The Challenges of using Commercial-Off-the-Shelf Narrative Games in History Classrooms

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ABSTRACT

As part of an Arthur Vining Davis-funded project conducted by the MIT Education Arcade, the author designed a lesson plan for a Lynn, MA teacher's 9th grade World History class, focused on the beginning of her World War 1 unit. This plan utilized a commercial, off-the-shelf game, *The Last Express* (Mechner 1997), originally developed and published for entertainment purposes. The lesson plan was developed to test the feasibility of using story-based narrative games with historical elements as a prelude to a critical writing exercise. The test was to see how students reacted to the game, both as a gameplay exercise and as a source of content, and whether students would be able make logical connections between the game and their other non-game classwork. This paper outlines the research that went into designing this lesson plan and identifies challenges educators might face bringing these games into their classrooms.

Keywords

Secondary Education, World History, Narrative Games, Curriculum Design

INTRODUCTION

Since before the first commercially published wargames, particularly *Tactics* (Roberts 1953) and *Tactics II* (Roberts 1958), human history has been a rich vein for inspiration in entertainment game design and development, not just as depictions of past and future war (Peterson 2012), but as means to explain and play with the world around us. As a result, there exist many games in a variety of formats that feature various historical ages of human history: board games about scientific progress (*The New Science*, Knemeyer 2013), wargames about most known armed conflicts, computer games about European settlement in North America (*Sid Meier's Colonization*, Reynolds 1994), and role playing games about the trial of Galileo and other great debates and historical conflicts (Carnes 2015). As a result, commercial games have been used in history classrooms (Antley 2011, McCall 2013) with varying degrees of success.

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As part of an Arthur Vining Davis Foundation grant-funded project, the author engaged in curriculum design research to examine how educators could use already developed commercial off-the-shelf (COTS) video games in humanities classrooms, particularly literature, history, and civics classrooms in US secondary schools (Caldwell et al. n.d.). After establishing a partnership with Lynn Public Schools as a test-bed for this research, we entered into a co-design relationship with eight humanities teachers selected by their schools' administration for their interest in games. The project was to create a widespread curriculum and series of best practices for teachers interested in incorporating COTS games in their existing curriculum and by creating and testing lesson plans utilizing games in established classrooms. This paper outlines the current status of one of these tests, utilizing narrative-focused COTS games in secondary school history classes.

HISTORICAL GAMES

Based on the teachers we worked with in the second year of the project, our focus was on how to use historical games beyond the role of delivering historical content. Because of the nature of the research, we focused on digital games that are commercially available (for purchase or for free use) and that do not immediately come with designed curriculum or lesson plans. These are games that were designed solely for entertainment rather than education. Throughout the process, we thought of these games not just as tools for teachers to use to illustrate specific elements of their curriculum, but as texts that students would need to critique and interpret, as they would any other media such as books or film. As a result, we divided our list of possible games to test into two categories, simulation or narrative, based on how players interact with the game.

Historical Simulation Games

Embedded in many definitions of game, particularly for video or computer games, is the concept of simulation, in which the game models a system (either real-world or imaginary) (Bogost 2007) via its rules and mechanics (Salen and Zimmerman 2004). In historical games, there are definite real-world systems that are represented within the game and based in some sort of historical context: systems of economy, politics, representation, and others. While traditional historians might consider these simulations' focus on process rather than event 'unhistorical,' and rather the realm of anthropology or sociology (Uricchio 2005, p. 331). For the purposes of teaching history in secondary education, however, these simulations connect history to the entire realm of social studies (within which history instruction is often located).

In *Gaming the Past*, author Jermiah McCall devotes a chapter to determining what makes a 'valid' simulation game, that is, a historical game that has qualities that he deems useful in the classroom (2013). Simulation games serve as an "explanatory model — a systembased explanation for how something in the real world functions" (p. 22) and most importantly, the gameplay must have "*defensible* explanatory models of historical systems" (p. 23), that they offer explanations for "how and why historical events were caused" (p. 27). He locates the ability to perform critical analysis of the model the game is presenting within the gameplay itself, through player manipulation of variables and decision making. It is these kinds of games he specifically calls 'historical simulations.' To him, all other historical games are just games that happen to take place in a historical setting.

McCall has excellent reason for this, in that he outlines a specific mode of student interaction with these games that he feels requires this specificity. His pedagogical goals, like many others working in this space, are to help students perform as if they were

historians, using James Gee's proscription that good learning, derived from good games, is such that students' play is similar to and using the same skills as professionals' work in the field (Gee 2007). In this case, these skills include reading and interpreting texts in the ways Sam Wineburg describes professional historians' practice (2001) techniques that require more than just recalling facts but applying problem solving skills and critical thinking. McCall supposes that students are able to practice these skills through the facilitated play of historical simulation games, but what about those games that 'happen to take place in a historical setting,' can they useful for students learning to have a critical eye towards texts?

Historical Narrative Games

McCall is correct in saying that *Assassin's Creed* (Ubisoft 2007), while a historical game, is not necessarily a historical simulation. The gameplay the player engages in is within a backdrop of history, but the actions the player takes (parkour and stealth assassination) is not based in historical systems. That said, the narrative and representational systems the player engages in through their gameplay are just as valid for interpretation, critique, and analysis as any economic or political system in a historical simulation game. A cursory survey of historians' (Sawula 2016), archaeologists' (Meyers 2011), and educators' (Travis 2016) views on the *Assassin's Creed* game series hints at a ripe opportunity to understand the potential for using narrative games in history education, particularly in how history is remembered and reinterpreted for new readers.

For this project, historical narrative games consist of games whose content features rich historical context and background, and in particular presents history as dynamic and consisting of multiple perspectives, rather than static and singular in viewpoint. In form, these games can be varied, but for this project we focused on games in a form that would be easily brought into a classroom, easier even than historical simulation games. This could mean that mastery of the game is either not important to the instructional mode or that the game was easy for players to play.

Like McCall's work with historical simulation games, using historical narrative games requires the players to critique and analyze the systems of the game, but in this case it is less the systems represented in the core mechanics but rather the cultural systems and symbolism used by the game authors in representing the historical world the players play within. The role of the teacher and facilitator is just as important as well, to help the students engage with the game in a critical mode (Flanagan 2009) which can require players to play sub-optimally or against the game designer's intentions, a type of play that is common with players of simulation games but can be less so with inexperienced players of narrative games. Examples of this critical play include playing *Elder Scrolls V: Skyrim* (Bethesda Game Studios 2011) in a 'pacifist' mode, completing the game without killing any enemy within the game (Totilo 2011), or playing *Skyrim* or *Witcher III: Wild Hunt* (CD Projekt Red 2015) as an archaeologist, examining objects within the world and ascertaining their use or purpose based on known understandings of similar peoples (Archaeosoup Productions, n.d.).

CRITICAL PLAYING & CRITICAL WRITING

As of April 2016, we have run three two-day tests of a lesson plan using historical narrative games in the classroom. For this test, we worked with a social studies teacher from a school who's district was participating in our research. This teacher did not identify as a game-player, even though in interviews she did reveal she played mobile games including *Candy Crush*, but she worked with a student population who did identify as video game enthusiasts. For the class population we worked with, three sections of the ninth-grade

World History course she taught, she felt that in-class game playing activities would be interesting to run, both because she was interested in knowing more about how games could be brought into the classroom but also in that she felt students would be more engaged than in standard classroom activities.

As part of the greater project, we identified the skills of critical thinking and critical writing, contained within the Common Core State Standards (National Governors Association Center for Best Practices 2010), as our learning goals for this exercise. Rather than using a game to deliver specific content about the subject matter, the game would be a tool to help students in their writing about content from prior lessons. The school the teacher worked within is a vocational school in her district; her class was required for students' progression through high school but as it was not a technical or vocational class, the students did not see it as a priority for their education. It was hoped that the game would provide engagement for the students and material to inspire them in their writing, beyond the usual document-based question material using primary sources they were already using.

Playing Games in the Classroom

We decided for this classroom to select a game that was relatively simple to control, would be playable in pairs, and that would provide a historical context that was rich in worldbuilding techniques (Wolf 2016). This latter requirement was part of a hypothesis that even when designing a fiction that takes place within the historical world, fiction writing techniques involving world-building are used to flesh out how characters interact with each other and with the systems around them. When narrative games are lauded for their atmosphere, it often has to do with how well-constructed (and how visible) is the world within which the game operates.

Pair playing was chosen as a means to better understand what the players were thinking about the game and their own gameplay while they played. Because they were playing together, they by necessity had to talk to each other about the decisions they were making, and would be more inclined to ask questions of the facilitator during their play or share their play with other students.

Technical Feasibility

In the early stage of research that we are currently in, we focused our first classroom test on technical feasibility. We had an understanding about the learning challenge we faced with using narrative games, but as this research project has a focus on creating new lesson plans and curriculum for teachers, we knew we needed to address the technical limitations of using these games in classroom environments.

The game that was used in the test was primarily chosen based on the available technology the teacher had, and was secondarily chosen based on the time the test would be run. The teacher specified she wanted to use the iPad cart that was available in her school as it would be the easiest technology she would be able to provide the students. This is a mobile cart that required a school technician to install software to, but once installed could be transported to any classroom on campus and locked within. Because we were running the test within the last quarter of the year, we chose a game which fit the classes content: European imperialism, colonialism, and World War 1. Based on these two constraints, we selected *The Last Express*, designed by Jordon Mechner and originally published in 1997, but recently ported to the iOS platform in 2013. The game takes place on the Orient Express during its travel from Paris to Constantinople within days of the assassination of Archduke

Franz Ferdinand in 1914. The students had just been introduced to this event in the days leading up to our classroom test.

The game itself can be played from beginning to end in a short timeframe, but not without failing at getting to the 'good' ending for the first several hours of play. The game has both the advantage and disadvantage of having multiple endings; players could finish the game within a class period or two, but this ending would likely be the result of their character's demise. For our test, we had two class periods of 40 minutes each, which severely limited how the game could be used in the classroom. Had we been using a desktop computer version of the game (for Mac OS X or Windows) we could have pre-loaded the game with save points, allowing us to control what part of the game players could play. Without this ability, which while technically possible was not logistically feasible as it requires bypassing the iPad's file system, our players were required to start the game from the very beginning. Through logging who used which iPad and using the game's built-in multiple save file ability, however, we were able to have each player use the same iPad on the second day of the test, so they could at least play for longer than a single class period and feel like they made some progress.

Our class sizes were larger than the number of iPads we had available at one time, but we had already decided to pair students up in their gameplay rather than play individually. The game relies on audio for much of its play, it has subtitles for foreign languages in use during the game but not in English, so we needed to provide splitters for the students to use should they desired to use headphones. Some students played with headphones and some did not. This also had its advantages and disadvantages; without headphones they could talk to each other, but the classroom was also so loud that it was difficult for them to understand the speech.

Gameplay Assignment

For this lesson plan, students were told that they would be playing a historical fiction game as part of a test for researchers from MIT. For the first class session, they were told that the game was related to what they've been learning in class, but nothing more beyond this. A facilitator, not their teacher but a researcher involved in the project, demonstrated the game on the classroom projector and instructed students in the basic controls of the game. As The Last Express is a style of point-and-click adventure game, this consisted of demonstrating how to move between rooms and halls on the train, how to talk to other characters, and how to pick up and examine objects. The students were then instructed to not play this game like they would any other game: rather than playing the game for completion, they were told to play the game as if they were detectives. The game places the player in an unknown situation and with a blank slate of a player character, not quite amnesiac, but the player character doesn't immediately know anyone on the train. The students were told that a murder would happen within the game and that as good detectives. they should be sure to have as many conversations with the people on the train as they could. They given a handout with headings including "The Player's Character," "Setting," "Non-Player Characters," and "Objects" to support this evidence gathering.

After this introduction, the students divided into pairs with an iPad each and played through the game for thirty minutes of class-time. The facilitator walked between the students observing their play and answering their questions while two stationary observers took notes about the students' gameplay and what they said while they played. After this session there was a quick debriefing where the facilitator asked the students about what they've seen, who they've talked to, and what they think is going on in the world around the game. In the second day of testing, the students immediately sat next to their teammates to play the game. At the start of class, the facilitator gave out the second assignment for the game, a short one- to three-paragraph narrative essay. Students were asked to select one of three available topics and to use the game and their notes to answer the topics. They were also given additional internet resources they could use, including recorded gameplay videos hosted on YouTube and the game's entry in Wikipedia. The topics the students were given were to create their own imagined account of the characters and setting of the game, based on their current understanding of the world as described in their coursework, and how the world was portrayed in the game. This included comparing and contrasting the game's world to the 'real world,' thinking about the daily life of one of the characters before they boarded the train, or imagining a wholly new character who might be a part of the plot on the train.

EARLY RESULTS

As of time of this paper, we do not yet have the writing results of the students. Rather than that, we do have observation notes about how the students played the game in class and how they talked about the game while they played and during the debrief sessions.

Our main findings from this test were in challenging our assumption of the ease of use of the game. As it was an older game, we knew that the students might not be immediately familiar with the style of the game, but that the learning curve would not be too high. What we did not anticipate was the difficulty in use of the time travel mechanic in the game. The Last Express is a game in which time travels at a constant rate. The non-player characters in the game have scripted movement and actions, the player needs to be in the right place at the right time to move the plot forward. Knowing this, we decided that rather than having plot completion be our goal, the students should instead work to collect conversations by recording any conversation they overhear or contribute to. Even though we created an easier activity for the students, we noticed that the students were frustrated with their inability to progress through the game. For some, this meant that plot completion was important to them despite our instructions. For others, they found that they were often unable to have or overhear meaningful conversations because the game required the plot to progress before they could happen. Students had the ability to move backward in game time to discover any conversations they might have missed, but they said that this was 'cheating' or 'unfair.' This feature is not a standard feature for many games and the students did not see it as an advantage but rather as a hinderance.

The design of the test and lesson plan was also intended to be a collaboration between researcher and teacher. Because of time and availability constraints, the teacher did not contribute to the lesson plan before the test began. Instead, the lesson was redesigned on the fly by both the teacher and researchers as each saw the frustration and confusion the students had in completing the assignments each day. The first day of the test in each classroom sitting was spent getting used to the interface of the game, for both the students and their teacher. The second day was focused on making sure the students were prepared for the writing assignment, which was given as homework. The teacher was particularly concerned about whether or not the students would understand what they were being asked to do, both in their gameplay but also in what they would be writing about. The teacher mentioned that they can get easily frustrated and decide to not complete the assignment if they felt overwhelmed. Based on this, the teacher contributed more to the end of day debriefing for the second day, specifically connecting the dots between the characters and conversations in the game to the real world events in 1914.

NEXT STEPS

For this particular research study, our next steps are to review the writing assignments the students turn in with their teacher, to better understand the differences between this assignment from the students' previous assignments. We will also be formalizing the lesson plan for future tests, with either this same game or another game, in order to then come up with best practices for bringing these kinds of games into the classroom.

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BIBLIOGRAPHY

- Antley, Jeremy. 2011. "Course Design Process: History Through Games." *Peasant Muse*. October 11. http://www.peasantmuse.com/2011/10/course-design-process-history-through.html.
- Archaeosoup Productions. n.d. *Digging the Game*. YouTube playlist.

https://www.youtube.com/playlist?list=PLV8Xi2CnRCUn5hhwAPSVsJDecM5jqY M1f

Bethesda Game Studios. 2011. Elder Scrolls V: Skyrim.

Bogost, Ian. 2007. Persuasive Games. MIT Press.

- Carnes, Mark C. 2015. "Dewey's "New Education" and an Alternative: Reacting to the Past." *The Journal of the Gilded Age and Progressive Era* 14 (04). Cambridge University Press: 583–88. doi:10.1017/S1537781415000511.
- Caldwell, Osterweil, Urbano, Tan, Eberhardt n.d. "I Just Don't Know Where to Begin" Designing to Facilitate the Educational Use of Commercial, Off-the-Shelf Videogames. In Ma, M., Oikonomou, A., & Jain, L. C. (Eds.). *Serious Games and Edutainment Applications, vol 2* (forthcoming).
- CD Projekt Red. 2015. The Witcher 3: Wild Hunt.
- Gee, J. 2007. What Video Games Have to Teach Us About Learning and Literacy (Rev. and updated ed). New York: Palgrave Macmillan.
- Flanagan, M. 2009. Critical Play: Radical Game Design. MIT Press.
- Knemeyer, Dirk. 2013. The New Science. Conquistador Games, Inc.
- McCall, Jeremiah. 2013. Gaming the Past. Routledge.
- Mechner, Jordan. 1997. The Last Express. [iOS], DotGames.
- Meyers, Katy. 2011. "Lessons From Assassins Creed for Constructing Educational Games." *Play the Past*. October 25. http://www.playthepast.org/?p=2077.
- National Governors Association Center for Best Practices, Council of Chief State School Officers. 2010. "Common Core State Standards." *Corestandards.org*.
 - http://www.corestandards.org/ELA-Literacy/RH/9-10.
- Reynolds, Brian. 1994. Sid Meier's Colonization. MicroProse.
- Roberts, Charles S. 1953. Tactics. The Avalon Company
- Roberts, Charles S. 1958. Tactics II. Avalon Hill
- Peterson, Jon. 2012. Playing at the World.
- Salen, Katie, and Eric Zimmerman. 2004. Rules of Play. MIT Press.
- Sawula, Christopher. 2016. "Assassin's Creed: Black Flag and Historical Interpretation." *Play the Past*. Accessed April 25. http://www.playthepast.org/?p=3965.
- Totilo, Stephen. 2011. "He's Level 9 in Skyrim. He Hasn't Killed Anything.," *Kotaku*. December 6. http://kotaku.com/5865615/hes-level-9-in-skyrim-he-hasnt-killed-anything

- Travis, Roger. 2016. "Assassin's Creed IV, Ubiculturality, and Stede Bonnet: an Invitation." *Play the Past*. Accessed April 25. http://www.playthepast.org/?p=4725.
 Ubisoft. 2007. Assassin's Creed.
- Uricchio, W. 2005. *Simulation, History, and Computer Games*. Handbook of computer game studies. MIT Press.
- Wineburg, Sam. 2001. *Historical Thinking and Other Unnatural Acts*. Temple University Press.

Wolf, Mark J P. 2016. Revisiting Imaginary Worlds. Routledge.