Walking Simulators and Interactive Fiction in the Composition Classroom: Reading, Writing, and Making

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Abstract

In answer to calls for a 21st century reconsideration of traditional procedures of classroom writing, I offer student-created interactive fiction (IF) as a classroom exercise that blends digital literacy, games-based pedagogy, and writing practice. I find walking simulators like *Firewatch* and *The Stanley Parable* serve as effective models of IF games. The walking simulator genre shows that by promoting a sense of immersion, exploration, and letting players take their time, a game can reveal advanced narrativity and literariness, as well as a range of rhetorical possibilities. By workshopping IF platforms such as Twine or Ink Script, students can learn to create their own textual walking simulators. In this way, they can engage in an accessible, text-based form of worldbuilding and learn to craft explorable, unfolding narratives that represent their research, point of view, or argument. This article explores the pedagogical potential of interactive fiction, discusses some of the literary possibilities found within walking simulators, offers some ideas about leading a composition classroom in reading and analyzing these games, and provides a brief overview of getting started with worldbuilding in Twine or Ink.

Keywords

Walking simulators; writing; worldbuilding; argument; composition; pedagogy; interactive fiction

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Interactive Fiction and Worldbuilding as 21st Century Composition

With the rise of networks, the ubiquity of digital media, and a generation of students who have grown up connected on the web, we are seeing the opportunity—indeed, the necessity—to understand that students are learning in new ways and needing increasingly multimodal and digital skills. The NCTE Executive Committee (2008) have called for a 21st century reconsideration of traditional procedures of classroom writing. Today, the Committee argues, people write as they never have before. While traditional forms of writing, argumentation, and publication are still in use, the Internet has revealed new genres of writing, communicating, networking, and co-producing. For the Committee, a classroom that hopes to prepare students to work effectively in these new environments must consider three new challenges: demonstrating new models of writing, designing a new curriculum to teach and support these models of writing, and operating on new models of classroom operation. In "Why Teach Digital Writing," Cushman et al. (2005) make a similar claim. They argue that the technologies of the world have formed a changed context for writing, which demands teaching new genres and focusing on new values and qualities to writing. It must be taught that technologies create new contextual conditions for writing which make very different demands on the writing process. The point, they argue, is not to simply teach writing with computers. The point is to teach *writing spaces*—to teach an awareness and consideration of how shifting audiences, new modes and models of writing, new technologies, and new (or blended) genres each make specific demands on the decisions a writer has to make. As they state, this is "because students need a full set of technology choices—including computers and networks—to support how they write, share, socialize, play, and organize their lives" (Cushman et al., 2005, para. 7). In the end, Cushman et al. call for a pedagogy that considers multiple contexts of writing, encourages a critical and thoughtful awareness of how technology shapes the writing process, effects awareness of how we learn in a digital world, and promotes multimodal approaches for writing (para. 9).

In the 15 years since Cushman et al.'s (2005) call, many scholars have explored how the rise of networked digital environments might help us achieve some of these new pedagogical goals. Jeffrey Bergin (2018), for example, uses Cushman et al.'s study of writing spaces, James Gee's (2012) explication of affinity spaces, and Michelene Chi and Ruth Wylie's (2014) ICAP (Interactive, Constructive, Active, and Passive) framework to ground a pedagogy that explores the value of writing within online, digital spaces such as websites, blogs, e-magazines, social media networks, and podcasts. Bergin argues that these digital spaces are "prime territory for engaging students in rhetorical processes – whether analyzing rhetorical messages or generating rhetorical artifacts" (2018, p. 1). I agree with, and practice, a pedagogy similar to Bergin's digital, multimodal approach; I too build my writing classes around routine work

within digital environments across genres. However, Bergin shies away from game-based pedagogies; here our approaches differ. I believe that play within, and creation of, virtual environments is the most direct manifestation of Cushman et al.'s call. I explore this argument in this article, focusing in particular on text-based environments created in interactive fiction platforms and inspired by the structure of walking simulators. In this article, I situate this approach within the discourse of virtuality and game-based pedagogies, argue for interactive fiction (IF) as an accessible platform and genre with which we can access these pedagogies in the classroom, demonstrate that walking simulator games serve as useful models for effective IF design, point to the academic potential of walking simulators and their related scholarship, and conclude with some thoughts and examples about how this kind of pedagogy might be scaffolded in a composition class curriculum.

It should be noted that I am not the only one who proposes game-based pedagogy and digital virtuality in response to the call for 21st century digital literacies. In an empirical study on learning processes in virtual environments, Jarmon et al. (2009) argue that learning best occurs through playful, explorative engagement in virtual worlds with "experiential learning" which places the *experience* of the student as central to the learning process (p. 170). Learning becomes organic, empowering, and transformative when students engage in the environment, work on project-based instructional activities, and cycle through the processes of experience, reflection, conceptualization, and experimentation. Virtual worlds, they further argue, carry several other advantages over analog teaching. They teach dynamically and reflexively, as the environment responds naturally to the experiments, input, and inquiry of the student, providing personalized learning experiences that better match each individual student's needs and position; they inspire creativity and thinking about new forms of media and content; and they facilitate social connections, community building, and collaborative work. Indeed, Jarmon et al. find that virtual worlds "provide an environment supportive of learning activities such as experimentation, exploration, task selection, creation, and dynamic feedback" (p. 170). In other words, we are seeing new conceptions of how students can learn: playfully, through creative practices, in virtual environments. Here, walking simulators come to mind: they are slow-paced games focused primarily on the exploration of a virtual environment. In games-based pedagogy, there are a couple of ways to incorporate walking simulators within a classroom.

Van Eck (2006) finds that classroom engagement with games may be the best way to reconsider our pedagogical practices in light of the call for 21st century learning. He offers three general tracks that researchers have taken in regards to what he defines as the discourse of digital game-based learning: "have students build games from scratch; have educators and/or developers build educational games from scratch to

teach students; and integrate commercial off-the-shelf (COTS) games into the classroom" (Van Eck, 2006, p. 6). Van Eck and I agree that the second option is the worst one, as it generally results in uninspired games that are neither pedagogically effective nor fun.[1] He concludes that the third option is the best way to engage students: to take existing games and incorporate them into the classroom by tying them into class standards, treating them as texts, and getting students to engage with them critically. While Van Eck's call for the study of COTS games is a strong methodological approach which I also incorporate into my classroom, he dismisses the first option as being outside the scope of the students' abilities and resources. I, on the other hand, think this first approach—having students make games—need not be so quickly dismissed, as it can be much more accessible than Van Eck claims. Learning how to read games through critical lenses and talk about them in scholarly ways is a useful first step. But *applying* those lenses to the creation of one's own games and environments is a necessary next step. It challenges students to directly exercise their abilities to persuade, engage, write, and code. It is here, along with others who advocate game creation in the composition classroom (see, among others, Brown & Alexander, 2016; Colby & Colby, 2008; Cox, Purzycki, Fooksman, & Mejeur, 2017; deWinter & Vie, 2016; Robison, 2008; Salter, 2015; Sierra, 2018; Skains, Bell, & Ensslin, 2016), where I situate my work.

I argue that we can immerse students in game- and world-building assignments as a means of remixing and applying class content, practicing digital literacies, and exercising their tool belt of rhetorical possibilities as communicators. The studies for interactive stories in the composition classroom are promising; for example, in "Interactive Story Writing in the Classroom," Carbonaro et al. (2007) detail an assignment which askes students to build interactive stories in a classroom community (p. 297). The benefits, Carbonaro et al. argue, of asking students to build imaginative worlds are threefold: they improve skills in digital communication, they scaffold the logical thinking skills of programming without the stigma of computer programming, and they serve as a mechanism for creative expression (p. 286). In this blend of creativity and computing, students learn both logically and creatively. Students were able to get started quickly, as interactive fiction stories require little setup, and were soon involved in deeper activities such as complex plot work and the establishment of characters and environments written with great detail (p. 296). Carbonaro et al. report that students were highly motivated and showed excitement in the

[1] Games of this category include drill-and-kill learning practices, like solving math problems for a score. Seymour Papert (1998) calls these kinds of games "Shavian reversals—offspring that keep the bad features of each parent and lose the good ones" (p. 88). He suggests that they are created by either an educator who doesn't understand what makes games fun or a game developer who doesn't understand how students best learn. See also Hopkins and Robert (2015).

story-writing process and also formed a community of increased collaboration through sharing, demonstration of new ideas, and conversations that revolved around the critiquing and development of both literary and technological skills (p. 297). I have witnessed the same in my own classes with assignments like this. Asking students to build an interactive, virtual space instead of a traditional five-paragraph-essay opens their experience up to creative remixing; the practice of digital literacies; a greater mastery of the concepts at play that have to be coded and enacted in the digital world; and a student-centered, hands-on, experiential pedagogy.

Making Games Made Easy: Interactive Fiction

I have found that the simplest and most accessible way to get students involved in this worldbuilding process is by having them learn to create interactive fiction. Though IF games have been around for decades, they are still popular. A look at the Apple App or Google Play stores reveals dozens of IF games. Inkle Studios offers *Sorcery!* (Jackson, 2013), an IF game with over 100,000 downloads; and *80 Days* (Humfrey & Ingold, 2014), an IF game with over 50,000 downloads that was rewarded on Google Play with the "Editor's Choice" award. Both games use Inkle's Ink Script (2016), an open-source and open-licensed interactive fiction scripting language that allows anybody to download, tinker with, and produce their own games. In addition, Choice of Games LLC (2019) hosts a variety of hit games playable across app stores and online. They also offer writing tools and publishing opportunities for writers at all levels. There are IF communities that share resources; provide feedback; host stories; and run competitions, game jams, and remix events, such as the Interactive Fiction Technology Foundation (2016) and the Interactive Fiction Archive (2019). These communities can give students opportunities to take their work beyond the classroom with community collaborations, feedback, and publishing potential.

Why IF?

I turn to IF rather than other game-making applications for three reasons: the textual nature of IF makes for easier connections to the writing process in a composition classroom, the writing and coding of IF is accessible, and the genre of IF is conducive to crafting explorable worlds and digital spaces.

First, by working with virtual text, students can play with digitality, choice, and agency while continuing to gain practice with and exposure to writing. Although this approach seems new and counter-traditional, foundational aspects of writing are evoked in textual worldspaces, both passively in terms of immersion in textual environments and actively with direct consideration of textual language and composition. Writing in this genre involves work with word choice; sentence-level construction; the consideration of transitions, structure, and form; the incorporation of research and citation; and the use of the wider forms of literary and

narrative analysis that are commonly associated with scholarly approaches to genres of static text.

Second, an argument for using text is an argument for accessibility. Where 3D art, virtual games, and software use require computers with graphics cards and considerable computing power, text remains lightweight and can be run on any system. Text based games, which require only typing to write and clicking to read, can also be mediated across forms, allowing this pedagogy to be accessed by those with limited vision, hearing, or mobility. They eschew entirely the challenges related to controlling a live unit in a 3D world. In his guide to IF platform *Inform 7* (Nelson, 2015), Aaron Reed (2010) writes of the accessibility of IF, which supports a community that includes "blind fans of IF" and "gamers with disabilities who are unable to keep up with reflex-based shooters" (p. xxiii). Furthermore, creation in 3D graphical worlds takes great amounts of time, resources, technical ability, and computational power. Triple-A games require teams of artists and programmers working in concert over years, with upwards of million-dollar budgets. Even simple indie games can take months to design and execute. These are not resources that an average student has access to. A work of IF, however, can be single-authored, achieved quickly, and made without budget beyond a single, networked computer.

Finally, work with simple IF games can build skills needed to later craft full graphically-rendered games and other forms of complex, interactive media. By learning the structures of worldbuilding, developing interactive narratives, crafting choices, employing procedural rhetoric (Bogost, 2007), and storyboarding out complex, reflexive worlds, students engage in the cerebral work involved in the creation of a vast array of multimedia. IF games can serve as drafts upon which future work can be built. Reed (2010) agrees: "The speed with which game mechanics and plot events can be mocked up and iteratively improved makes IF a wonderful medium for prototyping any sort of interactive story" (p. xxiii). IF games are accessible; engaging; and scaffold traditional writing strategies, game-based pedagogies of immersion, and 21st century digital literacies.

What it Looks Like

Coding narrative stories in IF is a blend between writing and programming: writers weave sentences together in code-like ways. For example, this is a block of code I wrote while teaching myself the Ink Script language:

```
[1] ===GRASS
[2] YOU ARE STANDING ON A GRASSY PLANE. A CONFIGURATION OF THREE
[3] LARGE STONES LOOMS HERE, FORMING WHAT SEEMS TO BE A DOORWAY.
[4] {RAIN: IT IS RAINING MODERATELY. THE STONES SEEM TO BE
GLOWING.}
```

> [5] YOU SEE A CLIFF FAR TO THE NORTH, AND HEAR FROM THERE A ROARING WATERFALL.
> [6] A PATH WINDS ITS WAY WEST AND DISAPPEARS INTO A GROWTH OF TREES.
> [7] TO THE EAST, YOU SEE A LARGE LAKE.
> [8] +[GO NORTH TOWARDS CLIFF] YOU BEGIN HIKING NORTH TOWARDS THE
> [9] CLIFF. -> CLIFF
> [10] +[GO WEST TOWARDS TREES] YOU FOLLOW THE PATH WEST UNTIL YOU
> [11] FIND YOURSELF SURROUNDED BY TREES. -> TREES
> [12] +[GO EAST TOWARDS LAKE] YOU HEAD DOWN TOWARDS THE LAKE. ->
> [13] LAKE
> [14] +[EXAMINE STONES] YOU APPROACH THE STONE STRUCTURE. ->
> STONE

This demonstrates the blending between coding mechanics and writing: the whole snippet is ordered like a paragraph, with a header, orienting language, and then language devoted to concrete actions and transitions. And yet the text here is also alive, structured in a way that positions the reader/player locationally inside a world. In that world, the player can navigate in multiple directions and examine elements in any order, within an environment that grows and changes around them. In this writing/coding space, students learn how to work in digital environments, learn structures of coding that will help them with other programming languages, and practice various forms of reading and writing strategies. Brendan Desilets (2016) details how the creation of an IF game involves the elements of composition we drill into our students in every writing class: those who write IF must begin by drafting out the world, "creating source text and testing the source text by trying to compile it" (p. 131). Students then engage in thorough peer revision, which involves playtesting and editing the coding layer, the spelling and grammar layer, and higher level critical and rhetorical layers. Finally, students enter the publishing stage, which, in the case of IF, can involve a host of multimodal writing tasks and genres, such as cover art, an instruction manual, a website about the game and story, and a walkthrough (Desilets, 2016, p. 137). As students practice and enact these writing strategies, they create work which can grow beyond the classroom to become real-world projects. Students can work to expand their IFs with more advanced programming, incorporate graphics, and even attempt to sell the game on an app store.

I have incorporated this genre into technical communication classes, multimedia classes, and first year writing classes. Some of the student work I have received includes a game about zombie invasions as a critique on cell phone overuse, a game where you play as a salesperson and enact different rhetorical strategies to maximize sales, a quiz about class concepts turned into a temple survival experience, as well as dozens of games related to bringing interactivity and life to students' term papers and researched arguments. In class reflections, students

reported falling in love with new rhetorical possibilities that they never knew they had access to.

The Problem: IF as Branching, Rather Than Worldbuilding

Unfortunately, I have found that when students first create IF, they often model their games after Choose Your Own Adventure (Chooseco LLC, 2019) stories. These games tend to have a single and static narrative that unfurls as players make the "correct" choices—that is, the choices that propel the primary narrative. "Incorrect" choices often result in quick and unsatisfying endings. This is a consequence of the structure of this kind of story: when every choice demands a new branch that has to be written, most of the effort goes towards a primary story. Another consequence of this style of IF design is that on a single playthrough, much of the student's work is missed and whole branches of story are never seen.

To counter these limitations, I encourage students to think of their IF not as a branching story, but as a virtual world they are building. If IF is constructed spatially—with rooms, characters, and objects—a player's interaction and exploration of the narrative becomes more dynamic. Games built in this way get to show more of the effort that goes into them. They are designed so that players are led through all parts of this created space through puzzles and exploration.

Interacting with good models of this kind of design work helps students wrap their minds around this approach. Walking simulator games are exactly the kinds of models that can be used in the classroom to demonstrate effective IF design. Due to their focus on the environment, and because they do not rely on driving action, the draw of walking simulators is in their detailed writing and engaging worldbuilding. This is why walking simulator games can be particularly strong models for the kinds of games that students could make in a writing class.

The Potential of the Walking Simulator

When considering the array of rhetorical and literary possibilities within a game, walking simulators may serve as the best genre for this kind of analysis. Walking simulators are defined by the primary goal of the game: to explore a world, and through the exploration, let the narrative unfold. They are useful games for literary analysis because they often eschew the elements of traditional gaming, such as lives, scores, or the demand of twitch-based reflexes, all of which can detract from the narrative complexity of a game. For example, consider Kirk Hamilton's (2013) review of *Bioshock Infinite* (Irrational Games, 2013) in *Kotaku*: he argues that the game, during its intro and before any combat, is brilliant. But when the overly violent and twitch-based action of the game kicks in, it loses much of its narrative value (Hamilton, 2013). Because walking simulators do not incorporate violent action, they can unfurl at a much slower pace, thereby allowing them to focus more on space, modes of narrative delivery, and the player's role in unpacking

the narrative. In "Beyond Walking Simulators," Koenitz (2017) suggests that this genre is "especially promising" as a narrative medium, where the slow pacing demands more focus on "new kinds of narrative experience" (p. 2). Melissa Kagen (2017) explores walking simulators as a style of game that is in many ways antithetical to traditional games. She characterizes the walking simulator as anti-normative, in contrast to the "hypermasculine" twitch-oriented action genre that characterizes many mainstream games (para. 3). With their focus on spatial storytelling and exploration in a narratively rich environment, walking simulators are coded as feminine and non-traditional; there are no points to earn, no enemies to vanquish, and no skills to master. As a teacher working with games in the classroom, I find this genre leads to more thoughtful and complex games-based work.

As a result of their increased literary possibilities, many walking simulators have been the subject of thorough academic rhetorical analysis which can be used in classrooms as models for literary criticism. For example, Kagen's (2017) argument about walking simulators as anti-normative serves as a useful lens to unpack how *Firewatch* (Campo Santo, 2016) subverts traditional gender norms. As another example, Bradley Fest (2016) explores *The Stanley Parable* (Galactic Cafe, 2013) as a game that brings the concept of self-reflexive metafiction to a digital and procedural space, thereby "rais[ing] important questions about the end of postmodernism, its legacies, and the digital realities of the twenty-first century" (p. 2). Both of these articles use critical frameworks—with a gender-theory and postmodern lens, respectively—to engage in deep literary analysis. By sharing these kinds of articles with students, a writing teacher can demonstrate both that game criticism can employ the rhetorical moves found in traditionally-studied and celebrated literature, and that games can be read and responded to just like traditional literary texts. By learning to talk about these kinds of literary moves, and then later actually enacting the moves themselves, students will develop higher order writing strategies and hone their critical lenses. This is the kind of literary work that would be easy to incorporate into any set of class standards in a literature or composition class. In addition, they can develop digital and coding literacies, practice procedural rhetoric (Bogost, 2007), and engage both as reader/player and writer/maker with the pedagogies of learning in digital environments explored in the first half of this article.

Playing, Writing, and then Making

With its slow pacing, emphasis on exploration and narrative, avoidance of the need for twitch-based reflexes, and tendency to engage with more literary devices such as meta-awareness and genre subversion, the walking simulator is an effective model for thoughtful, engaging, and spatial IF games. A composition class devoted to reading and writing this genre might be scaffolded to have students first play these kinds of games, then practice writing about and analyzing them, and then

employ the rhetorical devices they have learned to analyze in the creation of their own games. Such a curriculum might look like this:

Weeks 1 and 2: Learning to Play and Think About Games

Sample Games:

What Remains of Edith Finch (Giant Sparrow, 2017)*, The Stanley Parable*, *Gone Home* (The Fullbright Company, 2013), *Firewatch*

Each of these games features slow, careful pacing; interesting and engaging worlds; and creative, evocative writing. Students will be assigned the homework of putting a certain amount of time into each game. After each play session, students will write a rhetorical reflection, taking note of everything they experienced or struck them as they played, and what choices the authors of the game made in order to evoke that experience.

Weeks 3 and 4: Learning to Read and Write About Games

Sample Articles:

- De Wildt's (2014) "Precarious Play: To Be or Not to Be Stanley"
- Fest's (2016) "Metaproceduralism: The Stanley Parable and the Legacies of Postmodern Metafiction"
- Pavlounis' (2016) "Straightening Up the Archive: Queer Historiography, Queer Play, and the Archival Politics of Gone Home"
- Kagen's (2018) "Walking, Talking and Playing with Masculinities in *Firewatch*"

In addition to continual play and reflection, students will begin to read and discuss articles that analyze games. The articles listed here are examples of scholarly approaches to reading walking simulator games. De Wildt's (2014) article uses *The Stanley Parable* to complicate the role of choice and agency in a game. Fest's (2016) "Metaproceduralism," as previously discussed, examines *The Stanley Parable* with a postmodern lens. Pavlounis' (2016) article critiques *Gone Home* through the lenses of queer theory, historiography, and game studies. Finally, Kagen's (2018) piece on *Firewatch*, again referenced earlier, offers a reading of the game across feminine and hypermasculine discourses. All of these articles show how academic critique can be used on and in conjunction with games to forward arguments and analyses.

In these weeks, students will read, discuss, and reflect on these articles. Students will then expand their reflections into an extended rhetorical analysis essay on one of the games.

Weeks 5 and 6: Learning to Write and Code Games

Students will workshop, play with, and begin developing games within an interactive fiction platform. As they develop fluency with the platform, students will try to reproduce the rhetorical and literary moves that they have learned to parse out in the games they have played. Ask students to think about how games can create engaging spaces to explore, slowly unfurl narratives, subvert or play with conventions or expectations, and make statements or arguments. An interesting culminating project might be a "Gameful Argument," where students can attempt to convince readers/players of certain ideas through gameful engagement in virtual worlds. As students labor to convince their readers of their argument by bringing it and its consequences to life, rather than simply stating it outright, students will develop skills related to nuance and creativity. The project might be submitted along with a paper which situates the context of the argument, explains the author's choices in the creation of the game, and explores the project's underlying research.

Platforms

There are several free, powerful IF development programs which are available on multiple platforms. Programs such as Twine, Ink, and Squiffy let students create interactive texts that can function as living, breathing, dynamic, textual worlds:

- **Twine** (Klimas, 2018): The popular platform Twine creates choice-based IF with a graphical representation of each room laid out in a map that overviews the developing story. Twine offers a low floor and a high ceiling; Twine games can grow from simple text adventures to incorporate CSS formatting and multimodal, HTML inserts.[2]
- **Ink** (2016): Ink is the engine behind several popular games currently on the App store such as *Sorcery!* and *80 Days*, as referenced earlier. The focus of Ink is to create a flowing narrative that moves across branches according to player choice, but ultimately drives forward, down the page. This allows authors to offer player choices and easily create dialogue, with back and forth communication, without having to worry about dead ends.[3]
- **Squiffy** (2019) and **Quest** (2019): These sibling programs represent the two major genres of IF; the former functions like Twine or Ink, creating choice-based narratives.[4] The latter creates prompt-based IF games in the vein of Zork (Anderson,

[2] Twine: http://twinery.org/
[3] Ink: https://www.inklestudios.com/ink/
[4] Squiffy: http://textadventures.co.uk/squiffy

> Blank, Daniels, & Lebling, 1977), where players type out their commands as they explore the world.[5]

In my classrooms, I adopt an approach that values self-driven learning as the core pedagogy of the class. I give my students links to tutorials and other resources, I show them models and examples, and I workshop the process both as a class demo and in peer-assisted tinkering in groups. I make clear to my students that their games will not really start coming together until they begin to try things out for themselves, see what works, and learn to fix what does not.

I start my class off with interactive fiction by asking them to play an IF game. Often, I make the game myself; I pull together something simple that showcases the basics of textual worldbuilding. I will build, for example, a simple, white room, and have players look for a key (perhaps hidden under the bed) to unlock the door and escape. Such a simple game allows for basic code and establishes a few aspects right from the start: students can begin to think about how to use the platform to build a space which can be navigated, explored, and interacted with. Then, after they play the game, I share my screen onto the projector, open the platform, and write the same code out in front of them, explaining how to make rooms, descriptions, pathways, and variables. Then I break the class up into groups and ask each group to work together to build a similar type of game, a simple space that can be explored and solved. I move around the classroom as they play with the platform, answering questions and helping to debug.

As I have said, the real progress will not happen until students get home with it, read through the tutorial,[6] and take their time with figuring things out. I have seen students completely overwhelmed on Monday then able to present complex and engaging games in class on Friday. I make sure to demo these games, showing the class what some of their peers have produced, and invite the students to talk through how they made the games work. After routine modelling, workshopping, and time, students grow comfortable enough with the program to start creating IF games for assignments and class projects. The projects they create can later grow, become more complex with deeper programming, and serve as storyboards or components of multimedia projects.

21st Century Teaching, 21st Century Writing

To build a reflexive, interactive world out of a text, argument, or assignment is to practice creative thinking, develop a spectrum of digital and analog writing strategies, code structure literacy, and build narrative and ludological awareness. To play, discuss, read about, analyze, and re/create walking simulators is to deeply consider the possibilities of game design, interactive narrative, virtuality, and

[5] Quest: http://textadventures.co.uk/quest
[6] The tutorial I like to use for Ink can be found here: https://www.inklestudios.com/ink/web-tutorial/

storytelling in digital environments. It requires passion and engagement; students must research and master their content if they are going to persuasively go beyond writing to build an explorable and reflexive space/world around it. This is the kind of flexible, innovative, and digital work and thinking called for by the NCTE Executive Committee (2008), Cushman et al. (2005), Jarmon et al. (2009), and Van Eck (2006). When informed and guided by the structures of walking simulators, this approach answers the call for the teaching of writing spaces in the classroom with the creation of actual, virtual spaces. These are spaces in which writing, worldbuilding, and coding blend together and in which reading, writing, play, and collaboration are invoked for students as both readers/players and writers. The work within these spaces can serve as digital arguments, remixes of texts, components of multimodal approaches in the classroom, and publishable or even potentially sellable projects. It is work that views writing as playful, growing, and multimodal, and approaches learning through making in projects that can span across genres.

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