

| Recipient name:              | Dr Gene Carolan   |
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| Discipline and subject area: | Humanities and Social Sciences; Law   |
| Amount and year awarded:     | €1,349 in 2021  |
| Title of project:            | Is Virtual Reality the New Normal? Video Games as a Vehicle for Research, Teaching & Learning |

#### Summary of findings:

This project explored the use of mainstream video-games as a vehicle for education. Through research and conversation with colleagues over the past year, I have found that video-games can facilitate experiential learning in virtual environments that provide space for real-world reflection.

In keeping with the stated objectives in the project proposal, my Charlemont Grant has given me the resources and the platform to further disseminate innovative practices in the provision of third level teaching and learning. From September 2020 to May 2021, I was able to use funding from TU Dublin IMPACT to embed the 2013 video game, 'Papers, Please' in teaching and assessment activities on the Immigration and Asylum Law module at TU Dublin. My experience in this regard is the subject of a forthcoming paper in the Irish Journal of Academic Practice. The Charlemont Grant has allowed me to further disseminate this paper through conference presentation.

Many of the paper's main findings are of key relevance to this project. 89% of students surveyed enjoyed their time with 'Papers, Please,' and would enjoy further assessment based on similar video-games. Students described the game as a form of active learning that pushed them to recall prior learning and engage further with recommended and supplementary readings. As a result, 83% of students agreed that they were more likely to remember the relevant subject-matter after an assessment based on the game than if they had completed a traditional written assignment. These findings suggest that using a video-game as a call to reflection can trigger deep and experiential learning processes, and improve students' perceptions of learning and assessment. The Charlemont Grant has allowed me to further explore the myriad uses of video-games in educational contexts. Video-games allow students to experience simulations of real-life contexts that would otherwise be impractical for reasons of cost, ethics, or safety (Susi et al., 2007). This research demonstrates that this role-playing experience resonated strongly with students. By stepping into the role of a virtual immigration officer in 'Papers, Please', students were not just applying elements of immigration law in practice; they were confronted with the consequences of their actions. This forced students to engage in deep-learning and metacognitive processes, such as reflecting on their in-game behaviour; identifying subconscious norms and values; evaluating their progress, and making recommendations as to how the game could be improved.

The Charlemont Grant has inspired further research and collaboration on the use of video-games as a means of accommodating a greater range of learning styles, including auditory, aural, visual, and kinaesthetic. All students surveyed agreed that video-games are an accessible resource that can respond to alternative learning styles, while a further 83% agreed that a games-based assignment tested strengths they didn't typically get to showcase in written assignments. In anonymous feedback, one student found the game 'more stimulating for the mind than reading materials alone,' while another described the assessment as 'somewhat of a relief from traditional methods used by the majority of other modules.' These positive responses suggest that games based learning should be broadly considered to further develop and reward a variety of intelligences in third-level education. This educative potential has previously been considered by Dr Luke Moffett and Dr Dug Cubie (2017), who were the main collaborative partners on this project.



#### Plans for continuing collaboration:

My experience of the Charlemont Grant has given me the confidence to pursue further research in this area, and support from the Royal Irish Academy has reaffirmed my belief that this research is worth doing. I will continue to work towards utilising commercial video-games similar to 'Papers, Please' in educational contexts in collaboration with the Grant partner, Dr Luke Moffett. Dr Moffett has previously used the tactical military simulation 'ARMA 3' to teach element of International Humanitarian Law, and I have identified 'This War of Mine' (2014) as a strong contender for inclusion on such modules. Unfortunately, additional burdens imposed by the ongoing Covid-19 pandemic prevented us from taking the educative potential of these games beyond initial conceptualisation and discussion. The pandemic has not dampened our interest in this area, however, and the prestige associated with the Charlemont Grant has helped to expand our network of other interested academics. Dr David Kenny (Trinity College Dublin), Dr Maria Murphy (Maynooth University) and Maria O'Brien (Dublin City University) have all expressed interest in the aims of the project. I have also brought this project to the attention of the Gamification Community of Practice at TU Dublin, which has opened up further opportunities for networking.

Dr Dug Cubie of University College Cork has also agreed to help with organising a conference on the use of video-games in educational contexts. Unfortunately, ongoing uncertainty regarding Covid-19 made planning a one day conference on video-games difficult and this was not achieved during the lifetime of the grant. The Charlemont Grant has laid the foundations for building a network of like-minded individuals, however, and a conference highlighting innovative practices in this area will be a great way to consolidate the progress made thus far.

I am continuing to investigate a number of 'serious games' that can be used in other Law modules at TU Dublin and beyond. Prospective candidates include 'My Life as a Refugee,' a decision-making game developed by the UN High Commissioner for Refugees and based on the real-life experiences of refugees; 'Frontiers,' a serious-game developed with significant expertise with the goal of fostering social inclusion and understanding; and 'Missing,' a reality-based adventure game designed to allow players to resonate with an individual who is subject to human trafficking. I am also reflecting broadly on the use of 'play' in legal education, and ways to emphasise 'play' within the boundaries of the legal curriculum.





#### Published work and publication plans:

As stated above, my experience of embedding the 2013 video-game, 'Papers, Please,' on an immigration, asylum and citizenship module is the subject of a forthcoming paper in the Irish Journal of Academic Practice. This paper should be published in Spring 2022 and will acknowledge the support that I have received from the Royal Irish Academy. I continue to utilise 'Papers, Please' in my teaching on the Immigration & Asylum module, and this has provoked interesting comparisons between player agency as a virtual immigration officer, and the broad executive discretion enjoyed by the sovereign state in matters of migration and asylum. The extent to which 'Papers, Please' gives pause for reflection on these themes will be the subject of another paper that I am currently drafting, tentatively titled 'Gaming the System – What a Video Game tells us about executive discretion in matters of migration.' I intend to submit this article in late 2022.

#### Dissemination and plans for future dissemination:

I utilised my Charlemont Grant primarily to finance my participation at the Irish Association of Law Teachers' annual conference, where I presented my forthcoming publication and acknowledged funding from the Royal Irish Academy. Through my participation on the Legal Pedagogy panel, I was known (for or better or worse!) as 'the gamer' throughout the rest of the conference. The conference afforded me an excellent opportunity to network with other legal educators committed to experiential learning, including Mary Tumelty, Katie Power, and Owen Jump (all of whom are at University College Cork). My presentation also evoked interest from other relevant stakeholders, including Martin Hogg (Head of Law, NUI Galway) and Rory Boyle (The Law Society).

#### Collaborations and planned collaborations:

I was able to utilise my Charlemont Grant to increase my profile on TU Dublin's Community of Practice on Gamification. Through this Community of Practice, I have put in touch with Shaun Ferns and Hugh McCabe – two academics who have also experimented with the use of games in educational contexts. My interactions with the community of practice also led me to ARVR Innovate, a conference celebrating alternative and virtual reality applications founded by Alex Gibson of TU Dublin, and VIRaL, the Virtual Interaction Research Lab headed by Brian Vaughan at TU Dublin. VIRaLs examine how AR and VR technologies can be used to augment, improve, and innovate existing teaching practices and methods. They recently partnered with Intel to trial training simulation programmes within Intel. Brian and Alex would be excellent candidates to consider for a keynote address at any forthcoming conference on the use of video-games and virtual realties in educational contexts.





# Programme River Lee Hotel, Western Road Cork City.



#### Saturday 20 November

#### PANEL SESSIONS 1 SATURDAY 9.30 a.m. - 11 a.m.

#### C. Legal Pedagogy 1

- Dug Cubie, University College Cork 'Teaching Disaster Law Through Inter-Institutional Student Collaborations
- Edana Richardson, Maynooth University 'Teaching Company Law through Practice'
- Mary Tumelty, University College Cork 'Experiential Learning in Dispute Resolution: Pedagogy in a Pandemic and Implications for Future Practice'
- Gene Carolan, Technological University Dublin 'Papers Please' A Games Based Learning Approach to Immigration and Asylum Law'