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Dungeons and dragons and digital writing: A case study of worldbuilding

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Dungeons and dragons and digital writing: A case study of worldbuilding

Abstract

Collaborative worldbuilding is an ideal digital writing project for promoting critical thinking about contemporary issues, developing and applying disciplinary expertise writing transfer, and building digital literacies. In the context of the global Covid-19 pandemic where the student experience was characterised by isolation, collaborative worldbuilding also offered a powerful means of building solidarity and community. This paper presents a case study of using collaborative worldbuilding for gaming to achieve key digital writing learning outcomes. The case study shows how this innovative pedagogical approach can be mapped to two key frameworks for information and digital literacies: the Digital Competence Framework for Citizens and the Framework for Information Literacy in Higher Education of the Association of College and Research Libraries. The case study also illustrates how a MediaWiki installation can be used for worldbuilding and as a means of critically introducing students to Wikipedia itself. Qualitative feedback from the students shows that the class achieved its key learning outcomes. More importantly, student engagement during the class and their feedback ascertains that collaborative worldbuilding is a powerful means of building connections and empathy between students in the context of isolation, amid a global pandemic.

Practitioner Notes

1. The worldbuilding framework for collaborative writing developed by Trent Hergenrader can be adapted to contribute to the goals of a first-year seminar. However, there are logistical and technical factors to consider.
2. Worldbuilding for gaming is an engaging class activity whether used for online or in-person education.
3. Using a MediaWiki installation as the platform for digital writing is a felicitous means of imparting proficiencies identified by two information literacy frames, the Framework for Information Literacy for Higher Education and the Digital Competence Framework for Citizens.
4. Worldbuilding by authoring encyclopaedic entries on a MediaWiki installation allows for a critical consideration of Wikipedia itself.
5. Genre knowledge is essential to a student's development as a writer. Discussions of knowledge transfer often focus on the ability of students to apply and transfer expertise across disciplines. Speculative fiction writing based on academic research is an example of knowledge transfer between genres.

Keywords

Dungeons and Dragons, Digital writing, Worldbuilding, Wikipedia, Information Literacy, curriculum mapping, DigiComp, ACRL Framework, Wikipedia

Introduction

In the depths of the pandemic The *Harvard Business Review* offered a utopian vista of higher education's online future (Gallagher & Palmer, 2020). It noted that traditional lectures had changed little in centuries and that, as such, the sector was ripe for technological disruption. In its future vision, the digitally transformed university would thrive via its online offerings, which would range from micro-credentials to graduate degrees, delivered at a fraction of the cost of traditional education. AI chat bots and automatic reporting via data analytics would provide timely, essential support for students. "Which institutions will seize the moment to transform, and which ones will be left behind?" it asked (Gallagher & Palmer, 2020).

Three years on, we can answer that it is the students who are left behind. Despite the promise of online learning in broadening access to higher education, data from across the world confirms what we have known for years: online learning requires high intrinsic motivation abetted by socio-economic resources (Rizvi et al., 2019; Ferrer et al., 2022). Cracks in the positive appraisal of the online revolution in learning began to appear in 2021. An article in *The Guardian* about the stresses on university students in the U.K. quoted one who described their condition as "broken and defeated" (Blackall & Mistlin, 2021). In April 2022, *The Chronicle of Higher Education* declared that "a stunning level of student disconnection" characterised online learning (McMurtrie, 2022). A Gallup survey in 2021 found that a third of students reported difficulty in remaining enrolled in higher education (Gallup, 2022). The University of Wisconsin, Oshkosh, reported that its retention numbers for first-year students for the 2021/2022 academic year were the worst in forty years, and that the decline disproportionately affected students of colour (Examiner, 2022). Of course, we must be careful to distinguish online learning during a pandemic from online learning outside of a pandemic when drawing conclusions. Conversely, we must also avoid attributing negative findings solely to conditions under the pandemic. Some pre-pandemic research attests to the effectiveness of online learning, but national and institutional context is important, as are the characteristics of the student cohort (Pei & Wu, 2019). An important meta study found that blended, not purely online, learning achieved superior outcomes compared to face-to-face learning (Means et al., 2013). Key characteristics and demands of online learning are constant and limit its effectiveness.

Perhaps the most important lesson about online learning for educators and particularly university administrators is that students don't want it. A March 2021 survey in the United States found that "friends and social life" were the most missed aspect of higher education (Weissman, 2022). A City University of New York study also found a preference for in-person classes (Price Banks & Vergez, 2022). Finally, a survey of university students in Australia, Cambodia, China, India, and Malaysia found a strong preference for in-person learning (Eri et al., 2021). However, online education was also problematic for instructors. With few exceptions, the move to online teaching was ad hoc and under-resourced (Eri et al., 2021). A multinational European study notes that the quality of instruction following the

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ad hoc switch to online teaching in 2020 was dependent on an instructor's prior use of technology and experience teaching online (Kaqinari et. al, 2021). Where this was absent, institutional support for instructional design and technology were "decisive" in determining an instructor's experience (Kaqinari et. al, 2021).

In short, online education is not for everyone. The pandemic has laid bare what works and what does not. Now that that the enthusiasm for online education has tempered and the worst of the pandemic's restrictions receded, we can more reasonably plan for learning that embraces digital writing, whether online or in person, going forward, incorporating the lessons of the pandemic. This article offers of a case study of a digital writing class called Critical Skills taught during the summer of 2020, the height of the pandemic in Ireland, a country that experienced some of the strictest lockdown conditions in the world (Watson, 2021). Successful online teaching requires intense instructor engagement, the development of online resources, and careful and creative thinking about assessment. In designing this class, I sought first and foremost to address the isolation experienced by students in Ireland during the pandemic. My second priority was to design a class that would allow the students to experience agency. During the lockdowns, "doing your part" meant staying at home and avoiding human contact. This lack of agency compounded the isolation of lockdowns (McKenna-Plumley et al., 2021). I wanted to achieve the "traditional" writing and research skills learning goals associated with the course without compromising my two imperatives. Finally, in the context of "emergency" but potentially extended online learning and assessment, I wanted the class to increase the technological self-efficacy of students, which research now confirms is an important predictor of engagement (Owusu-Agyeman et al., 2021).

Looking towards an uncertain future, I wanted to design a class with a sturdy pedagogical framework that would allow it to transition to post-pandemic online or in-person classes with digital writing at its core. To do so I carefully mapped the class goals to two information literacy frameworks: the Framework for Information Literacy in Higher Education of the Association of College and Research Libraries (henceforth referred to as the ACRL) and the European Union's Digital Competence Framework for Citizens 2.2 (henceforth referred to as DigiComp) (ACRL, 2015; Vuorikari et al., 2022). This course embedded intense, academic digital writing as part of a team worldbuilding project for role-playing games (RPG) such as *Dungeons & Dragons* (D&D), the world's most popular table-top RPG. This case study can be helpful in showing how innovative curriculum design can be presented in a manner that builds support at an institutional level and can be shared as example of class design.

The article begins with an overview of the class design, starting with its theoretical underpinnings and proceeds to a discussion of how I implemented digital writing through a collaborative worldbuilding for gaming assignment. I then show how this class maps to the ACRL and DigiComp frameworks. Although this exercise follows the description of the class structure, assessments, and logistics, in practice I mapped the class curriculum to the frameworks before, during, and after the class.

Worldbuilding on Wiki: Curriculum Theory and Class Logistics

Critical Skills: A First-Year Seminar

Critical Skills is a first-year seminar that has been adapted to the Irish context of higher education. Access to university in Ireland is granted through a state examination, the Leaving Certificate. This is a content-based exam that rewards rote learning and proficiency in exam taking (O'Leary & Scully, 2018). However, its ability to prepare students for independent learning, problem solving, and the analysis of and engagement with sources is questionable (O'Leary & Scully, 2018). Maynooth University, like universities elsewhere, offers a first-year seminar (in this case optional not compulsory) because of the benefit seen in retention, among other positive aspects (Keup & Barefoot, 2005; Padgett et al., 2013; Starke et al., 2001). Created in 2015 by the author, Critical Skills emphasizes peer group formation, resilience, and independence by building information literacy and writing and research skills. A longitudinal analysis of the first three years of the program found an increase in retention of between seven and thirteen percent among Bachelor of Arts students (Nestor, 2019).

The switch to online learning, introduced in Ireland in March 2020, rendered achieving the goals of a first-year seminar more difficult but also more urgent (Tice et al., 2021). As a result, I redesigned Critical Skills mindful of the difficulties in achieving peer group formation in an online context. The redesign also afforded an opportunity to rethink what literacies should be the focus of the class. The redesigned class ran for six weeks as a pilot in the summer of 2020 to test its feasibility for programmatic delivery as the Critical Skills class. The class was intensive, meeting online six hours each week, supplemented by asynchronous content. Critical Skills, like many first-year seminars, is based on teaching processes and literacies rather than content. This is partly a result of composition—students from multiple degree programs are enrolled in the same class—and partly the result of educational philosophy. Cope and Kalantzis (2013) argue for the benefit of a multiliteracies approach to education. Focusing on building the literacies, capacities, and dispositions of students through process-based learning is a felicitous approach for a first-year seminar. I also decided to frame the class round gaming, specifically RPGs. The educational and social benefits of table-top RPGs are well-established (Cook et al., 2017; Spinelli, 2018) and I hoped that these would transfer—even partially—to an online context. Trent Hergenrader provides a detailed model of using worldbuilding for RPGs to teach writing and teamwork skills (Hergenrader, 2018). His work was foundational for my own course, where multiliteracies and gaming offered the most direct route to achieving my two primary goals for the class: combating isolation and offering students agency.

Trent Hergenrader, Collaborative Writing, and Worldbuilding

Hergenrader offers a comprehensive model for educational worldbuilding. "Worldbuilding," he explains, "Is the process by which an author creates an imaginary world that takes into account the varied social and cultural forces at play, how these forces work in concerts as a coherent system, and how in a work of fiction the details of the imaginary world often emerge by way of narrative" (Hergenrader, 2018, p. 18). Worldbuilding promotes critical literacy by offering an opportunity to reflect on contemporary issues (Tomin & Jenson, 2021). Worldbuilding is so powerful an activity for teaching critical thinking that advocates call it a "strategic tool" for

instructors (Martin & Sneegas, 2020). Two key decisions informed the planning in the early stages. First, I decided that students' worldbuilding would need to be informed by academic research. In other words, the students were writing speculative fiction. Second, I decided to use an installation of MediaWiki software on a subdomain of the Critical Skills website as the location for their writing.

Hergenrader's template for a worldbuilding class is comprehensive. His book presents a model tailor-made for classroom adoption, provides resources, suggestions for class design, and detailed student examples to illustrate the stages of a collaborative worldbuilding class project. Initially used in creative writing classes, academics outside of this discipline now recognise the benefits of worldbuilding (Martin & Sneegas, 2020; Tomin & Jenson, 2021). It is an ideal choice for achieving learning goals relating to teamwork skills and digital writing.

Class Goals and Methods

A key requirement of my class was that students' speculative fiction be informed by academic sources. This is important for achieving the goal of writing transfer. Transfer refers to the ability of students to apply their learning across genres and disciplines (Devet, 2015). Here, the scholarship of Rebecca Nowacek influenced class design. First, her framing of genre as a rhetorical act offers a powerful means for students as writers to understand essential characteristics of both what they read and write (Nowacek, 2011). Second, her description of transfer as recontextualization helps students move from reading academic sources to writing encyclopaedic speculative fiction. However, this class did not emphasise transfer between disciplines, that is between a student's courses, but rather transfer between genres: academic writing to encyclopaedic fictional writing. Indeed, genre knowledge and writing transfer between genres is arguably more beneficial than transferring disciplinary knowledge between the same genre, the academic essay (Driscoll et al., 2020). Students apply their academic knowledge and research in a domain (e.g., law, sociology, ecology) to the construction of a fictional world by writing encyclopaedic articles. Individual learning journals and low-stakes presentations capture student work with academic sources. Students recorded "research trajectories" in their journals and completed source analysis documents where they identified claims, methods, and conclusions from their academic texts. Students made low-stakes presentations of the sources during class. I had used both of activities with success previously so their adaptation as academic foundational work for worldbuilding was straightforward.

This was a collaborative project, and I used two resources to scaffold this element of the class: Purdue University's Comprehensive Assessment of Team Member Effectiveness (CATME, info.catme.org) and the YouTube channel "Teamwork: Surviving Your Group Project," developed by the University of Minnesota (*Teamwork*, n.d.). CATME's peer survey assessment tool requires a subscription, but greatly aids in treating teamwork, not just the "product" of the assignment, as an assessed activity. In addition, CATME provides useful document templates for team contracts and minutes of meetings. Critical Skills aims to teach students teamwork as a process and in doing so equip them with skills and experience they can deploy in subsequent team projects. In my experience, some colleagues who deliver content-focused classes assign team projects but provide less scaffolding. A first-year seminar that equips students with the skills for teamwork offers an important academic and indeed professional benefit.

I required that students use Microsoft Teams to coordinate their work. This was our university's default platform during the pandemic for online teaching. However, using it for a team project allowed students to engage with Microsoft Teams for the purpose originally intended. Moreover, a wealth of accessible, basic tutorials exist that illustrate how to use the software to coordinate team projects. I included a discussion of online safety and professional boundaries as part of the Teams training. Importantly, the Teams sites of groups provided evidence of the achievement of learning goals related to teamwork. Students used Teams to host documents for the project, team contract and minutes of meetings for example. Students also shared drafts and examples of their own work for peer feedback on Teams; some teams shared bibliographies and sources. They used the calendar app to schedule meetings and met on Teams. While it is important, especially in an online class, to afford students an unmonitored, informal space to share their concerns and experiences among themselves, I made it clear that evidence of teamwork (e.g., meeting minutes using the CATME templates) must be present on their Teams site for this component to be assessed.

However, there are several considerations and idiosyncrasies that could limit programmatic adoption. In many ways, worldbuilding as digital writing is more viable as an in-person class rather than online. Online delivery of this class required more preparation and was more taxing in delivery than any previous class (online or in person) I have taught. I strove to establish and maintain an online presence for students. I encouraged the use of the MS Teams chat function and even installed the app on my phone so that I could respond quickly. I held numerous extra online sessions for supplementary help on software, and I maintained regular office hours and strongly encouraged students to avail of them. Engaged instructors with a meaningful online presence is a feature important for successful online learning (Muir et al., 2020). Thus, this class, or online teaching in general, would be either impossible or unsuccessful if the instructor was carrying a heavy teaching load.

Technology is another hurdle. Programmatic adoption would not just be a matter of training instructors on MediaWiki; they must also have a degree of competency with the platform to support students. There are alternatives, for example students could build worlds using Microsoft Word, but the use of MediaWiki to write encyclopaedic content mirrors Wikipedia so closely that it unlocks key literacies that might otherwise remain unaddressed. I created a number of detailed screencasts for the class that provided asynchronous tutorials on the use of MediaWiki, MS Teams, and our university's library catalogue and databases. This required a significant amount of time and ancillary competencies in video editing software. These resources are surprisingly perishable. For example, a change to the user interface of the university library has subsequently invalidated the resource on its use that I made.

Wikipedia and Critical Literacy

The choice of using a MediaWiki installation was essential for achieving key learning goals. Wikipedia itself is an ideal platform for collaborative writing and a valuable tool for teaching critical literacy and other skills, however it can be a challenging site for both students and instructors (Di Lauro & Johinke, 2017; McKenzie et al., 2018). A dedicated class MediaWiki installation offers the best of both worlds: students produce academic work in an important genre, learn important digital literacies, and can critically reflect on the social production of knowledge (e.g., systemic

bias) without the risks associated with editing Wikipedia itself (Ford & Wajcman, 2017; Halfaker et al., 2011). Given the widespread use of Wikipedia by students (Todorinova, 2015), a critical understanding of the encyclopaedia is more helpful than the strict prohibition they may encounter in other classes.

Wikipedia is arguably one of the best tools for teaching critical literacy as a result of its hegemonic position in the information landscape (McMahon et al., 2017) coupled with students' casual familiarity. Instructors should choose any content area from their discipline that illustrates bias not necessarily factual inaccuracies—Wikipedia performs quite well here (Chesney, 2006). I use the "clean Wermacht" controversy on Wikipedia as a critical introduction. This perspective dominated historiography from 1958, the publication date of the memoirs of convicted war criminal Erich von Manstein, until the 1980s. It held that the German army in general and key leaders in particular were not responsible for war crimes; rather, these were the work of the SS or other units outside of the German army (Stahel, 2018). German historians comprehensively refuted this position. In the United States, Christopher Browning's landmark book *Ordinary Men* added the nail in the coffin to the "clean Wermacht" myth (Browning, 1998).

Yet there was one place where this myth remained prominent, the most widely used source of public knowledge in the world, Wikipedia. The historian David Stahel concluded that the dominance of the "clean Wermacht" on Wikipedia was to a great extent the result of Wikiproject Military History (Stahel, 2018). On Wikipedia, a "Wikiproject" is a group of editors that coordinate editing and activities around a topic of shared history. Stahel concluded that many editors treated sources uncritically and lacked the ability or training to contextualize sources and information (Stahel, 2018). Efforts to remove the "clean Wermacht" myth from Wikipedia articles were met with fierce opposition (N. Cohen, 2021). Ultimately, one editor, K.e.coffman, succeeded in revising the content but only after appealing to Wikipedia's highest dispute resolution process, the Arbitration Committee ("Wikipedia," 2019).

As part of the examination of the "clean Wermacht" on Wikipedia, I introduced students to the anatomy of a Wikipedia article, and the encyclopaedia's policies and procedures. We looked at "Talk" pages of articles, a sort of B-side to every article where editors discuss its content. We examined how Wikiproject Military History editors had used the policy of "undue weight" ("Wikipedia," 2021) to argue for the exclusion of content. We looked at a related example of using "undue weight" by Wikiproject Firearms to weaken content on gun violence (Dlthewave, 2019), or how editors used the policy to minimize information about sexual assault at universities (Peake, 2015). We considered the voice of Wikipedia articles, called "Neutral Point of View." This holds that articles must be written using "reliable sources" "fairly, proportionately, and as far as possible without editorial bias" ("Wikipedia," 2022).

We also considered how editors establish authority on Wikipedia. We looked at User Pages, public pages on Wikipedia where editors can include information about themselves, or just about anything else they want. These are fascinating anthropological artifacts. They act as a Sartrean "Being-for-Others," signalling an editor's facticity (Sartre, 1993). Finally, we looked at the importance of edit count (the total number of edits made by an editor) in establishing authority (Jemielniak, 2014). Establishing the dissonance between these policies and examples discussed in class, combined with a detailed look at Wikipedia's culture, offered a crucial, critical introduction

to the encyclopaedia. This was an essential precursor for the students as it enabled them to reflect critically on their own production of encyclopaedic content for their fictional world.

A MediaWiki installation does require work by the instructor and possesses certain requirements. Our university website and IT services were unable to support a MediaWiki installation. As a result, I installed it on a different website related to an independent Critical Skills project. Installation, using a webhosting control panel, required a degree of ICT skills that many instructors may lack. In addition, I customised the installation to limit the visibility of content and restrict user registrations, both as safety measures. A “vanilla” MediaWiki installation such as the one I used lacks the so-called Visual Editor of Wikipedia, a WYSIWYG editor that does not require knowledge of markup language. The latter is relatively straightforward but does require additional training for the students to use. The most difficult element of working with MediaWiki was creating Infoboxes. These are tables that appear at the side of every article and provide a short summary and essential information. They give articles a professional appearance. Infoboxes are important on Wikipedia because they provide metadata that makes them more visible to search engines. I created templates for infoboxes for the main categories of topics suggested by Hergenrader: characters, locations, events, and items. This process also required some prior knowledge. Despite the work required, a MediaWiki installation proved to be an ideal platform for worldbuilding. It provided an experience of digital writing for students that is transferrable to Wikipedia itself. Furthermore, the use of markup language and the introduction to tables provided an entree into the world of programming, but in the service of digital writing. There are alternatives to MediaWiki, however in terms of digital writing, this platform affords genuinely transferable digital writing skills.

Writing Worlds

After establishing the foundational literacies necessary, the class began worldbuilding in earnest. Following Hergenrader’s template, the students start with deciding the genre for their worlds. There were three student teams in the class. Two choose to create worlds appropriate for a fantasy RPG such as *Dungeons & Dragons*; the other team created a science fiction world appropriate for the *Traveller* RPG. Interestingly, but perhaps unsurprising too, no students expressed interest in creating post-apocalyptic or dystopian worlds while living through a global pandemic.

Fundamental to Hergenrader’s system is a “Worldbuilding Deck,” a randomisation mechanic that generates social structures for the fictional world. His text offers instructions on how to make the deck, or one can be downloaded from the book’s website (www.collaborativeworldbuilding.com). The deck divides a fictional world into four structures: governance, economics, social relations, and cultural influences. Each of these has numerous substructures. Government presence, rule of law, and social services are substructures of governance; economic strength, wealth distribution, and agriculture and trade are the economics substructures; the substructures for cultural influences are race, class, and gender relations, and sexual orientation relations; the substructures of social relations are the influences of the military, religion, technology, and arts and culture (Hergenrader, 2018). The worldbuilding deck consists of cards numbered 1 to 5. You lay out the name of the structures and substructures on cards (or post-it notes or similar) and then deal out cards for each substructure. A “1” indicates that there is a low level, in terms of

abundance or tolerance, in the world, a “5” indicates a high level. A separate series of cards indicates if a substructure is trending up or down in a world. For example, a “5” trending down in sexual orientation relations would indicate that there the society is highly tolerant in this area, but become less so. A “1” trending up in wealth distribution would indicate a society with severe inequality but getting better. Not every substructure is trending, only five. You deal the trending cards randomly, but can decide whether you want an individual card to be trending up or down. The distribution of numbered cards is such that the world produced is balanced but nevertheless possesses some sectors that create or are indicative of societal tensions. A good discussion in class is to have students consider their own society and apply worldbuilding deck ratings. For example, my Irish students, contrasting the popular votes legalising same-sex marriage and abortion with the prevalence of Catholic public schools, said that they would rate religious influence a “3,” trending down.

The scope of the world is the next important decision a worldbuilding team must make. Scope can be small or massive. For example, scope could be a back garden like the one in *Mrs. Frisby and the Rats of NIMH*, or multiple solar systems connected by a gate system as in *The Expanse*. Hergenrader shows how the use of focal points can make a world manageable regardless of its size. Focal points are where the action happens in a world. The cinderblock where a family of sentient mice live is just a few meters from the rosebush under which technologically advanced rats live. Both are locations developed in detail by the author. Conversely, in a world with a galaxy as its scope, not every planet, star, or asteroid need be detailed. The focal points could define the key points of action as, for example, a rebel base, a moon-sized spaceship, or a gas mine city that floats in the atmosphere of a gas giant planet. Determining their world’s scope was a fun, creative activity that whetted the appetite of students for worldbuilding.

The academic, creative opportunities here are tremendous. Even at this early stage, students started thinking about how academic subjects of interest could be applied. Students studying sociology immediately began discussing how they could incorporate what they learned about inequality to their fictional world; a history student on the science fiction team started to make connections to readings on revolutions. A computer science student on the same team applied readings on the Chinese “social credit” system to develop the idea for an advanced surveillance system called “G0ds-Eye.” The academic source learning journal provided essential scaffolding for the development of these ideas.

The next step in Hergenrader’s model is to develop the world’s timeline or sequence. “Collaborative worldbuilders,” he explains, “Must contemplate not only how their world works in the present, but how it came to be, and to consider different directions in which it may be heading in the future” (Hergenrader, 2018, p. 36). Students conceptualise a “point of present,” the beginning of their world, and possible futures. This step is when clear consequences and opportunities for speculative fiction writing become apparent. The first imaginative leap opens door to social, political, historical, ecological, and many other considerations. This can be an intimidating process, so I illustrated the idea of sequence with several examples from commonly known fictional worlds. For example, take the start of *The Fellowship of the Ring* as our “point of present.” What preceded? The defeat of an evil demigod and the fall into obscurity of a magical ring. What does the present hold? The emergence of unlikely heroes, the re-emergence of ancient evil forces, an ancient race—the elves—in decline, and disunity among kingdoms and factions.

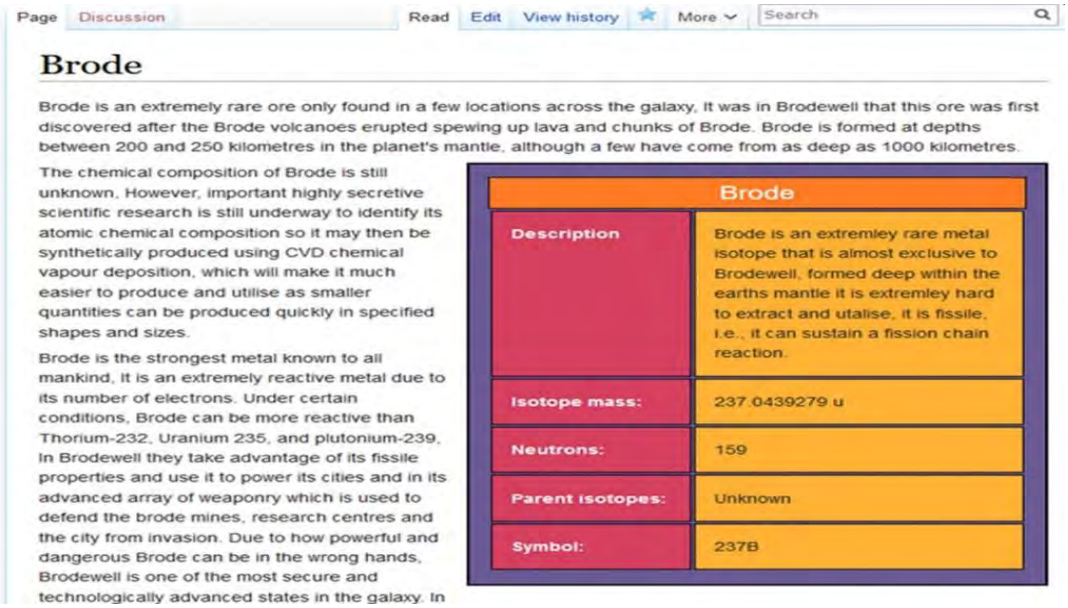
What are possible futures? A world enslaved by evil or the unlikely success of a small band of heroes. I also used the start of the first Star Wars movie, *A New Hope*, to illustrate sequence. The opening scroll of the movies literally says, “A long time ago in a galaxy far, far away....”

One team creating a fantasy world decided that their point of present was the aftermath of a war between two factions of gods. The war determined the cosmogony of the setting and shaped the emergence of humans and their world. In the present the defeated gods were now being reborn as humans, and the future hinged on how humans would engage with the reborn gods. The team creating the science fiction world decided that its beginning was in the recent past as colony world, where the point of present involved a struggle between workers and rulers over control of the planet’s valuable resource, a type of mineral that can be tapped to generate massive amount of power. Even at this early stage, students should generate a rough map of their world. Yet it is crucial to inform students of the pitfalls here. The risk of implausible maps or the temptation to make maps at the expense of writing can be great. Maps of fantasy worlds, including some of the most famous, can be unrealistic when authors attempt to make maps that mirror the physical, geological processes, and features of our own world (Acks, 2017). Here too, Hergenrader provides useful advice and suggests recommended software, and following this, two teams used the free version of the software Inkarnate. The remaining team used Google Earth and remixed screen grabs of the islands off the west coast of Ireland

The process of determining genre, scope, sequence, social structures/substructures, creating a basic map, and ICT training (WikiMedia, MS Teams) occurred during the first three weeks of the six-week class. The first substantial collaborative writing occurred at the end of the second week. Students wrote a “metanarrative lead” that introduces the reader to the key characteristics of their world (Hergenrader, 2018). Wikipedia articles themselves start with a lead that acts as a standalone summary. We examined the leads of several modern countries’ Wikipedia articles as examples. Then, students spent the next three weeks building their worlds, and each student was responsible for individually writing eight encyclopaedia articles, 250 to 500 words in length, for their world, distributed evenly among the four categories (characters, events, locations, items). Thus, although the worldbuilding was collaborative, the digital writing was individual. Teams consulted to make sure that their contributions were consistent with each other and the metanarrative. For example, if one student created an entry for a character, another student should not create an event where that character died without first discussing it with character’s creator. Hergenrader provides detailed guidance on negotiating tone and content, boundaries, dispute resolution, and collaboration (Hergenrader, 2018).

Figure 1

Example of a catalogue entry with infobox on a class MediaWiki installation



Building Worlds, Mapping the Curriculum

While designing the class I began mapping its content to the ACRL and DigiComp frameworks. Whether a class is content or process-based, curriculum mapping is an important if perhaps neglected step in the design process. It serves a number of functions. Perhaps most importantly, it allows for alignment and transparency across the curriculum of a university (Wijngaards-de Meij & Merx, 2018). All classes, whether process or content, no doubt address key literacies. However, ad hoc coverage can lead to lacuna as well as duplication. Curriculum mapping helps to avoid this type of implicit or tacit coverage of skills and concepts, providing structured coverage linked to a curriculum rather than incidental or accidental coverage. Curriculum mapping has the potential to enrich classes by freeing up class content and time that might otherwise be spent covering a concept or skill addressed in another class. Second, and more specific to this class, curriculum mapping for innovative, atypical classes can win over sceptical colleagues and satisfy curriculum committees. Third, curriculum mapping can help scaffold the structure and delivery of a class, since it is important to map the curriculum before, during, and especially following the conclusion of a class. This allows for an honest reflection of what the class achieved, and adjustments going forward.

I chose to map to the DigiComp and ACRL frameworks because they are both in widespread use. They are also substantially different. DigiComp is specific to digital literacies which had particular applicability to a class centred on digital writing. The ACRL framework is interesting because its six frames are presented as metaphors: authority is constructed and contextual, information creation as a process, information has value, research as inquiry, scholarship as conversation, and searching as strategic exploration (ACRL, 2015). Metaphors, argues Wendy Holliday, “Help

us understand areas of experience that are not easily apprehended in their own terms, such as teaching and learning" (Holliday, 2017, p. 6). Although students may struggle when engaging with the text of the ACRL framework (Scott, 2017), I have find that the metaphors lend themselves to practical, experiential demonstration. For example, scholarship as conversation scales from a discussion of the importance of referencing all the way to understanding paradigm shifts, and laterally to how teams work together to generate content and ideas. Authority is constructed and contextual, and this lends itself naturally to a discussion of genre and rhetorical purpose. The DigiComp framework is arguably more granular (Vuorikari et al., 2022). It also packages "information and data literacy" together as the same competence area, which results in content bloat. Both frameworks target dispositions not just skills. DigiComp understands competencies in three dimensions: knowledge, skills, and attitude. The ACRL divides its outcomes into knowledge practices and dispositions.

Both frameworks are lengthy documents with significant detail in each competence or frame. For the purposes of this article I will map to the headline competences or frames. In the case of the DigiComp 2.2 framework I include the reference to the sub-competencies. DigiComp 2.2 provides its own "proficiency level" scale, ranging from 1 (foundation) to 8 (highly specialised). For the ACRL I have used David Krathwohl's revision of Bloom's Taxonomy to rate outcomes (Krathwohl, 2002). This description of learning ranges from 1 (remember) to 6 (create). The ratings below are my own evaluation after the class, based on an assessment of student work. This class was premised on digital writing and so we should expect a close alignment with the DigiComp framework. An important area for further research is developing a tool for students to assess their own learning in the context of the frameworks.

Figure 2

Collaborative worldbuilding mapped to the ACRL framework

ACRL Framework	Authority is Constructed and Contextual	Information Creation as a Process	Information Has Value	Research as Inquiry	Scholarship as Conversation	Searching as Strategic Exploration
Using MS Teams to coordinate team project		Create			Create	
Introduction to Wikipedia	Evaluate				Evaluate	
Authoring an article on the class wiki			Evaluate	Create	Create	Create

Figure 3

Collaborative worldbuilding mapped to DigiComp 2.2, part 1

DigiComp 2.2 Framework	Information and Data Literacy			Communication and Collaboration					
	1.1 Browsing, searching and filtering data, informatin and digital content	1.2 Evaluating data, information and digital content	1.3 Managing data, information and digital content	2.1 Interacting through digital technologies	2.2 Sharing through digital technologies	2.3 Engaging citizenship through digital technologies	2.4 Collaborating through digital technologies	2.5 Netiquette	2.6 Managing digital identity
Using MS Teams to coordinate team project				5	5		7	5	3
Introduction to Wikipedia						5			
Authoring an article on the class wiki	6	6	4						

Figure 4

Collaborative worldbuilding mapped to DigiComp 2.2, part 2

DigiComp 2.2 Framework	Digital Content Creation				Safety				Problem Solving			
	3.1 Developing digital content	3.2 Integrating and re-elaborating digital content	3.3 Copyright and licences	3.4 Programming	4.1 Protecting devices	4.2 Protecting personal data and privacy	4.3 Protecting health and well-being	4.4 Protecting the environment	5.1 Solving technical problems	5.2 Identifying needs and technological responses	5.3 Creatively using digital technology	5.4 Identifying digital competence gaps
Using MS Teams to coordinate team project					4	4	2		2	3		
Introduction to Wikipedia			4									
Authoring an article on the class wiki	4	2									2	2

Conclusion: Worldbuilding as Digital Writing

Hergenrader writes of the “lure of endless worldbuilding” (Hergenrader, 2018, p. 131). Indeed, between the academic learning journals, the world metanarrative, and the individual articles, my first-year students have never written more. Students created two worlds that would be immersive settings for fantasy RPGs and one suitable for a science fiction RPG. In a normal semester-length class, the worldbuilding writing would extend into the second half of the semester alongside and in relation to actual gaming.

Worldbuilding is a fundamentally engaging and rewarding activity, and pedagogically effective. Qualitative feedback from students supports this conclusion. The pilot had twelve students enrolled. Six completed an end-of-class survey. While two stated that the main benefits of the class were “improved my confidence as a writer” and “improved my writing,” other students identified “communicating completely online” and “teamwork” as the most important learning outcomes. In addition, all twelve students enrolled in the class passed. This pass rate contrasts with global, and my own institution’s, trends during the pandemic. Whether the pass rate was the result of the engaging content, particular circumstances of students, pastoral care, or a combination of all three requires further exploration. These results, although based on a small sample, are encouraging. They, along with the alignment to the information literacy frameworks, in particular DigiComp, suggest that worldbuilding for gaming is a compelling model for a class premised on digital writing.

Nevertheless, worldbuilding as digital writing may be less appropriate for a first-year seminar than an upper division writing course and not just because of logistical and technical considerations. Although my students wrote a lot (relatively), they did not write in the genre they will most likely be subjected to as students: the academic essay. As an assessment, the academic essay is problematic. Mark Sample dismisses an essay as “a twitch in the void” (Sample & Schrum, 2013, p. 87). As compelling as I find his critique to be, Critical Skills equip students with the tools for success required at university. There was some content applicable to the academic essay covered in the class. For example, students identified and discussed thesis statements in their academic sources as part of their learning journals and source presentations. However, they did not write thesis statements. I would suggest that writing encyclopaedic content (after being equipped with critical literacy) is more relevant to the type of content students will consume, and be expected to produce, in the course of their professional if not academic lives.

Ultimately, I concluded that the workload, logistical, and technical requirements of the class, rather than any issues with content, precluded widespread adoption for Critical Skills, either as an online or in-person class. As an individual instructor I would certainly teach the class again—it was one of the best classes I have ever had the pleasure of teaching. Creating worlds for *Dungeons & Dragons* in a rigorous academic context that embedded a broad spectrum of digital literacies was professionally and personally fulfilling. However, the teaching load of Critical Skills, five classes for the university tutors who deliver most classes, was the primary roadblock to programmatic adoption. ICT skills of faculty were also a consideration, but less so than workload, as training can be implemented. I would recommend that worldbuilding be used in singular, upper division classes. The model is viable for disciplinary subjects, and it would make for an exceptional interdisciplinary capstone project. Whether or not online education emerges from the pandemic

as a significant expectation of students, or a core component of a university's mission remains to be seen. The limitations of this type of learning and education have been revealed, or rather reaffirmed. Self-efficacy and motivation among students, on the one hand, and high-quality instruction, on the other, are essential conditions (Clark et al., 2021; Zapata-Cuervo et al., 2021). Potentially, online offerings will expand, but based on a better understanding by policy makers and university administrators of which cohort it benefits, and what it requires to be successful.

This article presented a case study of how to teach digital writing in an innovative, engaging way that aligns with two of the dominant information literacy frameworks. Moreover, it was *digital writing* not just writing that was digital. Students now consume so much information digitally that it is imperative that universities impart literacies in this domain, and that students be empowered both as producers and consumers of digital content. We must avoid the fallacy that traditional education in a lecture hall entails traditional assessment by written essay or exam, or that somehow online classes are magically and automatically spaces of digitally-blessed learning. The re-use of year-old recorded lectures for some online classes at Ireland's most prestigious university disabused many of this assumption (Wilson, 2021). Whatever the fate of online learning, digital writing is here to stay. Our task is to develop innovative ways to promote and deliver it.

Conflict of Interest

The author(s) disclose that they have no actual or perceived conflicts of interest. The authors disclose that they have not received any funding for this manuscript beyond resourcing for academic time at their respective university.

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