



[Interactive Fiction in the Humanities Classroom: How to Create Interactive Text Games Using Twine \(/en/lessons/interactive-text-games-using-twine\)](#)

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This lesson provides strategies for incorporating game creation into the classroom. The first half of the lesson discusses the challenges and benefits of teaching game creation while the second half includes a technical tutorial for Twine, an open source game creation tool.

 Peer-reviewed (<https://github.com/programminghistorian/ph-submissions/issues/348>).

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Introduction

Playing and making games in the classroom, offers us a powerful opportunity to critique cultural narratives and create new narratives of our own. Games are an increasingly important part of our cultural landscape. In 2020, the global gaming industry generated an estimated income of over 77 billion dollars. [The Entertainment Software Association \(https://perma.cc/J8VP-GYSQ\)](https://perma.cc/J8VP-GYSQ) estimates that approximately 65% of American adults play some form of video-game.

Increasingly, students and the general public are engaging with history, politics, and

social issues through games. For example, 2020's bestselling *Red Dead Redemption II* (<https://perma.cc/8DMH-GMJW>) (over 22 million copies sold) is set in the U.S. in 1899 and alludes to the American Civil War, industrialization, and the forced relocation of Indigenous peoples. As Krijn Boom, et al. note, game companies are "keen to make use of a variety of historical pasts as this provides them with recognizable themes, settings or narrative frameworks."¹ However, games do not always represent the past (or the present) in an accurate or thoughtful ways.

This lesson starts with a brief overview of games and game studies, then moves into practical suggestions for incorporating text-based games in the classroom. I then provide a technical tutorial for making a text-based game using the open source game creation platform *Twine* (<https://perma.cc/2F7N-X2Y4>). *Twine* offers an accessible way for students and scholars to make text-based games. As part of the technical tutorial, you will learn how to create a text-based game with six sections. You will learn how to incorporate choices, code (macros), and styling into your game. The lesson ends with sample *Twine* assignments and additional resources. The lesson assumes no prior knowledge of games/gaming and no prior technical skills.

In this lesson you will learn:

1. Basic strategies for incorporating games into teaching and research
2. How to create a simple text-based game using the free, open source platform *Twine*
3. How to add complexity to a *Twine* game using code (macros) and CSS styling

Required Materials

To follow along with this lesson, you will need a computer with an internet connection to access *Twine*. *Twine* can be downloaded and run on your desktop, but it can also be run directly in the browser. I use *Twine* version 2.3.12 (the current version of *Twine* available in the browser as of 2/11/21). I provide instructions for using *Twine* directly in the browser. The advantage of using *Twine* directly in the browser is accessibility. The disadvantage is that you will need to download and save your game to your desktop, then upload it to the browser again each time you begin a new working session. This is because the browser-based version of *Twine* only stores your game in the browser's cache. I discuss the steps for saving your game in more detail in the section titled "Saving Your Game".

When using *Twine* in the browser, you may want to avoid certain versions (<https://perma.cc/84XY-9MR6>) of Internet Explorer and Safari. My students have reported issues saving their games in both Internet Explorer and Safari. Chrome, Firefox, and Opera are fully supported.

One potentially confusing aspect of *Twine* is that the platform allows you to work with several story formats (<https://perma.cc/P973-K4LW>), or visual layouts. The syntax for each story format works a little differently. The examples I use are written for the default format, *Harlowe 3.2* (<https://perma.cc/QM7M-KBEM>). To follow along

with this lesson, you will not have to modify the story format. When looking for answers to your Twine questions on the web, make sure you include the story format in your query: e.g., “how to change background color in Twine Harlowe 3.2”.

To teach Twine in the classroom, your students will also need access to computers with internet connections. It is possible to use Twine on a mobile device, but the interface is challenging. I have taught Twine in classes where not all of my students had access to computers by having 2-4 students share a computer and create a game as a group.

Why Games?

The academic study of video-games has existed since the 1980s, with scholars from multiple disciplines, including English, History, Psychology, and Education, analyzing games as cultural artifacts. Humanities scholars draw on a number of tools and lenses to study games, borrowing from film studies, feminist analysis, queer theory, and digital rhetoric. In recent years, the field of Game Studies has gained traction as the video-game industry has grown. Mainstream and independent games often deal directly with literary source material (*Walden* (<https://perma.cc/AG3P-AESB>)), historical settings (*Assassin's Creed* (<https://perma.cc/DE9J-VPMN>)) or socio-political issues (*Papers Please* (<https://perma.cc/77BY-YCAG>)). For examples of game scholarship from multiple fields, see the journal *Game Studies* (<https://perma.cc/7RW3-Q6U8>).

Creating Games

In addition to writing about games, humanities scholars are increasingly making games as a form of scholarship. Though every medium comes with advantages and disadvantages, games are particularly suited for:

- Creating accessible, wide reaching public humanities scholarship
- Facilitating communal play and communal learning
- Modeling complex systems, or the relationship between options and outcomes

For example, Wendi Sierra's NEH funded collaborative project *A Strong Fire* (<https://perma.cc/W6SA-QFAM>) uses narrative and vocabulary games to educate players about Oneida (<https://perma.cc/DWX8-RCT5>) language and cultural values. The game is a collaboration between scholars in English and Game Studies, as well as artists, musicians, and tribal members. *A Strong Fire* is geared toward elementary-aged children and their parents and is intended to foster intergenerational and communal play. *A Strong Fire* demonstrates the way that games as a medium can offer scholars the opportunity to create an accessible and wide-reaching public platform that fills gaps in the cultural record.

Scholars are also using games to make rhetorical arguments. As Stephen Ramsay and James Coltraine note, “games are defined by formal or informal rules, and these rules can be adapted to reflect similarly structured humanistic arguments.”²

Sometimes these humanistic arguments are historical; William Urrichio notes that, “we might think of the rule systems that characterize various brands of history as constituting the potential rule systems for game play” (336).³ A game’s argument may be intended to spark social change; Cait Kirby’s Twine game *September 7th, 2020* (<https://perma.cc/GP6X-RARD>) allows the player to experience the first day of returning to in-person classes during the 2020 coronavirus pandemic from multiple perspectives, including an immuno-compromised college sophomore and an assistant professor. Players are confronted with complex choices that often result in equally negative outcomes, such as “Do you motion for the student to put their mask on or pull your own mask tighter?” *September 7th, 2020* argues that the decisions made by university administrators have resulted in unfair choices for students, faculty, and staff. This argument has been successfully made in many different mediums. However, putting the player in the position of making these choices lends an emotional immediacy to the appeal.⁴

Teaching Games

Perhaps because of an increase in games as scholarship, games have also enjoyed increased usage in the classroom. While some instructors use games as educational tools (e.g., to teach vocabulary) others use games as texts, asking students to analyze the rhetorical messages embedded in commercial games. There are several advantages of coupling game analysis with game creation:

- Asking students to create cultural artifacts encourages them to think critically about the design choices that inform the popular media they consume
- When students are tasked with creating a game, they must think carefully about audience and rhetorical choice
- Encouraging students to create games can be empowering. Popular games are filled with historical misconceptions, poor representation, and repetitive narratives. By creating their own games students can begin to imagine and execute the types of change they would like to see in popular media
- As a secondary benefit, game creation can be a good way to expose students to computational skills and careers that they may have otherwise thought were out of reach

One of the greatest challenges of teaching games as texts, is the accessibility of games and gaming systems. Text-based games, or interactive fiction (<https://perma.cc/PH2H-ZEJV>), are a relatively accessible medium to work with. There are multiple platforms (<https://perma.cc/VT39-ASY>) for creating interactive fiction.⁵ These games can be played directly in the browser and are often free to play. While text-based games and interactive fiction enjoyed mainstream success in the 1970s-80s, Twine games have enjoyed recent popularity among independent creators, queer developers, and activists. Most interactive fiction games do not require speed, dexterity, or previously learned gaming “skills.” This is significant, since many students (especially women) may not identify as gamers.⁶

It is also important to take accessibility and confidence levels into account when

teaching game creation. According to the [Computer Science Teacher's Association](https://perma.cc/9V55-7F63) (<https://perma.cc/9V55-7F63>), women and students of color are less likely to have received computer science training in middle school or high school. This, combined with harmful cultural stereotypes, can result in low programming confidence levels. As a platform, Twine has several advantages: scholars and students with no programming experience can create their first Twine game within minutes of opening the platform. As Janet Davis notes, instructors can encourage women and minority students to engage with computer-science-related skills by portraying computing as “a tool for solving problems that matter.”⁷ The popularization of accessible platforms like Twine has resulted in independent games that reflect perspectives often ignored by the mainstream industry. LGBTQ+ creators (including Porpentine (<https://perma.cc/4HNJ-GDST>) and Anna Anthropy (<https://perma.cc/9JT2-9NXJ>)) have been a key part of this movement. In “[Rise of the Videogame Zinesters](https://perma.cc/R2K8-V94T),” (<https://perma.cc/R2K8-V94T>) Anna Anthropy argues that Twine and similar platforms have decentralized creative power. Twine allows students to use programming to create personalized stories and develop meaningful arguments.

Scaffolding Game Creation

It is important to [scaffold](https://perma.cc/5EAD-7R6D) (<https://perma.cc/5EAD-7R6D>) game creation in order to create as even a playing field as possible for students, who will come into the classroom with radically different experiences with and expectations about playing games, and with varying levels of digital literacy. Collectively playing a game, analyzing a game, and discussing cultural and historical context is a good way to scaffold game creation.

Myth Busting

An important first step in creating a meaningful and inclusive environment for game creation is addressing common misconceptions. Students often start my classes believing that:

- Games are purely for entertainment and are ideologically “neutral”
- Certain types of games are more legitimate than others
- Only certain types of people play games (students may feel that the games they play, such as mobile games, do not qualify as “real” games)
- That games easily create social change by automatically sparking empathy

Playing and analyzing a game is a helpful way to challenge these assumptions. Games with strong rhetorical arguments are a good place to start. I begin many of my game units with Zoe Quinn’s Twine game *Depression Quest* (<http://www.depressionquest.com/>), in which you play as someone living with depression.

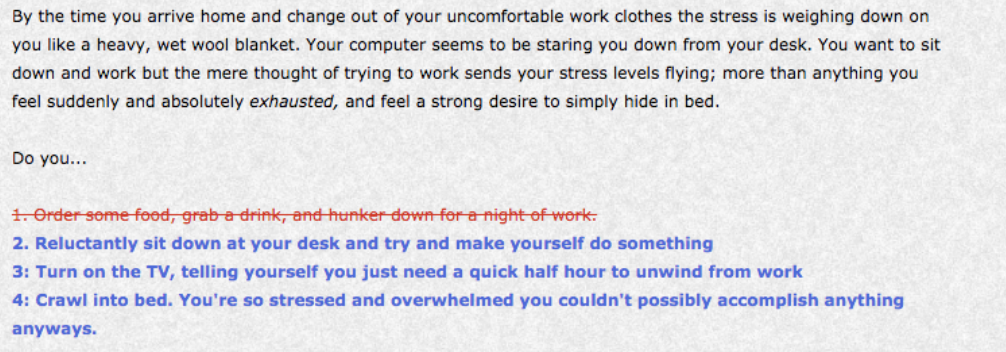


Figure 1. Example from *Depression Quest*

The game aims to help people understand the depths of mental illness. While the game treats depression respectfully, students should be provided with a [content warning](https://perma.cc/AJ8R-Y8PD) (<https://perma.cc/AJ8R-Y8PD>). Students often react to this game by noting that: they did not realize games could be about serious topics, they did not realize a game could make an argument, and they did not realize a game could be a story.

Analyzing a Game

I find it helpful to lead in-class game analysis with a series of questions that draw attention to the rhetorical nature of games:

- What is the game's argument?
- What design decisions (at the level of both narrative and mechanics) contribute to this argument?
- Who is the intended audience? What design decisions were made to engage this audience?
- What is the relationship between you, the player, and the [player character](https://perma.cc/N34M-H82A) (<https://perma.cc/N34M-H82A>) (the character controlled by the player)?

For example, in *Depression Quest*, the player character's mother pressures the player character to stop "sitting around feeling sad." The game's [mechanics](https://perma.cc/FVS6-TWLD) (<https://perma.cc/FVS6-TWLD>), or the rules that govern gameplay, push against this attitude—the player is presented with seemingly positive options (as is shown in Figure 1.) some of which they cannot choose. The story and mechanics work together to argue against the harmful misconception that those suffering from depression can simply choose to stop feeling sad. This suggests that the game is geared towards players who might be in support roles for a friend or family member living with depression. It is also important to question the degree to which the game creates empathy: by playing *Depression Quest*, does the player know what it is like to live with depression? While the game might cause the player to feel emotion for a given character, this does not mean that the player can fully understand another positionality or that the player will act differently after playing the game. Games can emotionally move us, but they do not necessarily change our actions.

Introducing Context

It is difficult to talk about games without talking about issues of representation.

While students may not be directly familiar with the ways these issues shape the gaming industry, many will be familiar with implicit arguments and stereotypes: “women don’t play real games,” “the hero is usually a white guy.”

The specific pieces of cultural and historical context you might use to frame this discussion depend on the nature of the class and the games you are playing/making. I often teach games in Women and Gender Studies classes. I find it helpful to discuss the “Gamergate” (<https://perma.cc/NLK5-VKVT>) controversy of 2014, an online harassment campaign directed against women in the gaming industry (Zoe Quinn, the creator of *Depression Quest*, was the initial target). Gamergate is primarily useful for discussing the biases that pervade the gaming industry, however, it can also facilitate a conversation about the potential repercussions of publishing games. I never require my students to distribute or host their games publicly. I also do not require them to share their games with classmates (although I encourage them to do so). Instructors should consider the potential consequences of asking students to share their games, especially given the internet backlash against women, queer folks, and people of color.

I also find it useful to raise questions about how games are made. Since Gamergate, studios have received increased pushback for a lack of diversity in representation. In some cases, this has resulted in more diverse representation but not better representation. For example, *Red Dead Redemption II* faced criticism for its depiction of Charles, a Black and indigenous character. Part of the critique stemmed from the fact that a non-indigenous, non-black actor was cast to voice Charles. This type of example raises productive questions for classroom discussion:

- Who gets to make games and why?
- What does it mean to represent the past “accurately”?
- Who gets to tell another person’s story?

Ideally, engaging these questions foregrounds several realizations about creating historical and cultural narratives:

- It is important to think critically about our own positionality and how it informs the narratives we create
- It is important to understand the ways in which narratives are partial, subjective, and constructed
- It is important to directly engage with the perspectives we are trying to represent (e.g., through community partnership)

Drawing from other forms of public, historical storytelling can also be helpful. The issues of ethics and representation raised by game creation are also raised by historical archives and [history harvests](https://perma.cc/QJM7-2T57) (<https://perma.cc/QJM7-2T57>), both of which grapple with what it means to tell other people’s stories publicly.

Drawing on theoretical approaches to game studies can also provide useful context. Feminist Game Studies and [Queer Game Studies](https://perma.cc/CYA4-KWME) (<https://perma.cc/CYA4-KWME>).