Simulations and Games in the Civics Classroom

Christopher D. Moore  
*Georgia State University*

Cheryl Anne Beshke  
*University of Georgia*

Chara Haeussler Bohan  
*Georgia State University*

In this study, the authors evaluate the use of an election simulation game in the middle and high school social studies classroom. They consider how the game implementation reflected the practical use of constructivist and constructionist pedagogical principles. A brief explanation of the literature on the use of technology in social studies classrooms is provided and a practical explanation of how teachers implemented the game is offered. The ability to connect practice to theory afforded teachers important grounding and support for the use of technology in the social studies classroom. Students benefitted from the process of engagement in a form of media that is natural to digital natives. Challenges, with respect to the practical use of gaming in the social studies classroom, also are explored.

*Keywords:* civics, simulations, games, constructivism, constructionism, technology, practitioner research

**Introduction**

Over the past decade, educators have been pushed to integrate technology into the kindergarten-12 curriculum. In a 2009 issue of *Social Education*, Editor Michael Simpson noted, “Young people are fascinated by technology, and teachers who find ways to convert their students’ favorite devices into vehicles of instruction can look for exciting results” (p. 108). In 2003, researchers Peter Doolittle and David Hicks found there was a direct link to the use of technology in social studies education within a constructivist theoretical framework. “The proposition that technology has a role to play in the fulfillment of social studies pedagogy is undeniable” (p. 86). Yet, somewhere between the unrealized potential for technology and students’ fascination with it, a sizeable disconnect persists. Technology has not been fully integrated in the social studies classroom in truly meaningful ways (Lee & Friedman, 2009). In the most recent *Handbook on Research in Social Studies Education*, Kathleen Swan and Mark Hofer (2008) come to this simple but powerful conclusion, “... the federal government spent at least $4 billion annually on kindergarten-12 school technology infrastructure. However, despite these investments, educational technology has not produced the pedagogical revolution in the kindergarten-12 classrooms” (p. 307).

Teachers who are able to harness technology and make it applicable, relevant, and interesting to students just might find the “exciting results” that spark a digital revolution in the classroom (Simpson, 2009, p. 108). Simulations offer one possibility for harnessing technology to teach critical thinking skills in the social studies classroom. The National Council for the Social Studies’ (NCSS) most recent position statement on the purpose of social studies...
specifically identifies simulations as a means to think critically about the subject matter: “Through discussions, debates, the use of authentic documents, simulations, research, and other occasions for critical thinking and decision making, students learn to apply value-based reasoning when addressing problems and issues [italics for emphasis]” (National Council for the Social Studies [NCSS], 2008, para. 20). Simulations have been used in the social sciences since the early 1960s (Axelrod, 1997). They can be employed for many purposes such as: entertainment, prediction, and performance, but simulations can also be utilized for education and scientific discovery (Russell, 2013; Stephen, Feinberg, & Zack, 2013). Within the realm of education, Robert Axelrod argues, “A simulation need not be rich enough to suggest a complete real or imaginary world. The main use of simulation in education is to allow the users to learn... principles for themselves” (p. 2). As the utilization of technology grows, and specifically, as students become more technologically literate, educators can take advantage of online programs and simulations. There are many simulations for social studies, such as colonization games for American history, a stock market game for economics, or a game comparable to Cable in the Classroom’s® “eLECTIONS: Your Adventure in Politics” (hereafter known as eLECTIONS), (2014) designed to help American government students understand political campaigns and the Electoral College. See Web-Based Resources for the link to the game’s site.

![Figure 1. Opening screen of eLECTIONS.](image)

According to the 2010 curriculum standards set forth by NCSS in Standard 10, students should be able to demonstrate understanding of the purpose of government and the rights and responsibilities of citizens (NCSS, 2010). Higher order reasoning skills indicate students also should identify examples of institutions and describe the interactions of people with institutions,
recognize and practice selected forms of civic discussion and participation consistent with the ideals of citizens in a democratic republic, and explain actions citizens can take to influence public policy decisions.

We describe how to implement the use of an election simulation game in the social studies classroom. We also evaluate the practical implementation of constructivist and constructionist pedagogical principles for helping students to demonstrate mastery of technology in a middle school and high school setting. One author is a social studies teacher and one is a media specialist who implemented the election simulation game in both public and private middle and high schools in a large urban area in the southeastern United States. The third author is a social studies education professor at a large urban university located in the southeastern U.S.A.

Learning Theory

In order for teachers to best implement eLECTIONS in classrooms, it is useful to quickly review the reasons why it is important to use simulations and games in the social studies classroom. The chief reason to employ these tools can be found in the theory of social constructivism. As Doolittle and Hicks (2003) defined the terminology, social constructivism is a theory emphasizing social interaction as a primary source of knowledge. Social constructivism relies on communication from participants in order to construct meaning. Learning is relative to the learner. Like constructivism, constructionism, promoted by Seymour Papert (1991), also relies on the use of context and language to determine what students learn. Constructionism is predicated upon the idea that students learn when they are actually creating a product. “It then adds the idea that this happens especially felicitously,” says Papert, “in a context where the learner is consciously engaged in constructing….” (p. 2). As a pedagogical theory, constructionism requires students to create or build something such as a project, a set of software, or a model demonstrating this new knowledge. Students, furthermore, should be given more freedom to learn in their personal way, not through rigidly defined methods. When teachers are pressed to use technology, they often turn to slide show programs, such as Microsoft PowerPoint®. Yet, PowerPoint® does not take advantage of the tools available to teachers, simply conveying the information in an outdated pedagogical style, with a new, flashier wrapping. This sentiment was echoed by Doolittle and Hicks:

If integrating technology means nothing more than enhancing the traditional delivery system of social studies content, where laptops replace notebooks for taking notes, where PowerPoint slides replace handwritten overheads, where e-textbooks replace hard copy textbooks, then we will be no closer to a vision of transformative, powerful social studies teaching and learning (p. 75).

Papert’s goal is to have students learning in a way in which technology is the vehicle through which they create in order to learn. This goal is reiterated in much research about using technology in the social studies classroom (Doolittle & Hicks, 2003; Lee & Freidman, 2009; Russell, 2013; Swan & Hofer, 2008; Squire, 2005).

The Use of Technology in Social Studies

In recent years, a continuous push for implementing technology in the social studies classroom has ensued. Simulations and games are an appropriate means of implementing constructionist learning theory. Students and teachers, however, can experience a technology information overload; thus, it is important to steer clear of using technology for technology’s
sake. In a recent article by Adam Friedman and David Hicks, they discussed the state of technology in the social studies (2006). After the two conversed about the glut of recent research on technology in the social studies, they focused on technology integration and teacher education. Their attitudes toward technology, however, were tempered. As the discussion continued, Hicks stated:

For a while we were acting like kids in a candy shop. We were excited about the range of technologies just in reach and how sweet they all looked; yet all they really did was give us a quick rush and left us feeling a little bloated and overwhelmed. A result of this, I think, is that the concept of marginal propensity to consume has taken hold with regard to salivating over the potential of all the different types of digital technologies to reform the social studies (2006, p. 248).

More research was needed, in regard to how professors were working with pre-service teachers on incorporating technology, as well as how instructional design furthered learning, Hicks and Friedman concluded. Not all the research points positively toward the ever-increasing influx of (and demand for the use of) technology in the classroom. In a study on the problems integrating technology in the kindergarten-12 classroom, Hofer and Swan (2006), noted there are obstacles to promoting this incorporation, and “many authors advocate that teachers need to explore this frontier without models of classroom success, examples of ‘tried and true’ curricula, and evidence of increased student learning” (p. 86). This notion also is evident in history education with the push toward the use of primary sources in history classes, where students are supposed to apply the laws of historical thinking to documents, but teachers are not shown how to access the documents nor are they shown how to use them online (Barton, 2011; Bohan & Davis, 1998; VanSledright, 2002; Wineburg, 2001). This point is amplified by Greg Sherman and David Hicks (2000), who claimed “research continues to suggest that despite the perceived potential of technology, many social studies teachers are currently reluctant or unable to utilize content specific uses of technology in their professional practice” (p. 244). Another challenge is students’ and teachers’ lack of familiarity with the technology, so learning a software program can take up a great deal of class time. This problem is compounded by many packed state and local curriculum guides leaving little room for in-depth projects and activities not related to content standards (Hofer & Swan, 2006). Similar concerns emerged when Gayle Thieman conducted a five-year study on pre-service teachers and their integration of technology in the classroom; even if they did make technology skills a part of their pedagogical routine (which a reported 85% did); she asserted, “There is little evidence that kindergarten-12 students used technology to support critical thinking, problem solving, and decision-making” (2008, p. 342).

Technology and Civics Education

At the time of the 2008 publication of The Handbook of Research in Social Studies Education, Swan and Hofer found only one article on civics education and technology. Finding relevant research on simulations and games also proved difficult for Young et al. (2012), who noted: “No research of this type was identified in our review, suggesting the missing element may be a more sophisticated approach to understanding learning and game play in the rich contexts of home and school learning” (p. 84). The lone article found a study published by Tina Heafner in 2004, which focused on the use of technology to motivate students to learn about the campaign process. According to Heafner, the teacher selected for this case study had teaching experience and a Master’s degree in social studies education. She incorporated traditional and
constructivist pedagogical styles in her instruction. The students, still, were uninterested in learning about campaigning and the election process. So, Heafner worked with this teacher to create a computer-based project.

In Heafner’s (2004) research, she found by having students interact with the technology, they were already more interested in the work assigned to them: “All students reported enjoyment in the task because technology made their work easier and more fun to complete” (p. 46). Furthermore, students enjoyed working on the project because it allowed them to do neater work, add graphics, videos, and sound bites, and made the PowerPoint® look more “professional” (p. 46). Students were also able to tap into a skill set they already possessed for using the computer. Students were familiar with the Internet and other technological elements used in their presentations. They were not bored, however, by being asked to use the computer in a way that was remedial and disproportionate to their skills. Students were reported as able to develop confidence in ability, enjoyment in learning and the opportunity to learn new social studies information. Because of the creation of student work, the focus of the classroom shifted from teacher-centered instruction to student-centered instruction as “…technology added value to social studies instruction by increasing motivation and engaging students in the learning process” (Swan & Hofer, 2008, p. 313).

**Constructivism and Constructionism in Simulations and Games**

When Papert (1991) was teaching Logo, a program he and his colleagues created at the Massachusetts Institute of Technology (MIT), he found students learned better when they were given free rein to explore and learn the software on its own as opposed to following pre-planned instructions. His research led him to believe students’ interest and exploration of a subject, through technology, in order to create an end product, was a highly effective mode of teaching. The results of this learning can then be shared, with other students, to enhance learning.

In the social studies classroom, technology resources are available, but woefully underused or theoretically developed (Doolittle & Hicks, 2003). While Doolittle and Hicks concentrated on the use of technology in a social studies classroom from a primarily constructivist platform, the authors “open the door to a constructionist approach with respect to computer-based simulations… These six pedagogical strategies when adjusted for the constructionist assertion that learning occurs through designing, building and making an object, provide a theoretical argument for computer-assisted simulation games” (Feinberg, Schewe, Moore, & Wood, 2012, p. 422). Simulations and especially video simulations may reach students who do not enjoy or learn from more ‘traditional’ pedagogical approaches.

**Implementation and Game Play**

In the March 2012 article, “Our Princess is in Another Castle: A Review of Trends in Serious Gaming for Education,” Young et al. (2012) recommended that research on video games should not be generalized but instead focus on this question: “How does a particular video game being used by a particular student in the context of a particular course curriculum affect the learning process as well as the products of school (such as test grades, course selection, retention, and interest)?” (p. 84). We used eLECTIONS as an introductory unit to learning about the Electoral College, but it also can be used to discuss political parties or the election process. We implemented this game with students in middle and high schools. One of the main reasons we were drawn to this game was students’ involvement in creating their own candidates while giving a realistic, yet simulated, view of a presidential campaign. Students were required to look...
up the basic platforms of both political parties and determine their stance on issues such as immigration, affirmative action, education, military spending, the economy, and healthcare.

The game facilitated students’ understanding of their own political leanings and allowed them to select the key issues for their platforms. Students did not have to agree with every ideological component of their chosen political party but could choose a stance on every key issue. This political investigation greatly benefited students in their game play by fostering pragmatic as well as disciplinary knowledge of civics. Game play preparation can be adjusted, depending on the time, age level, and technological abilities of the students.

![Elections Game](image)

**Figure 2.** Students may choose to concentrate on five major issues for their platform.

Each of Doolittle and Hicks’ (2003) six pedagogical tools incorporating a constructivist approach to technology can be applied to various aspects of the eLECTIONS game. Cable in the Classroom® provides plenty of options for game play. The game setup demonstrates Doolittle and Hicks’ first principle: “The construction of knowledge and the making of meaning are individually and socially active processes” (p.10). Competitors are allowed to play against a computer, or they can compete against a classmate. If finding enough computers for students is a concern, students can double-up at one computer or, the teacher can facilitate the game on one computer through a projector, thus allowing the mock Presidential candidates to be run by teams of students. If students work as a team, the possibility for collaborative and critical engagement in discussions increases dramatically. According to Katherine Powell and Cody Kalina (2009),
“Cooperative learning is part of creating a social constructivist classroom. Students should not only work with teachers one-on-one, but they should also work with other students. Students have a lot to offer one another” (p. 244). As the students, playing the role of campaign managers, make decisions about travel, campaign spending, and responses to events, the game provides feedback in the form of money and electoral votes gained or lost. Students begin to understand how choices made during the course of an election campaign affect the outcome. The game begins as the players choose a slate of five “authentic, real-world” issues, such as: education, health-care, immigration, and defense, fulfilling Doolittle and Hicks’ third principle, “The construction of knowledge is fostered by authentic and real-world environments” (p. 11).

In creating their campaign, students might select topics relevant within their homes and communities, or prominent in the media. They can choose issues for which they have prior knowledge or an especial interest, which demonstrates the fourth principle described by Doolittle and Hicks (2003): “The construction of knowledge takes place within the framework of the learner’s prior knowledge and experience” (p. 11). In the next step of the game, students decide the candidate’s standing on each of the chosen issues, refining both the connection to an authentic, real-world environment and their particular prior knowledge and experience. Once students have determined the candidate’s standing, a map appears on the screen indicating each state’s position on political and social issues. These concerns include topics such as healthcare, education, immigration, and taxes.

Other candidates in the game also have positions on these issues, either assigned by the computer or by other game players. The game, thus, contains all of the complexities of a real campaign. Every decision a player makes affects the other candidates as well as his or her own fundraising and electoral votes. This complex interaction of decisions and outcomes is a perfect example of Doolittle and Hicks’ (2003) second principle. “The construction of knowledge involves social mediation within cultural contexts” (p. 11). Students involved in an eLECTIONS game must act and react to events and decisions that are not always predictable or under their control, thus the interaction creates a unique opportunity for constructing knowledge. “The individual, engaged in socially mediated activity, is transformed or constructed through this socially mediated activity, just as the social institution is transformed or constructed by the participation of the individual” (Doolittle & Hicks, 2003, p. 11). The game proceeds as a dial spins to determine the number of spaces to move on the virtual game board. Players land on spaces that determine particular scenarios and must choose how to respond.

The fifth principle Doolittle and Hicks (2006) described is also apparent while playing eLECTIONS, “The construction of knowledge is integrated more deeply by engaging in multiple perspectives and representations of content, skills, and social realms” (p. 12). With each spin of the dial, players are exposed to the other candidates’ slate of issues and positions. A teacher might also assign a group of students to create a candidate with values and positions different from their own in order to develop a deeper understanding of the electoral process. Playing eLECTIONS does just what Eric Klopfer, Scot Osterweil and Katie Salen (2009) recommend: “An educational game should put players in touch with what is fundamentally engaging about the subject, should help them build a scaffolding of core concepts, and should motivate them to go deeper” (p. 32).
Playing eLECTIONS provides a powerful learning experience for students. Rather than learning about civics through a traditional lecture format or reading a text and answering questions, students construct meaning through the process of making autonomous decisions and reacting to and reflecting upon the feedback provided in the game. This aspect of eLECTIONS demonstrates Doolittle and Hicks’ (2003) sixth principle, “[t]he construction of knowledge is fostered by students becoming self-regulated, self-mediated, and self-aware” (p. 12). Playing repeatedly increases a student’s knowledge and leads to more sophisticated decision-making through the support of game feedback. The teacher is not a lecturer or a dispenser of knowledge but rather a facilitator, who can ask guiding questions as students strategize moves or help students recognize and correct misconceptions. eLECTIONS provides teachers and students the opportunity to use technology in a way that may transform the teaching and learning process. Participating in the simulation fosters personal, social, and engaging experiences exemplifying a constructivist approach to learning. Students develop a sense of ownership for their candidate, becoming invested in the outcome as they learn about the political parties, the Electoral College, and key issues in presidential elections.
Figure 4. An example of a circumstance on the campaign trail and students’ choices to solve the problem.

Assessment

After the election, students have the opportunity to see the results of their actions through an itemized list detailing the states in which they campaigned on each turn and the choices they made along the way. A more telling evaluation of what students learned in the process can be gained by having discussions in class. Questions, such as the ones below, can begin to help facilitate discussion:

- How did you choose your party affiliation and key issues? What stance did you take on these issues? Why did you take those particular stances?
- In what states did you campaign the most? How did you determine where to campaign? What problems did you encounter while choosing your campaign trail?
- What were some of the challenges you faced along the way? How did you determine what moves you should make?
- If you played this game again, what would you do differently? Why would you make those changes?
- What did you learn by playing eLECTIONS that you did not know before?

Of course, discussion is not the only way to assess learning for eLECTIONS. The English Language Arts Common Core standards place strong emphasis on writing and social studies content can support these standards by providing opportunities for students to expound upon
their learning in class. An essay or critique of the game allows students to demonstrate mastery of content and continue to hone their writing skills across the curriculum.

**Conclusion**

Using eLECTIONS in the social studies classroom allows teachers to meet students where their interests are present. Today’s students play video games; send text messages; surf the Internet; and frequent social networking sites. They are, in Prensky’s terminology, “digital natives” (2001, para. 5). Presenting these students with an opportunity to learn using technology engages them. The authentic, real-world environment of eLECTIONS provides a scenario where critical thinking, problem-solving, and decision-making skills can lead to the construction of meaning. Integrating technology into the curriculum using an online game or simulation like eLECTIONS does not require valuable time to be spent in learning unfamiliar or complicated software as the process of playing the game or simulation is intuitive and fun. Most importantly, working through the game is time well spent for students. No longer is the teacher feeding students’ knowledge required by the NCSS standards; the students acquire the knowledge themselves, at their own pace and in their own way.

**References**


Web-Based References


Authors’ Bios

Christopher D. Moore is a doctoral student at Georgia State University. His primary research focus is simulations and games in the social studies classroom. He also teaches high school social studies in the metropolitan Atlanta area.

Cheryl Anne Beshke earned her educational specialist degree in Language and Literacy Education at the University of Georgia. She works as a media specialist and also teaches language arts in an elementary school in the Atlanta area.

Chara Haeussler Bohan is an Associate Professor in the College of Education at Georgia State University. She is the author and editor of several books and more than 60 research articles in history and social studies education. Email: cbohan@gsu.edu.