

TELLING THE STORY OF MINDRISING: MINECRAFT, MINDFULNESS AND MEANINGFUL LEARNING

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ABSTRACT

This paper describes a unique project known as MindRising Games. It reports how the innovative use of Minecraft™ combined with the principles of mindfulness and meaningful learning contributed to rich digital story telling. MindRising Games was a competition, which was part of the 100-year commemoration of the Easter Rising, designed to celebrate 200 years of the Island of Ireland. It involved over 450 young people and educators from nearly every corner of Ireland in a digital exploration of the past, the present and the future. In brief, MindRising Games was about telling digital stories through the experiences of today's youth in reflecting on the events of 1916 and reimagining what the next 100 years could bring for Ireland. Participants were required to create a project portfolio in Sway, build a virtual world in Minecraft™ and make a short video showcasing their efforts. These videos provide a rich archive and valuable insight in to the level of mindfulness and meaningful learning generated by the MindRising Games projects.

KEYWORDS

Minecraft™, MindRising, Mindfulness, Meaningful Learning, Ireland

1. INTRODUCTION

There is renewed interest in the educational potential of computer games (Kangas, Koskinen & Krokfors, 2016). The power of play is now a serious field of academic research, as evidenced by the number of books and journal articles published on the topic (see for example, Whitton, 2014). Notably, even before the latest Pokémon craze the popularity of the computer and video gaming industry is reported to surpass worldwide revenues generated by Hollywood movies (Barab & Jackson, 2015). Despite popular stereotypes that male teenagers dominate gaming, the average computer and video game player is estimated to be 35 years old, with women over the age of 18 (33%) representing a significantly greater proportion of the playing population than boys age 18 or younger (15%) (Entertainment Software Association, 2015). While the educational potential of computer games is widely acknowledged in the literature the challenge for educators is to go beyond “play” by finding ways of integrating such experiences in meaningful learning activities, which provide transformative advantages over conventional teaching methods. This point is reiterated in a systematic review and meta-analysis of the literature, which identifies ‘the importance of questions that ask not if but how games can support learning’ (Clark, Tanner-Smith & Killingsworth, 2014, p. 14).

This paper describes an innovative project that sought to better understand how to harness the educational potential of one of the world's most popular computer games—namely, Minecraft™ (Butler, Brown & Mac Críosta, 2016; Mac Críosta, Butler, & Brown, 2016). It reports on the MindRising Games initiative first launched in February 2016. This was a unique competition for young people (aged 6 to 14 years), which was part of the official commemoration activities for the 100-year anniversary of the Easter Rising. In Ireland, the 1916 Easter Rising also known as the Easter Rebellion was an armed insurrection over the Easter period in Dublin against British rule. The MindRising Games project involved an exploration of the past, the present and the future through digital story telling mediated through Minecraft™ to reflect on, and project forward, to 200 years of the Island of Ireland. In this paper we briefly outline the rationale for selecting Minecraft™ for this initiative and the basic design of the MindRising Games competition. We also outline some of assumptions and guiding principles about mindfulness and meaningful learning which underpin the project.

After describing the official launch the paper explains the development process that almost 450 young people engaged in leading up to the final MindRising Games celebration event in May 2016. Drawing on the experience of this event we reflect on the success of MindRising Games and discuss future initiatives that might help to bring ‘Blockheads’ and ‘Grayheads’ together to tell digital stories about Ireland.

2. WHY MINECRAFT?

Immersive virtual worlds are capable of facilitating highly interactive, engaging, collaborative and multimodal learning experiences (Lee, Dalgarno, Gregory & Tynan, 2016). While they have great potential and have generated considerable interest leading to increasing uptake by educators over recent years, platforms such as Second Life, Active Worlds and Open Simulator have yet to become widespread or mainstream in educational settings, evidenced by few large-scale implementation projects. A recent literature review on the use of Minecraft™ offers a useful discussion of the benefits and limitations of this popular computer game for educational purposes (Nebel, Schneider & Rey, 2016). Minecraft™ is a game that allows you to explore virtual worlds and use blocks to build amazing environments from the simplest of homes to the grandest of castles. In contrast to some of the abovementioned virtual worlds, Minecraft™ has a growing following and has established itself as one of the world’s most popular computer games. Notably, almost 20,000 million copies have been sold for PC, 12 million copies for XBOX360, and more than 21 million copies for mobile phones, which places Minecraft™ on the all-time best-sellers list (Nebel, Schneider & Rey, 2016). It follows that Minecraft™ was ideally suited to an Easter Rising commemoration project, with the aim bringing both young and old people together to reflect on and tell digital stories about the past, present and future of Ireland. The game environment is relatively accessible, user generated, with flexible rules and modifiable components. Players can use the platform to build, explore and socialize with other users. It is noteworthy that the Minecraft™ community includes children, young people and adults, including silver surfers. Given the diverse player base and level of interest across generations in the Easter Rising, the MindRising Games project hoped to provide a unique digital experience that would bring ‘Blockheads’ and ‘Grayheads’ together.

3. LEARNING THROUGH MINECRAFT

From an educational perspective the use of Minecraft™ supports planning and self-regulation skills (i.e., mindfulness). The ability to build and re-create virtual worlds also lends Minecraft™ to a wide range of applications, including the accurate reproduction of existing environments and re-imagination of future places and spaces, which supports the integration of the game within the curriculum for authentic and meaningful learning experiences. This point helps to address the concern in the literature that a lot of learning, self-regulation and strategy development required in rule-based games does not readily transfer to real-world problem-solving contexts (Bransford, Brown & Cocking, 2000). Accordingly, the Institute of Education in Dublin City University (DCU), the largest teacher education provider in Ireland, was very supportive of the MindRising Games initiative. Moreover, the National Institute for Digital Learning (NIDL) hosted by DCU was a willing supporter along with Microsoft as the MindRising Games initiative was seen as an innovative vehicle for embedding the use of digital technologies in teaching and learning as advocated by the recently launched *Digital Strategy for Schools (2015-2020)* (Department of Education and Skills, 2015). This new Strategy, coupled with a *Roadmap for Enhancement in a Digital World (2015-2017)* for higher education (National Forum for the Enhancement of Teaching and Learning, 2015), recognises the importance of meaningfully integrating technology within educational contexts. In short, the MindRising Games project was seen as an innovative way of helping students develop a range of key 21st Century skills to fully participate and flourish in today’s globally connected world. These skills include the ability to reflect mindfully, communicate skilfully, collaborate effectively, problem-solve, innovate and construct new knowledge over the course of their lifetime. In this respect the basic premise was that learning through Minecraft™ in the course of this project was potentially a valuable way of bridging the divide between the traditional classroom and the new digital world outside of school to help better prepare young people for their futures.

4. LAUNCHING THE PROJECT

On February 3rd 2016, 120 people attended the official launch of the MindRising Games project at DCU. The launch was opened by Professor Brian MacCraith, DCU's President, and was designed to be highly interactive with all attendees participating in, and contributing to, stories from the past (and future) in order to seed potential MindRising Games projects. Notably, during the launch 25 primary school students from five different schools participated in a challenge to recreate from inside MineCraft the Morse code message sent from the General Post Office (GPO) in the week of the Rising. Prior to the launch the MindRising Games team created the General Post Office (Figure 1) and Dublin Castle in Minecraft™ to help illustrate the potential to teachers and scaffold participants in building their own virtual worlds. In this regard the MindRising Games competition sought to reimagine the teaching of history in school using digital storytelling techniques. Importantly, the MindRising Games initiative was part of the *Youth and Imagination* strand of the official Ireland 2016 Commemoration Program and was open to schools and groups on the island of Ireland and abroad. As part of the initiative a number of high profile MindRising Ambassadors were appointed, including Lord David Puttnan, Ireland's Digital Champion and multiple Academy awardee.



Figure 1. Minecraft rendering of General Post Office

5. DEVELOPING THE PROJECTS

After the closing date for entrants—schools, groups and individuals— at the end of February the intention was that participants would work together from March until the end of April 2016 on developing their digital stories across a range of media, including building elements of their projects in Minecraft™. More specifically they were encouraged to develop their own virtual world(s) to remember the past 100 years and reimagine what the next 100 years could bring for Ireland. Projects could consist of a variety of elements with video, audio and Minecraft™ animation. To scaffold this stage of the project educators and mentors were encouraged to attend a Minecraft ‘bootcamp’ and ongoing support with design thinking tools and tutorials were available on the MindRising Games website. A number of other historical locations were created in Minecraft™ including sites from Northern Ireland and a futurescape of urban living in a 2066 city featuring landmarks from Belfast, Cork, Dublin, Galway and Limerick (see Figure 2).

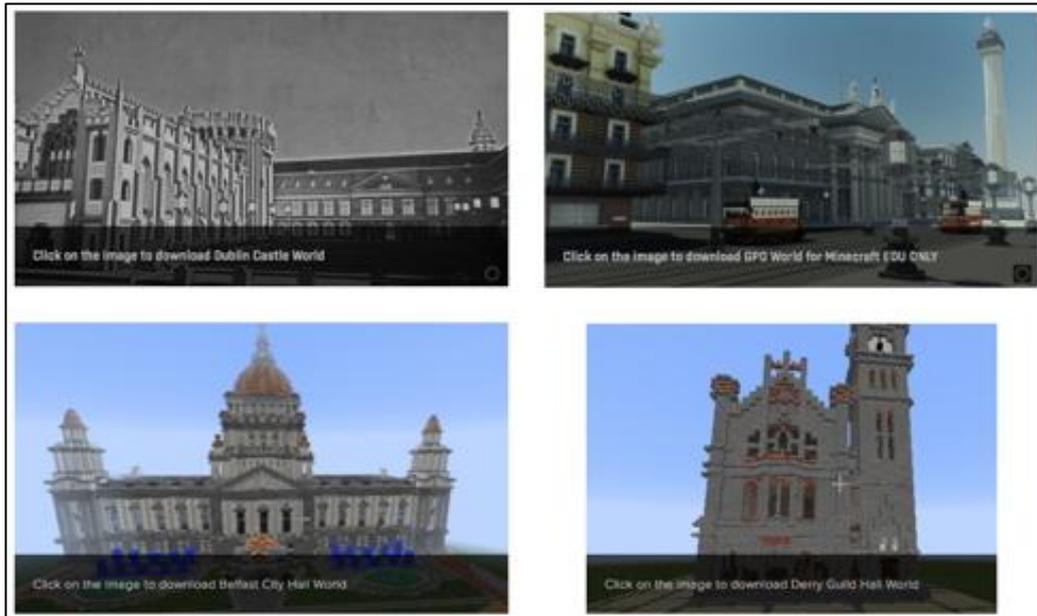


Figure 2. Example of historical locations created in Minecraft

Sample lesson plans were also developed to support teachers. All content was freely available to download use and ‘hack’. In summary, in the development phase of the MindRising Games initiative participants were expected to create a project portfolio built in Sway, develop a virtual world in Minecraft™ and bring everything together in a three- minute video summarising their project. In other words, entrants were encouraged to document, publish and share their work through a range of media, including video snippets, audio recordings, Minecraft™ builds, ebooks, pictures, photos, Sway scrapbooks and so on.

6. CELEBRATING THE PROJECTS

All participants were invited to a one-day MindRising Games celebration as part of the Coolest Projects event in May 2016) to share and learn from each other. This event also gave an opportunity to recognise some of the most outstanding projects, with several awards for excellence across a range of categories. While not all of the entrants got to the finish line those who did produced some truly inspirational stories supported by impressive Minecraft™ environments, as illustrated below in the burning of the Cork City Hall in 1920. In addition to the virtual worlds the brief videos provide a rich archive of some of the successes and challenges faced in developing a MindRising Games project and many of these appear on the project website [www.mindrising.ie]. MindRisng16 attracted considerable media attention, with 11 stories published in newspapers, including the *Irish Times* and *Irish Independent*. A press release related to the awards ceremony describes the winning entries [http://www.dcu.ie/institute_of_education/news/2016/jun/mindrising-awards-ceremony.shtml]. In many respects this level of media interest is further evidence of how MindRising Games was successful in linking to ‘Blockheads’ and ‘Grayheads’.

7. CONCLUSION

The focus now shifts to the future and the next MindRising Games proposed to start in September 2016. As Ireland moves into the second half of the 2016 commemorations there is a deliberate effort to look ahead to the future. Therefore, a meeting of many business, education and community leaders took place in July at DCU to reflect on the first iteration of the MindRising Games experience, and to discuss how Minecraft™

could become a valuable part of a number of future-focused projects already or about to get underway, including the Smart Cities, Smart Health and Smart Stadium initiatives. Cognizant of these projects the MindRising team are building this in to our plans and have exciting ideas for future competitions, including building a program focused on re-imagining our future through a hybrid of physical and digital worlds (e.g., connecting the real-world via sensors, cameras and data to the Minecraft™ worlds). Such a project would aim to seamlessly link smart physical cities with smart digital cities. Finally, the MindRising Games initiative was only made possible through a unique collaboration between Business Model Adventures, Microsoft, DCU's Institute of Education, and the National Institute of Digital Learning. This collaboration has helped launch the first in what all parties anticipate will be an annual competition, which could in the future expand to other countries. As Pokémon has taught us this year the computer and video gaming world can expand rapidly and is not restricted by national boundaries.

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