

"I Need a Green Axe": Using Video Game Knowledge in the Social Studies Classroom

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Abstract: Today's students are natives of technology more than ever before. Along with being natives of the digital world, students are also avid video game players in a way that the previous generation was avid television viewers. There is a movement in some circles within the academy to explore how video games and video game knowledge can be integrated into the schooling experience. This presentation will explore this innovative, and controversial, teaching technique and strategy. By using the examples from a variety of video games, new pedagogies for reaching these students (and a myriad of social studies principles) will be explored.

"This sort of feels like the hammer in search of a nail phenomenon – here's a cool game, let's see if we can fit it into the social studies."

"The main question I have with the proposal is the lack of examples of 'real' social studies classroom teachers using video games in their classrooms."

During the Spring 2007 semester, we taught an undergraduate methodology course in using role play, simulations and gaming in the social studies classroom where the students explored how commercially successful games could be utilized in a social studies classroom. In keeping with this theme, we explored that very notion through a proposal to the annual College and University Faculty Association (a division of the National Council on Social Studies) conference that examined how Guild Wars, one of the fastest growing massive multi-player online games could be used to teach history, geography, civics and economics. The above quotations represent some of the feedback that we received on our unsuccessful proposal.

We have chosen to begin this article as such because unfortunately there are few, if any examples of social studies teachers who have attempted to integrate commercially successful games into their classrooms. We admit that the social studies literature has many references to teachers who have used *Sim City*, *Civilization* and other simulation-style games in their classroom. However, these games are not the commercially successful games that the children today are purchasing and spending hundreds or thousands of hours playing. For example, Gentile, Lynch, Linder and Walsh (2004) found that 94% of the 600 grade eight and nine students they surveyed from four mid-Western high schools played video games for an average of nine hours each week, while Prensky (2006) estimated that the average student will have played more than 10,000 hours of video games by the time they graduate from college. The games that these students are playing include *Madden NFL*, *Kingdom of Hearts*, *Super Mario Bros.*, *Tom Clancy's Ghost Recon* and *Grand Theft Auto* (i.e., the top five selling games of 2006 – see Kirdahy, 2006); or *Mario*, *Pokémon*, *Sim*, *Final Fantasy* and *Madden NFL* (i.e., the top selling console game series of all time – see Wikipedia, 2007). In fact, the *Sim City* and *Civilization* series are not even in the top twenty selling PC games – with *Civilization III* being the twenty-third and *SimCity 3000 Unlimited* being the thirty-fifth. Considering the length of time that these games have been on the market and their perceived value by educators and parents, this lack of sales is particularly noticeable.

So where does that leave us, with children today playing a lot of video games and teachers who have little knowledge with or understanding of the games that children are actually playing. In this paper, we describe some of the efforts to bring video games, using examples such as the *Sim City* and *Civilization* series, into the classroom. As

a part of this discussion we outline some of the reasons why even these efforts have met with limited success. We also examine how teachers can use examples from commercially successful video games to address the National Council for Social Studies' (NCSS) ten curriculum standards. While we firmly believe that video game content can be effectively used in a social studies classroom, it should be noted that we are not arguing for teachers to start integrating commercially successful video games in their classroom. What we are advocating is that teachers need to have a better awareness of the content of these video games so that they are able to use them to stimulate the students existing schema to illustrate complex social studies concepts.

Why examine video games?

As an industry, video games have been able to do something that educators continue to struggle with – engage youth to complete non-mandatory tasks for long periods of time. The motivational characteristics of games are often cited as one of the reasons, even by game proponents (Dempsey, Lucassen, Gilley, & Rasmussen, 1993-1994). They argue that there are many motivational characteristics of games, such as challenge, competition, curiosity, and random features giving rise to the unexpected. For example, in a series of studies conducted by Ryan, Rigby and Przylski (2006) the authors reported that motivation in gamers was largely based on the level of autonomy the game allowed, the challenge presented by the game, and the presence felt by gamers within the game environment. Prensky (2001) argued that good games give players a feeling of control, but with a level of uncertainty. According to Gee (2003), video games motivate and engage because they provide “explicit information both on-demand and just-in-time, when the learner needs it or just at the point where the information can best be understood and used in practice” (p. 138). The best games provide feedback to the player that can motivate them by providing regular updated on their success.

The story of the game or game narrative is often associated with the role of motivation in a game. Good games and stories provoke and tease the reader/player to wonder what will happen next. A game with a good story can motivate and engage the player to want to be involved in and to affect the outcome of the story. Games also allow for real participation in the story, as the outcome is largely dependant on what the player does. Wolfe (2001) describes that games “involve the audience in a uniquely direct manner, making the *viewer* into a participant or *player*, by allowing the player to control (to some degree) a character in the game’s diegetic world” (emphasis in original, p. 93). Grodel (2003) is even more emphatic, arguing the story “is only developed by the players active participation” (p. 139).

This ability to control the game, to play it in a manner that is specific to the player’s own curiosity is consistent with what we know about constructivist learning. As Hooper and Rieber (1995) described it, a constructivist learning environment is one where the learning is active, controlled by the student, builds upon prior knowledge, and is grounded in meaningful contexts. While this describes the very nature of most commercially successful video games, video games designers have been able to extend this to allow players to actually designs aspects of the game as well. Prensky (2006) describes that games such as *Age of Empires* and *The Sims* have build in features that allow for players to modify, or “mod”, the game’s characters, environment and even the game play. Gee (2005) describes modding as ranging “from building new skate parks in *Tony Hawk* or new scenarios in *Age of Mythology* to building whole new games” (p. 53). Essentially, these features allow players to become game designers and further enhance the constructivist nature of this medium.

The active and controllable aspects of video games are typically based upon problems in the game that need to be solved by the player. Prensky (2001) described these problems as the “conflict, competition, challenge, and opposition” (p. 05-14). In order to play the game, essentially the player must face conflict, compete, overcome challenge, and face opposition from other players and non-player characters (i.e., computer controlled characters) in order to solve a problem to win the game. Gee (2003) outlined thirty-six learning principles embedded in video games, one of which was the multiple routes principle. This principle was based upon the fact that video games provide “multiple ways to make progress or move ahead [which] allow learners to make choices, rely on their own strengths and styles of learning and problem solving while also exploring alternative styles” (p. 108). Video games allow players to explore solving problems in many ways until they find one that is suitable to their own preferences that also allow them to be successful. This is consistent with research described by Elman (1991), who stated that learners who are free to explore in hands on environment often learn creative ways to solve complex problems. These are some of the ways in which designers have embedded learning principles into video games and are able to captivate youth for hours upon end.

The past of video games and social studies

Buckingham (2003) argued that “schools need to make much stronger attempts to address and build connections with young people’s media cultures” (p. 313). When it comes to video games schools have not totally ignored this growing medium. Many teachers have experimented with simulation-style games, such as *Oregon Trail*, the Tycoon series, a variety of simulations by Tom Synder, and, more recently, *Making History*. Berson (1996) noted simulations “allow students to engage in activities that would otherwise be too expensive, dangerous, or impractical to conduct in the classroom” and simulations also “facilitate the development of students’ problem solving skills and place students in the role of decision makers” (p. 490). Two of the more common of these simulation-style games that have found their way into the classroom have been *Sim City* and *Civilization*.

The *Sim City* series are video games where the player is essentially an urban developer. Starr (1994) described the *Sim City* series as a game without a specific goal or objective, which allowed “the player [to] decide what kind of city to build – whether to emphasize its size, wealth, beauty or harmony with the environment” (p. 23). Basically, the player is tasked with creating, building, and managing a city – with everything that entails, from decisions about commercial, industrial, or residential land use to the number of and location of public services and utilities to the tax rate citizens are charged to the potential for natural disasters such as fire, flood, hurricanes, etc. to the satisfaction of their populace. They are responsible for ensuring the growth of their city and the well being of their citizens. While the natural ties of simulation-style games like this one make it popular with classroom teachers, there is little evidence of their effectiveness as classroom tools. For example, in discussing the use of *Sim City* with a seventh grade social studies class Teague and Teague (1995) concluded that students were “able to identify with and related to [these] projects that [had] a significant bearing on their everyday lives” and that students seemed “to be motivated by ‘gaming’” (p. 32) – but they failed to consider how that sense of realism or increased motivation (if it did in fact exist, as no measurement was ever taken) affected the learning of these students.

Alternatively, Carr (2007) described the *Civilization* series as a strategy where a gamer “establishes a settlement that with luck, skill, diplomacy, mercantile savvy, technical attainment and military guile will expand to thrive for six thousand years – or for as long as acquisitive, game-generated, neighboring nations can be bribed, befriended or outgunned” (p. 2). *Civilization* includes hundreds of game concepts, from the invention of writing to the concept to the workings of democracy. According to Squire (2004), it also allows players to have the opportunity “to explore relationships among geography and politics, economics and history, or politics and economics – interdependencies that can be difficult to discern through more conventional means” (p. 22) However, Squire (2002) has concluded that after more than a decade of these kinds of video games in the classroom “little is known about what players are learning through playing [games like *Sim City* and *Civilization*]” (Rethinking the role of Educational and Social Science Research in Digital Gaming, 4).

Another, more recent example is McDivitt (2006), who used the World War II game *Making History* with 64 sophomores. He also taught another group of students as a control using standard history textbooks, conventional lectures as assignments. He reported that students who were taught using the video game “scored as well or better on every single question.... [and] were noticeably better at identifying the geography of Europe, explaining the significance of the 1938 Munich Conference, and listing the reasons for the start of the war” (p. 15). There are many in the field of instructional technology who have questioned comparative research, such as the kind being presented by McDivitt, stressing that the inability to control variables such as socio-economic status, access to technology in the home and, in particular, changes in teacher pedagogy due to the use of technology; arguing that these are the real causes of the differences in student engagement and achievement (see Clark, 1983; Reeves, 2005; Russell, 1997).

The potential for video games and social studies

Looking at the standards established by the National Council for the Social Studies (NCSS) it is an easy leap to see how well video game content aligns with the standards and allows the teachers who know these games a powerful strategy to employ with students who also play to help with content retention and analysis. The following are a few selected examples of video games that would be best suited for relaying what the NCSS feels are important standards that should be employed within each social studies classroom. Our presentation will provide the audience with a wider selection of examples for all ten NCSS standards.

For example, the first NCSS standard is that “social studies programs should include experiences that provide for the study of culture and cultural diversity” (NCSS, 1994). Popular commercial video games like *Star Wars: Empire at War*, *World of Warcraft*, and *Call of Duty 3* all have aspects of culture that a teacher could use to meet this standard. For instance in a Civics class a discussion could be held on why in the *Star Wars Universe* is there a rebellion against a galactic empire who only wants to maintain order and commerce? In *World of Warcraft* a teacher could discuss why the cultures of the different races are constantly at war with one another and also discuss how students get along with other members of the game and some of the challenges of compromise. In *Call of Duty 3* students could discuss the differing cultures of the Allies and Axis powers and how those differences led to armed conflict. The educator could then lead a discussion on how cultures can avoid these types of conflicts and draw real-time parallels between US foreign policy and Islamic countries.

Another area that video games would help immensely is with standard three. Standard three reads, “social studies programs should include experiences that provide for the study of people, places, and environments.” (NCSS, 1994) Games such as *Gunn* and *Harry Potter and the Order of the Phoenix* allow students to experience life in different time periods and places by roleplaying in those environments. *Gunn* is a first person shooter that has the player take on the persona of an outlaw who is trying to avenge his father’s murder. In the game the player has to interact with NPCs based on historical characters and react to situations like a 19th century outlaw would have. This experience gives insight to the thought process of those living in the 19th century and gives life to the social norms of the time that are sometimes hard to explain in a classroom environment. With the game *Harry Potter and the Order of the Phoenix* the players are asked to deal with situations that arise at an English boarding school. True, this particular school has magic, the staircases move, and the paintings talk to you and hide your stuff but the essence of living at school and the experience of being away from home is very palpable to students who may never leave home to go and study. *Harry Potter and the Order of the Phoenix* also allows the player to be an English student and learn slang and lingo that they may have never been exposed to which fits in nicely with this particular standard. A skilled educator could use examples from these games and pull on the experience of the players to create a more effective discussion of this standard.

Standard five states, “social studies programs should include experiences that provide for the study of interactions among individuals, groups, and institutions.” To have an effective debate on these issues a teacher could use examples from the games *Saints Row*, *BioShock*, and *Knights of the Old Republic 2*. *Saints Row* and *BioShock*, however, create a different scenario that a skilled educator could use to have discussion on what would happen if there were no laws or if a society created itself totally rejecting the standards of what is considered decent society. In the game *Saints Row* the player takes on the role of an undercover police officer who is given permission to commit crimes to bring down the large mafia style gangs running rampage all over the city. The player is left with choices to make that influence what will happen in the game. The choices lead to ethical dilemmas that a teacher could use to generate a healthy discussion of crime and punishment not to mention the premise of the game and what it means in a constitutional government. *BioShock* takes places close to a mile under the ocean. A society was created underwater to get away from the madness of the nuclear arms race during the height of the Cold War. Unfortunately this utopia has splintered into chaos and it is the player’s job to restore order. A teacher could use this game to discuss why people sometimes feel the need to drop out of society and start up their own community based on their belief system (i.e. David Koresh and the Branch Davidians). *Knights of the Old Republic 2* also fits within this category but would also work well with standard four which deals with individual development. In *Knights of the Old Republic 2* the player takes on the role of an outcast Jedi who is called back into service to reestablish the Jedi order and reunite the Republic. Unlike other RPGs this one is totally driven on the player’s decisions. This would allow for a teacher to discuss concepts such as mercy, loyalty, and loyal opposition which are definitely lacking in our strive to make social studies more like the game show Jeopardy than an actual discipline of thought and depth.

The final NCSS standard states the following. “Social studies programs should include experiences that provide for the study of the ideals, principles, and practices of citizenship in a democratic republic.” Games such as *Medieval II Total War Kingdoms*, *HALO 3*, and *Blazing Angels: Squadrons of World War 2* would be useful games to draw comparisons, contrasts, and examples from. *HALO 3* is a first person shooter in which the player takes on the persona of Master Chief who is the only thing stopping an alien invasion which threatens a peaceful earth. To become the Master Chief your character had to go through a very painful medical procedure to allow him to do the different acrobatic and skill moves that allow him to face overwhelming odds. An educator could use this example to discuss the following: What is more important, the person or the state? Would you go through a procedure like the

Master Chief to ensure the happiness of your community? *Blazing Angels: Squadrons of World War 2* also picks up on this theme of *dulce et decorum est pro patria mori* (which is Latin for “it is good to give one’s life for the state”) but it is set during the Blitz of England by the Nazis during World War 2. The player takes on the persona of a pilot who flies mission after mission to protect the citizens of Great Britain from air attack. A social studies teacher could use the experiences of game play to contrast democracy with national socialism or a myriad of other engaging lessons. With *Medieval II Total War Kingdoms* the player is thrust into the Dark Ages in which political treachery is just as deadly as an army driving peasants with the plague in front of them. The purpose of the game is to become the next Holy Roman Emperor and reestablish order through political manipulation, church sanction, and military might. A teacher could use this game as example of what life was like for peasants under this system of government and contrast to the lives the students live today.

Conclusions and implications for classroom practice

Over a decade ago, Whittaker (1995) stated that “teachers’ ignorance of the capabilities of the technology leads to an inability to solve basic problems and the promotion of too narrow a range of applications, such as machines being used more as typewriters than as word processors” (p. 36). He continued by asserting that “the pedagogical strategy of using pupil constraints in IT goes awry when teachers cannot assess their knowledge and capabilities” (p. 36). Basically, if educators do not have a knowledge of and the skills with the kinds of technologies that students are using, they will not be able to develop effective teaching activities using those technologies or their ignorance will serve to isolate the useful aspects those technologies could have served with their students. This lack of knowledge and skills applies to video games, just as it would any other technology.

Once again, we remind the reader that we are not arguing for or encouraging the use of these kinds of video games in the classroom. Even video game proponents acknowledge that the time is simply not available and the political climate makes it unfeasible. But as good educators we are always searching for ways to reach our students and stimulate their interest in our subject area. Green, Reid and Bigum (1998) believed that “video-computer games represent an important and extremely effective entrée into this newly emergent, rapidly consolidating culture” (p. 39). Essentially knowledge of popular or commercially successful video games can serve as one way to reach students using technology that they use everyday. There are many other video games that can be used to make connections to the social studies curriculum; you just have to know more about those video games to find them.

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