i>	https://copyrightliteracy.org/resources/the-publishing-trap/the-publishing-trap-resources/
<i>Game summary</i>	Participants take on the roles of four imaginary academics from different disciplines. They then guide these characters through an entire research career, making decisions and generating discussion around aspects such as copyright, Open Access, impact and academic life in general.
<i>Participant comments</i>	<p>Particularly useful for early career researchers, featuring a variety of realistic and comprehensive scenarios that will help them to think about aspects of their future careers that they may not yet have considered. The game is particularly good for discussions around conferences and journal articles, but may need some customisation to make the section on book publishing more effective. The broad range of topics covered may mean that facilitators must be fairly comprehensive in their knowledge in order to answer any questions that come up during play.</p> <p>The facilitator can use the game as a way to raise awareness of support services that are available at different stages of a research project, or at different stages of a researcher's career. The game works particularly well with larger groups and is capable of accommodating up to sixteen participants, but this greatly lengthens the already long duration (usually about 90 minutes for a full playthrough) as discussions around decision-making can be quite extensive. The game can still be used effectively with significantly fewer participants (even as few as one), but doing so requires a lot of flexibility on the part of the facilitator, as this has a big effect on the game's scoring mechanics.</p>

Virtual Games Workshop

<i>Based on</i>	Sweigart, A. 2016. <i>Invent your own computer games with Python</i> . 4th edition. San Francisco: No Starch Press
<i>Sessions facilitated by</i>	Pauline Ward (Pauline.Ward@ed.ac.uk) from the University of Edinburgh
<i>Available from</i>	http://inventwithpython.com/invent4thed/

<i>Workshop summary</i>	This workshop was a chance for research support staff to learn how they could design their own games using the Python programming language. The workshop used the case study of a game to help raise awareness of research data management, but the method would have applications in many different training scenarios.
<i>Participant comments</i>	<p>Requires a lot of time to develop the games from scratch, particularly if no one on the research support team has any existing knowledge of Python. However, this also means that the game can be entirely customised to fit local needs, and it is entirely up to the designer as to the aspects of research support on which the game should focus.</p> <p>Computer-based games have some advantages over physical games. For example, they are easier to use with individuals, or over long distances. They also have different accessibility challenges, so may be better suited for e.g. participants with limited mobility. It also requires less facilitation once the game has been designed, potentially reducing the administrative effort of running sessions.</p>
<i>Additional materials</i>	<p>Slides: https://drive.google.com/open?id=15XXRvAu7gv5BMoKHQNmGvAIAUx0CxH4H</p> <p>Code repository: https://github.com/PaulineDataWard/ResearchSupportGames (created in the workshop - work in progress)</p>

General Discussion

The notes below are a mixture of comments made during the open discussion at the end of the event and also feedback from attendees to certain structured questions. As above, all comments have been amalgamated and edited to ensure anonymity.

What are the advantages of using games-based research support?

- Rather than being a distraction during a training session, games can actually make it much easier to get messages across.
- By being interactive, games can help to engage participants in topics that can otherwise be quite dry. This is particularly good for people who learn by doing or visual learners, making it more likely that these audiences will retain the information.
- Interactive and engaging games are especially helpful for introducing new or complex ideas without overwhelming (or boring) the audience.
- Decisions and puzzles in games can make for excellent conversation-starters.
- Games can promote peer-to-peer learning and teamwork.

- Games are fun - for both participants **and** facilitators! Using a game as the basis for an informal support conversation can be a really good way of getting people to feel more comfortable discussing topics that may be new to them or which they may find stressful.
- Discussions with researchers using the questions raised by existing games can help to make support staff aware of changes in their local research landscape or of gaps in service provision/training.

What makes games fun for you?

- Using innovative mechanics.
- Using hands-on gameplay.
- Using an element of randomness or surprise - the unpredictability can keep things fresh over multiple playthroughs.
- Using simple mechanics that are easy to understand - games are better when they require minimal instruction before getting started.
- Having opportunities to test your own knowledge on a topic.
- Having opportunities to use your own problem-solving and analytical skills.
- Having opportunities to be creative.
- Having opportunities to discuss and interact with other people.
- Competing against other players and/or working together as a team.
- Understanding how the information learned through the game can be directly useful in real-life situations.
- Not taking things too seriously - games should have an element of humour.

What limiting factors might exist when using games as part of a research support service?

- Customising game content to account for local circumstances or policies. For example, some games may assume the presence of a UKRI block grant or unmediated repository deposit processes, but these may not exist at your own institution. Support staff should spend time going carefully through the game's contents and making any tweaks as necessary to ensure that it is relevant for their audiences. This may need continued revision as policy landscapes change (e.g. Plan S), as game developers may not have the time/resources to keep their games up-to-date.
- Customising game content to focus on alternative topics. For example, you might want to change the game content slightly to help expand on one topic in particular, rather than the full range of topics

covered by the original version. This may be especially true if certain topics are less relevant for your institution, or for the particular audience with which you intend to use the game.

- Awareness of how long it takes to play the game. Games might be shorter or longer with fewer or more participants. You might also have other factors that place a strict limit on how much time is available in which to play the game - for example, you might be limited to very short sessions of only 5 to 15 minutes. You may also need to take account of extra time required to prepare/tidy up before and after a game. Also, be mindful of how much time you are asking participants to commit, as you may need to include additional time for a break midway through, especially if the game covers a lot of information.
- Awareness of how much time it takes to be ready to run the game. Support staff may need to spend time/money getting the physical components ready, and will need to become familiar with the game's instructions. They may also need to spend further time brushing up on any topics that are less familiar to them, in case they are asked questions during gameplay. It may be very helpful to do a "test run" with colleagues first, before using it with researchers. This will help them to understand how best to facilitate the game and may highlight any particular challenges or issues that may have been overlooked.
- Awareness of accessibility issues. Different games may pose different accessibility issues. For example, you may need to spend time making a digital version of a physically-demanding game so that it can be used with researchers that have mobility issues. Game components - both physical and digital - should also be easily distinguishable for participants to help avoid frustration or confusion; this means being aware of appropriate colour combinations, game board layouts, and sizes/shapes of game pieces.
- Attendee discipline/subject backgrounds. Facilitators will need to make a decision on whether to run sessions for participants of mixed disciplinary backgrounds (e.g. engineers, biologists and artist historians), or for participants of a limited range of disciplinary backgrounds. It can sometimes be great to get an interdisciplinary perspective, as it can help to foster connections across the institution and enable researchers to better understand why certain decisions make sense from another researcher's perspective. However, you may find it better to tailor your sessions to the specific needs of a given discipline, to help highlight things that are mainly relevant to them, or to make it easier to use examples that are directly relevant to their specific interests. This decision may also depend on the game being used.
- Numbers of attendees. You may have varying success in getting people to attend sessions, so the facilitator should be prepared to run the game in various circumstances. Some games may cope well when dealing with extremely low numbers of participants, others may cope less well. In part, this is dependent on the ability of the facilitator to adapt the game to meet the specific needs and numbers of attendees at any given session, which is a skill that develops with practice. You may need to find the best strategies for ensuring optimal numbers of attendees - e.g. offering free food/drink during sessions, or co-locating sessions in the middle of other events.
- Attendee engagement. Not everyone enjoys games, and even those who do might not enjoy all types of games. Facilitators will need to be prepared to handle attendees who prefer to spectate, or find other ways to involve them in the important discussions that are happening during the course of the game, or - if the majority of the attendees are unwilling to play - have an alternative planned! Similarly, facilitators may find that it is more difficult to run games with participants that are very introverted - if the purpose of the game is to generate discussion, then this can be very difficult if all participants are reluctant to

talk. Furthermore, facilitators may need to be prepared to explain things that they may take for granted, when dealing with participants who may not have much previous experience of games.

- Handling negative social interactions. Because most games are designed to force social interaction between participants, facilitators will need to be prepared to handle (hopefully rare) cases where participants are not getting along. It may be worth developing or adopting a code of conduct for use in group sessions, or you may prefer to handle things on a case-by-case basis. For example, what do you do if one participant is being overly competitive and thereby having a negative impact on others peoples' enjoyment of the game?

What do we want to see more games about?

- Plagiarism (possibly already covered in *Copyright the Card Game* by UK Copyright Literacy - <https://copyrightliteracy.org/resources/copyright-the-card-game/>)
- General Data Protection Regulation (GDPR) and data management
- Research ethics
- Impact case studies and promoting research impact (beyond how these are covered as just one of many topics in existing games)
- Plan S and future Open Access policies of funders/REF, for example new attitudes regarding OA monographs
- Getting funding and writing research proposals
- Pathways for early career researchers

The Next Event ...

We'd be interested in running another event like this in future, as everyone seemed to find it very useful and there are lots more games and games-based workshops out there. We've already had some feedback about ways to improve the event, such as using a venue with more natural light and trying to find smaller rooms to avoid adjacent games disturbing each other.

Are you...:

- a) Interested in providing a venue or sponsorship?**
- b) Keen for us to showcase a particular game or run a particular workshop?**
- c) Unhappy with any aspect of how this event was run, which we could improve on next time?**

If so, then feel free to get in touch with us (g.r.bray@rgu.ac.uk and Valerie.McCutcheon@glasgow.ac.uk) and we'll bear this in mind when we start planning the next one, which we hope to run in July 2020!