
Democracy & Education

The Challenges of Gaming for Democratic Education: The Case of iCivics

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Abstract

Video games are the most recent technological advancement to be viewed as an educational panacea and a force for democracy. However, this medium has particular affordances and constraints as a tool for democratic education in educational environments. This paper presents results from a study of the design and content of four iCivics games and their potential to meet the goals of democratic education. Specifically, we focus on the games as designed experiences, the nature and accuracy of the content, and the nature of intellectual engagement in the games. We find that the games, while easily accessible and aligned with standardized curriculum, do not provide opportunities to engage players in deliberative decision making on contemporary issues or to apply concepts from the game world to their role as citizens in training. Further, the game content is more “textbook” than the potentially dynamic and authentic types of civic engagement the medium of games can provide.

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WHILE PLAYING THE iCivics game *Immigration Nation*, which asks young players to identify which potential immigrants we should allow into the United States and for what reasons, we received the following feedback from the Statue of Liberty, the in-game feedback agent:

*You know what we do with boat thieves in these parts . . . ?
That's right: WE DON'T LET THEM INTO THE COUNTRY!
Get rid of this jerk! Oh, and call the police.*

This kind of feedback may seem jarring, but it is one of many examples of responses designed to clearly give young players feedback that their decision was incorrect based on the rules in the game, rules that are based on commonly taught U.S. immigration laws as they are presented in textbooks or state academic standards.

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It is also intended to be funny and thus motivate the player to continue to play, win, and master the content. I include this example of what a player experiences in *Immigration Nation* as it is indicative of many of the iCivics games and seems to represent the primary objective of the game design: to engage young people in civics content in a way that leads them to a clear and defined correct answer that is also intended to be more entertaining than the usual civics lesson. It is also hoped that students play these games outside of the school or that they can be used as an introductory activity for one of the more traditional lessons available to teachers on the iCivics website (<http://www.icivics.org>).

However, the attempt to be entertaining here also includes language (i.e., *jerk*) and sentiments not often promoted in democratic education, and especially in an activity intended for elementary students. As the game designers build these cases (the content) and the rules of the game, they shape the possible narrative arcs players may construct, and thus the “ideological world” (Squire, 2006) of the game. In the case starting this article, the rule about criminals not being allowed to immigrate is greatly oversimplified. While being a criminal is a major hurdle to being allowed to immigrate, it is not a hard “rule” as presented in the game because someone labeled as a criminal in one country may count as an asylum seeker in the United States.

These designed experiences also shape how young players will view the world and their roles as democratic citizens. It is important to consider if these games will help students connect the individual actions in the game to larger, sometimes controversial, ethical and political issues in society (Raphael, Bachen, Lynn, Baldwin-Philippi, and McKee, 2010). For example, the issue of immigration in the game represents the textbook version of who gets to immigrate and is set at a place, Ellis Island, and via a mode of transportation, a boat, that have little relevance to the issue of U.S. immigration today. Further, the example of a boat thief is not as clear-cut when we consider the example of political refugees from Cuba who took boats to seek asylum in Florida in the late 1970s. In this study we examine how four iCivics games are designed to engage young people as learners and as citizens-in-training and attempt to answer the following question: What are the affordances and constraints of iCivics games for democratic education?

iCivics

iCivics is a national civic education nonprofit organization founded by former U.S. Supreme Court Justice Sandra Day O'Connor in order to provide “students with the tools they need for active participation and democratic action” (www.icivics.org/our-story). It has developed over fifteen games for use in and out of school and accompanying curriculum and resources for teachers to use in their classes and has provided numerous regional professional development opportunities for teachers. The games are intended to be a gateway to the curriculum provided on the site and focus on topics such as constitutional rights, the roles of the different branches of the government, and specific issues such as immigration and fiscal policy. iCivics was designed to be as approachable and accessible as possible—the

goal is to get its games, and civic education, into classrooms and living rooms. To this end, the organization has been quite successful, as it claims that over 70,000 teachers have registered for the site and that the games have been played more than 10 million times (www.icivics.org/our-story). We selected iCivics for our study as it has been so successful at developing games and reaching out to such a broad audience of teachers and students.

Games and Gaming to Learn

The use of video games in education is far from a new phenomenon. The past decade has seen an increased interest in the learning potential for games and gaming beyond just motivation, including: the development of literacies through gaming (Gee, 2003); gaming and simulations that model professional or disciplinary models for teaching STEM disciplines and civic education (e.g., Shaffer, 2004; Shaffer & Gee, 2006; Poole, Berson, & Levine, 2008); and the use of commercial games to teach subjects such as history and geography (e.g., Squire, 2005; Squire, DeVane, & Durga, 2008). Studies on student engagement in immersive virtual worlds designed for inquiry learning have shown particular promise within the STEM fields, especially when grounded in problem-based learning (Barab et al., 2009; Barab, Sadler, Heiselt, Hickey, & Zuiker, 2010) or when used as a medium to learn about student scientific reasoning (Dawley & Dede, 2014).

Games have been similarly promoted for use in the social studies classroom (Watson, 2010), but little empirical research has been done to show the effectiveness of these proposed practices. The majority of the scholarship on games and civic education is conceptual in nature, including frameworks for using games in class, anecdotal examples from classroom practice, and critical analyses of games and simulations promoted for classroom use (e.g., Bers, 2010; Curry, 2010; Marino & Hayes, 2012). Raphael et al. (2010) presented a framework for research and design of games for civic education and raised several central issues, including the importance of aligning games with civic content and citizenship-related skills. They argued that games that successfully integrate “civic content and game play will be more effective at fostering civic learning than games that do not” (p. 206). They also promoted the use of games to engage students in contemporary public issues and to inspire action that can be applied outside of the game, noting that “games that set rules, goals, and roles that require players to act and reflect on public matters will be more effective for civic learning” (p. 208). Unlike the STEM games and learning research that utilize purposefully built games such as *Quest Atlantis*—the virtual immersive world built by Barab and his colleagues to engage students in STEM problem-based inquiry—the work in social studies relies more often on commercial games or more simplistic single player games.

Research into the iCivics games specifically is extremely limited despite their popularity and has come most often in the form of evaluation studies. A study by Kawashima-Ginsberg (2012) found that the iCivics online writing tool Drafting Board, designed to help young people develop skills in constructing argumentative essays related to issues such as the electoral college and community service, had a significant positive effect on participants specific to

explicit skill development around argumentative writing. Other studies of the impact of iCivics games on student learning focus narrowly on gains in civic knowledge measured with selected response standardized test-like items. For example, a series of studies conducted by Baylor University researchers found positive effects in middle school participants in both basic civic knowledge and in areas such as motivation as a result of playing selected games (Blevins, LeCompte, Wells, Moore, & Rodgers, 2012; LeCompte, Moore, & Blevins, 2011). These studies focused on explicit outcomes of iCivics: skill development in evidence and argumentative essays, acquisition of factual knowledge, dispositions, and motivation. They are not able to measure the kinds of inquiry, deliberation, or conceptual-level understanding that researchers in the STEM fields have focused on. Nor have they been able to measure students' thinking in ways that Squire and his colleagues (2008) did using the more open ended *Civilization* games in world history classes.

Does this mean that games are not effective mediums for democratic education? There are historical reasons to be skeptical of games being promoted for democratic education, as there have been many technologies that preceded games also viewed as an educational panacea (Cuban, 1986) or as solutions for the digital divide and educational inequity (Cuban, 2001; Margolis, 2008). In addition, there are serious concerns raised about the narratives players may construct in the ideological worlds of the games (Squire, 2006). Historically, one of the most widely used games in social studies classes, *The Oregon Trail*, is viewed as including misleading and stereotypical representations of American Indians and the experiences of settlers moving west in the late 1800s (e.g., Bigelow, 1997). Further, games viewed as educational and easily accessible, such as *The Oregon Trail* and the iCivics games, often result in teachers and parents encouraging young people to play these educational games as an alternative to other media forms without any kind of reflection on what they are learning from the games (Caftori & Paprzycki, 1997). Raphael et al. (2010) noted the importance of having students reflect on how the design and production of the game reflect particular views. This research suggests that games often used as a reward or outside of a structured activity have the potential to produce naïve understandings among students.

Democratic Education Framework

Our primary focus is to understand how these games may be a medium for democratic education. There is some disagreement about the goals of democratic education, which encompasses civic or citizenship education. Most state standards and textbooks for government and civics courses focus on the structures and processes of government (e.g., branches of government, how a bill becomes a law). These curricula emphasize the characteristics of what Westheimer and Kahne (2004) described as a personally responsible citizen: law abiding, informed, but staying within the system. Other scholars in democratic education focus on deliberative democracy, which emphasizes student discussion and deliberation of controversial issues as a way to prepare them to engage as active and informed citizens (Hess, 2009; Parker, 2003). Still others advocate for a more action or justice-oriented democratic

citizenship that emphasizes advocacy and political action for the common good (Levinson, 2012; Westheimer & Kahne, 2004). *The Guardian of Democracy: Civic Mission of Schools* (Gould, 2011) report, which is intended to inform state and national policy related to civic education, emphasizes a combination of teaching deliberative democracy, sharing knowledge of the structures of government, and to a lesser degree, equipping students for direct civic action. It also promotes the use of simulations and role-playing to help students understand the structures and processes of government.

In this study we focus on how well the iCivics games provide students the opportunities to engage in these different aspects of democratic education. We know that certain types of thinking are particularly important for democratic citizenship: being able to inquire about problems or questions for which there are multiple competing answers, being able to take a position and use evidence to warrant that position, and being able to discuss and deliberate controversial issues (Hess, 2009; Parker, 2003). We also know that many young people are engaged politically and civically on their own using social and other online media (Banaji, Buckingham, Van Zoonen, & Hirzalla, 2009; Cohen & Kahne, 2012) and that some have argued that civic education should be designed to help young people engage in a more mediated and participatory global culture (Kahne, Hodgins, & Eidman-Aadahl, 2016). Therefore, we examine the accuracy and level of complexity of the content in the games; whether or not the games engage players in open or closed issues or questions (Hess, 2009); whether or not issues related to policies present the "best case, fair hearing of competing points of view" (Kelly, 1986); and how the roles students assume in the games are designed to develop skills to prepare them to act as citizens in a mediated world.

Raphael et al. (2010) also raised the issue of the impact of a more or less structured game narrative. They noted that having a game that is efficient in getting players to the "right" answer does not necessarily promote the kinds of thinking aligned with civic engagement. The analysis of the nature of issues presented as being open or closed, and the inclusion or exclusion of competing perspectives, helps to provide us with a sense of the ideological worlds constructed through the designed experience of the iCivics games (Squire, 2006).

Analysis of iCivics

Our research team utilized eight participant-researchers, law students, and upper-class undergraduate government majors, all with expertise in the content areas of the games to generate data through play and provide initial analyses. We selected four games designed for upper-elementary and middle school audiences that reflect prominent contemporary issues in American politics and society that also align tightly with common state standards for middle school civics classes: *Do I Have a Right?* (constitutional rights, including free speech); *Executive Command* (executive power, policymaking); *Immigration Nation* (immigration policy, routes to citizenship); and *People's Pie* (fiscal policy, debt).

Do I Have a Right? is set in a law firm with the player in the role of the managing partner whose job it is to select lawyers and to

partner each potential client with a lawyer who has the correct “specialty” in a particular amendment. The goal of the game is for the player to learn and apply various constitutional rights (e.g., First Amendment, Fourth Amendment) in order to attempt to improve the firm’s “prestige” score.

Immigration Nation is designed for the youngest players and, therefore, is the least sophisticated and the quickest to play. The player takes the role of an immigration officer in New York Harbor whose job it is to decide who should be allowed to enter the country, to which “harbor” successful petitioners should be sent, and who should be denied entry altogether. The harbors represent the various routes to citizenship or legal entry, including the Born in the USA harbor for those who can claim citizenship by birth-right and the Permission to Work harbor for those who qualify for legal residency.

Executive Command focuses on the powers and responsibilities of the executive branch. The player assumes the role of the president and manages the many tasks of the executive, including giving speeches to Congress, playing the role of commander in chief, and taking diplomatic missions aboard Air Force One. The player wins by maintaining the president’s public approval score.

In *People’s Pie*, the player is asked to make decisions regarding federal revenue generation and spending, such as setting the tax rate and the retirement age for social security. The player then makes decisions about funding specific programs, such as Financial Services and Agriculture. Inevitably, the player overspends during the first round of budget decisions and must borrow money to balance the budget while attempting to maintain “citizen satisfaction” by funding programs that gain high public approval.

Methods

In order to analyze both the content and structure of the game as a designed experience, we generated data through gameplay that helped illustrate the content, game rules and structures, and the overall narratives related to citizenship, nation, and the core issues of each specific game. Using a data generation method previously established for gaining insights into students’ thinking and experiences in game-based learning (Wideman et al., 2007), we assigned the student research assistants to play two assigned games in pairs. The government majors played *Executive Command* and *People’s Pie* while the law students played *Do I Have a Right?* and *Immigration Nation*. The computers were equipped with Screenflow, a program that allowed us to record the gameplay, the reactions of, and the conversations between the two research assistants in each pair.

The research assistants were instructed to follow a “think-aloud” protocol, explaining their actions, decisions, and reactions to game feedback. Think-aloud protocols have been found to be effective in providing evidence related to the experiences and thinking of students in a situated learning context that is difficult to capture in a self-report measure or follow-up interview (Cotton & Gresty, 2006; Wideman, et al., 2007). These recordings provide evidence related to the participants’ affective reaction to the game as well as create a record of their thinking and the overall narrative they create through their gameplay related to democratic

education. The research assistants then transcribed these conversations along with the game actions and feedback recorded from the screen into a transcript from their hour of play to use for coding.

This data was coded line by line, with each line representing a particular scenario posed, a decision made by the player, or a feedback or response in the game. In addition to coding each portion of the transcripts (e.g., *decision*, *feedback*), we also coded the nature of tasks, questions, or problems posed (e.g., *open/closed*) and whether or not we identified any content that was either inaccurate or simplified to the point of being trivial. For example, a scenario from *Immigration Nation* in which the player is asked to accept or reject a character who says, “Help! I was born in Minnesota, but I went for a long walk and wound up in Canada by accident. Can you let me back in?” would be coded as a closed scenario as there is a correct answer expected by the game. Additional codes were generated as they emerged in the data that built from our framework of democratic education. These initial codes were used to develop conceptual memos first for each gameplay episode (i.e., each research assistant session) and then compared to other gameplay episodes from the same game to look for similar and contrasting themes. Finally, these themes were compared across games to identify major themes about what the iCivics games pose as affordances and constraints for democratic education.

Our analysis as presented here is limited to the context in which the data was collected and based on the interactions between our research assistants and the games, as well as our analysis as researchers. Put differently, we likely did not play out every possible scenario or narrative that could be constructed from the games; nor do the views and actions of our research assistants match those of the 10-to-13-year-olds who are the games’ target audience. Even given these limitations, our study adds a layer of analysis when compared to other curriculum studies that focus only on a critical or deconstructionist analysis of content or gameplay, especially within a dynamic and affective gaming environment.

Results

Four themes emerged from our analysis of the four iCivics games. The first of these themes illustrates the particular affordances for democratic education, such as the explicit design of the games for use in schools, scaffolding, and ties to standards and civic concepts. The three additional themes illustrate tensions in the game design and experience of players that act as constraints of the games. These include a lack of emphasis on a more dynamic “nontext-book” civic content, no clear applications to real civic action for players, and few opportunities for players to engage in decision making that presents best case, fair hearings of competing points of view or evidence in the iCivics games. In particular, we focused on the nature of the intellectual work in the games as it relates to democratic education and, as part of our analysis of the ideological world of the games, on whether the issues presented as open actually push the player to a “correct” answer. These findings also reflect a tension in iCivics’ attempt to be both as accessible as possible to all teachers and students and to attempt to prepare

students for their stated goal of “active participation and democratic action.”

Affordances of iCivics Games

iCivics is explicit and intentional about making their games and resources as accessible as possible for teachers and students. Unlike many projects within educational gaming that restrict access to their games to research projects, the goal of iCivics is to be in every school in the United States. This desire for accessibility also includes students and teachers who may not be as familiar with playing video games, as well as students who may need a little extra scaffolding to learn how to move through the game world successfully. Three characteristics of the games reflect their affordances toward this goal of accessibility that also align with aspects of democratic education, in terms of learning about structures and concepts related to government, and are presented here.

Designed for the classroom.

iCivics games are notable for small bobblehead characters, upbeat soundtracks, and designs that emphasize active participation with heavily scaffolded gaming models. The games are designed to be used within the limits of the 50-minute class period or outside of the classroom with little additional support needed to learn the basic gameplay. When entering a game for the first time, pop-up

windows explain the components of the game and basic actions to get the player started (see Figure 1). This kind of explicit “hard” scaffolding introduces the player to both the features of the game world and the basic steps for playing, and allows the player to quickly learn how to engage with the core tasks in the game.

In addition to the scaffolding windows that help players acclimate to the structure of the game, each game also has multiple forms of feedback. The feedback agents provide positive feedback when the players make the “correct” choices and provide helpful guiding feedback when they make the “wrong” choices. In the example we use in the introduction from *Immigration Nation*, the feedback agent is the Statue of Liberty. Lady Liberty tells the players whether or not they have allowed the correct immigrants in and whether or not they have sent them to the right harbors (i.e., allowed them in under the correct rules). In *Executive Command*, a journalist helps narrate the overall story of the game and transition between the four-year-long terms in the game, and a chief of staff tells the players what tasks need to be completed or reminds them if they forget to do something. These feedback agents help players to learn the rules and provide feedback to correct any mistakes.

Concept based.

The iCivics games’ designs are tightly tied to the concepts that are the “content” to be learned from playing each game and are



FIGURE 1. Screen Shot Illustrating Scaffolding in *Do I Have a Right?*

designed to get the players to learn the concept and apply them. These concepts are aligned with state academic standards. For example, in *People's Pie*, the focus is on introducing concepts from economics, particularly the array of departments that the federal government funds. In *Immigration Nation*, players are engaged in learning and applying the five major criteria, or "rules," that can be used to gain entry to the United States as a citizen or legal immigrant: U.S.-born citizen, child of U.S. citizens, marriage to a U.S. citizen, political refugee, or someone allowed entry for work. *Do I Have a Right?* focuses on the acquisition of a conceptual understanding of the constitutional rights of individuals, such as the right to free speech or to protection from unreasonable search and seizure. The players are introduced to these concepts through the partners that they select for the firm, such as Chuck Freepress (First Amendment) or Sally Fourth (Fourth Amendment). The players are then asked to apply this knowledge by determining whether or not potential clients have rights based on their complaints and whether there is a partner who is skilled in each particular conceptual area. The feedback the players receive pushes players toward the correct answers that will help them to pass each level or successfully complete each task, indicating a mastery of the concept/content being presented. This structural aspect to the games makes the games accessible to a broad audience and also means that the games will align with state standards for civics in many states. As we will note, this affordance for reaching a broad audience through aligning with textbook- and standards-based civic knowledge can also be a constraint when compared with the goals of action civics or deliberative democratic education. However, if young players are able to transfer their knowledge of rights of citizens under the U.S. Constitution from the games to their engagement as citizens, this is essential knowledge for democratic education.

Designed affective response.

One of the strongest themes in our analysis is the powerful affective reaction our participant-researchers had while playing the games. Those who played *Executive Command* were noticeably stressed by trying to juggle all of the demands of their avatar president. Midway through her game, one student exclaimed, "I am getting really stressed out playing this game!" and started yelling, "Walk faster," to her computer avatar as she attempted to finish tasks. Her partner in the session later summed up what he saw as this affective aspect of the designed experience in *Executive Command*.

You get a sense of the stress of the job . . . The way that this is designed, what are you seeing? There are certain things that you take to certain places to get them done, and you have a lot to do, and it is hard to do it all at once, and it is hard to keep everybody pleased . . . Basically, there is so much happening . . . and then at the end they say, "Oh, wow," and, "Time flew," and goodbye. The exhaustion aspect is implicit.

Similarly, those who played *People's Pie* talked about their frustration with having to borrow money and how much they empathized with the frustration felt by legislators related to budget

issues. These affective elements are an affordance that also aligns with the goal of simulating civic-related roles identified in the *Civic Mission of Schools* report and likely acts as a motivational force to learn the game content (Gould, 2011). However, as we explore, these affective responses also shape the narratives players may construct as part of the designed experience of the game narratives that emphasize particular ideological views about politics, policies, and the role of citizens.

Constraints of iCivics

Abstract and Expedient vs Relevant and Complex

There is no doubt that the games are designed to both engage players and align with traditional civic content. In the case of *Immigration Nation*, the game is designed for young audiences and focuses on explicit policies, such as the example in the article opening illustrates: Criminals will not be allowed citizenship. This attempt to break down immigration policy into a set of clear rules, with five "criteria" for being legally allowed into the United States, illustrates the desire of game designers, much like textbook authors, to effectively transfer this knowledge to the player. This is the type of expediency in game design that Raphael et al. (2010) identified as a major issue in designing games for civic education.

Creating clear rules, and engaging the player in learning and applying these rules, makes for an efficient and effective instructional design. Of course, the real world cannot always be represented with clear rules, which is hinted at in some of the language used in feedback. For example, when a player allows in someone who was born in Kentucky, the Statue of Liberty responds that "just about anyone born in the United States is automatically a citizen," though the game declines to address in what circumstances that general rule would not apply.

Further, the examples of immigrants who should be admitted include characters who possess strong positive traits, such as desirable work expertise or courage in the face of an oppressive regime in their home country, whereas those who are denied entry offer obviously ridiculous reasons for their desire to enter, such as asking to "travel around the country to make fun of Americans" or wanting to come to the United States because they are "REALLY LOUD" and want to be in the United States "SO EVERYTHING WILL BE AS LOUD AS ME." These kinds of very unrealistic and even silly examples likely are used to entertain or motivate players in the games, but they also may distract from the goals of the game and diminish the likelihood that players can connect concepts from the game to the world outside of the game. In this way, an affordance may also be a constraint.

Other less realistic immigrant examples may be even more problematic as they simplify the issue of immigration in the game. For example, a player may assume something about the potential immigrant who claims, "In my country, I have been a strong opponent of my government's policies. The government has now decided to throw my whole political party in jail because of it." The player may think that person would automatically be admitted as a refugee seeking asylum. The United States does grant refugee status to more people than any other country, but this does not mean that this process is automatic, nor is the number of refugees who qualify

for asylum unlimited, as there are ceilings for refugees and limits on resettlement programs. Further, had the boat thief in this article's opening example been a Cuban refugee, as we postulated, this rule in the game becomes even more blurred. Can someone who might be considered a criminal in some ways also qualify for asylum? Further, although the language in the opening example is meant to be engaging, is calling the "boat thief" a "jerk" the type of modeling that we want for citizens?

The other games face similar abstraction issues. In *Do I Have a Right?* current issues such as free speech, gun rights, and voting rights are trivialized by using examples such as the client Sam Colt, who says, "Last week Congress banned all guns except for water guns. I like hunting, but I can't hunt with a water gun. Do I have a right to a gun I can hunt with?" On the issue of suffrage, the character Taylor Townsend says, "My state has purposely made it much harder for Asian people to vote for governor, because my current governor says that Asian people don't know enough about voting. I'm Asian—do I have a right to vote?" This could be made into a relevant discussion of an issue and application of the 15th Amendment, but with only the information provided here, the player could be left with a trivial understanding of the amendment and the current issues where it applies today.

In *Executive Command*, every scenario our research assistants played involved a war being fought against an imaginary country (Neverland or Wonderland), but this war is not a conflict like any the United States has seen since World War II. This is a traditional war, formally declared and conventionally fought. Does such a scenario help players understand the nature of military conflict since the War Powers Act? Or the nature of the current conflicts that the United States is involved in? The goal in the game is that the players understand the roles of the executive branch, Congress, and the military (e.g., Air Force, Army), as outlined in the Constitution. Similar to the previous examples, however, certain scenarios in the game trivialize this important knowledge by using examples that avoid complexity and do not apply in the current geopolitical context (e.g., war on terror).

Goals in the Games vs Goals of Democratic Education

Two of the games, *Do I Have a Right?* and *Immigration Nation*, include issues that were almost entirely coded as being closed. These games are designed to help students learn the "correct" answer related to concepts surrounding constitutional rights and immigration law, respectively. However, as previously noted, using simplistic criteria for concepts and abstract examples is great for expediency but not for engaging young players in the types of messy problems that promote active citizenship. We are not arguing that the content and rules in the games are inaccurate, only that they are oversimplified and irrelevant to the contemporary political context. Since the goal of the games is to teach players to apply explicit rules that align with the textbook version of content included in most state standards, the game experience is not much different from that of many classrooms, where this content is also simplified and taught out of the contemporary context.

The other two games, *Executive Command* and *People's Pie*, had many tasks that were coded as being open, as they asked the

players to make decisions between two or more potential options. In *Executive Command*, seemingly open tasks appear from the beginning: A player starts by setting a primary agenda issue for the presidency, with options including deficit reduction, education, and security. The player also gets to make decisions on signing or vetoing legislation, make executive decisions on diplomacy, and fulfill the role as commander in chief for military matters. In *People's Pie*, the players set the levels of income tax, payroll tax, and corporate tax, as well as the retirement age for Social Security and Medicare. They then make decisions on which programs to fund within departments such as Agriculture, Financial Services, and Homeland Security, and whether or not to borrow money to help pay for any debt when they outspend revenue. For both of these games, winning is measured by the amount of citizen support or satisfaction that the players' decisions create. The goals of the games are to help students to recognize the various roles of the executive branch and the tensions involved in making federal budget decisions.

In both of these games, however, a different tension emerges. Both games include tasks that appear to be open and could potentially involve the types of decisions that ask players to weigh the "best case, fair hearing of competing points of view" that Kelly (1986) recommended for democratic education. However, despite these seemingly deliberative scenarios, the open decisions are actually designed with "correct" answers in mind that are reinforced by the feedback and the criteria for winning designed into each game.

The tension that emerges is the one between the goal of the game (winning through accumulating points or maintaining citizen satisfaction) and the goal of democratic education. The seemingly arbitrary reward system for "winning" in these games does not seem to be tied to the specific concepts or issues. Instead, it promotes attempts by the player to discover the patterns that will likely result in "winning" based on adherence to the rules. For example, we found that you can easily win *Executive Command* by approving all laws where the public will benefit and by quickly ending the war; in *People's Pie*, which is a complex game, you simply need to lower taxes, raise the retirement age, and fund small-budget projects to keep the citizens satisfied.

In addition to this pitfall, elements from both games also suffer from the fact that individual choices that seem open-ended up having a "more correct" answer. For example, if you select Security as an administrative priority in *Executive Command* and give a speech to a joint session of Congress to promote the issue, you are given two choices at each stage of your "speech" to try to get a high approval rating. The options you get, however, are not diplomacy versus using the threat of military force, or taking an isolationist versus an interventionist stance toward a nation that asks us to intervene. Instead, one legitimate perspective on the issue is paired with a rather ridiculous answer intended to be "wrong." In the case in Figure 2, the options are "I will work day and night to make sure that no terrorists attack this country" or "We should shut down all police stations and fire stations, so all police and firefighters can go on vacation." Similar to the earlier "closed" task games, here there is an obvious correct choice that is juxtaposed to an

obviously incorrect one. These options do not engage the player in weighing legitimate competing options but instead push a player toward a particular ideologically driven view on foreign policy and domestic security.

The legislative decisions in *Executive Command* offer more choice and more realistic examples, although none that would cause the player to weigh an issue from two different sides, especially as the bills that are sent for the president's signature are judged only by how popular they are with the public and have no ramifications in terms of the budget. In one scenario, a player was sent a bill titled "Preventing Climate Change" with three provisions: "Develop new technologies to help limit climate change"; "Research ways to control and reduce greenhouse gas emissions to limit climate change"; and "Encourage people to pollute a lot and then research what's happening." Instead of taking the intended path, which was to veto the bill because of the third provision and then wait for the bill to come back amended, our player approved all three clauses by signing the bill as is. She was awarded 25 points for each of the first items and deducted 40 for approving the third. This presentation of obvious right and wrong decisions, reinforced by the awarding or deducting of points, does not encourage the player to weigh political views in making any sort of thoughtful decision.

In *People's Pie*, the player has even more opportunity to make seemingly open selections, with feedback coming in the form of a

rise or fall in "citizen satisfaction." This game provides more realistic choices in projects to fund, but, as in *Executive Command*, seemingly valid funding programs are coupled with ridiculous ones. For example, programs under Homeland Security include the serious Disaster Insurance Program and the absurd Sniffing Cats program to "train cats to help customs officers." This is problematic because these games reflect real contemporary issues and are structured around content based on "textbook" concepts, similar to the two other games, but also include a mix of both trivial examples (e.g., sniffing cats) and political content with clear views (e.g., climate change) that can potentially influence the players' understanding of government and their views on particular relevant issues.

Further, the rules that warrant success in the game, such as gaining points or congressional or citizen approval, do not match the rules of society. The fictional worlds of the games lead to simplification of the issues and place the focus for players, even our undergraduate and law student researchers, on figuring out how to win the game rather than on the ramifications for cutting spending on entitlements (*People's Pie*) or for advocating a stricter foreign policy role (*Executive Command*). The game design thus focuses on intellectual work more in tune with behaviorism and the transfer of knowledge rather than constructivism and the active construction of knowledge and working to follow a path based on



FIGURE 2. Example of Policy Options in *Executive Command*

democratic deliberation. These games neither engage students in authentic deliberative activities nor engage them in realistic scenarios or data as they are designed based on apolitical textbook content instead of cases of political or civic engagement argued for by democratic educators (e.g., Hess, 2009; Parker, 2003).

Designed Experience, Affect, and Ideological Complications

In addition to looking at the affordances of design and the nature of intellectual work in the game, we also considered the overall experiences of players: a combination of their affective responses, the narratives that they constructed, and ideologies that may be reflected in their experiences. It is easy, given the interactive nature and design of these games, to see them as fun, engaging, and neutral. However, it is important to be aware that there are people behind the designs of the games with political views, values, goals, and objectives of their own (Raphael et al., 2010; Squire, 2006).

What are the overall stories that players construct through engaging with these games? That people coming through immigration include only “worthy” and “good” people such as those with technical skills, like computer programmers? That running a law firm means only defending people you know are on the side of right and that those people will always prevail? *Immigration Nation* and *Do I Have a Right?* may lead to some beliefs about their content that is simplified or naïve, and those beliefs will give students little understanding of the issues in today’s context of immigration reform or the battle over gun rights. These ideological messages are not clearly conveyed, but are instead built into game rules and content that are designed in many ways to mimic the neutral tone of a textbook.

For the policy-oriented games, the stories that are constructed reflect larger political views, but they don’t allow the players to construct their own views based on weighing real differences on issues. This was apparent in the example of the agendas selected by the president in *Executive Command* and their relationship to the larger message that the game sends about how to be a successful president. For example, one player selected Deficit Reduction as the primary issue agenda. As described, the players are given a series of choices between one serious statement and one absurd statement as they give their speech. These selections form a larger view on deficit reduction that players do not really have a choice about. In our example, the speech included:

- I am concerned about the high level of debt this country has . . .
- Reducing the deficit must be a national priority . . .
- We cannot leave this huge debt for our children and other future generations . . .
- Reducing the debt will take sacrifice and courage from all of us . . .

Although there likely are a lot of politicians on both sides of the aisle who may believe in these statements, they reflect views about the economy and fiscal policy from a particular perspective. There are many economists and politicians who believe running a deficit

and accruing debt is sometimes necessary in order to use funds to stimulate the economy. This is not a closed issue but an open one with legitimate competing points of view. The players of *Executive Command*, however, are not engaged in weighing these decisions.

Similarly, they have no diplomatic option to avoid war but must engage as a way to learn that the navy is used to fight battles at sea and the army is the force to stop Neverland’s invasion of Maine. One player remarked that it was

stressful . . . They want you to get that there is a lot more going on than making appearances and that when a crisis happens, like a war, that Congress doesn’t sleep while you handle the war . . . that you still have your education bills and all of these things that need to get to where they need to go.

In *People’s Pie*, our research assistant players would often rack up large debts in the first round of play as they were hesitant to deny funding to popular and important programs aimed at providing those in need with vital assistance or at investing in and improving the national infrastructure, in part because of the way it impacted their citizens’ satisfaction. One player remarked upon completion, “Wow, that was hard . . . Looking at the way I played the game . . . it is a good metaphor for the snowball effect that can occur [with government spending] that you fund one thing and then another, and pretty soon it is out of control.” The players empathized with members of Congress and the executive branch as a result of the challenges represented in the games. When you combine these affective reactions with the policy messages in these games—both in content and in the game design—a larger game narrative is formed, that narrative in this game’s case being that it is bad to accrue debt to fund even worthy programs. This is not the only message that may be taken from the game, but it is the one that is most likely to be experienced based on our repeated play of the game.

In terms of democratic education, these games introduce players to key concepts and knowledge, as well as major issues, but fall short of engaging them in the skills of developing, weighing, supporting, or acting on a given position—which is the stated goal of iCivics. For the most part, the player is not faced with decisions based on a fair hearing of competing points of view. Instead, there appears to be a “right” answer the game is designed to push the player toward.

Discussion and Implications

Our analysis illustrates the great potential of games such as iCivics to engage young people in learning civic concepts and assuming the roles of civic agents to develop empathy through an affective and designed experience. These concepts are also viewed as being one important characteristic of high-quality democratic education (Gould, 2011). This analysis also, however, describes the constraints of these games and how these tensions between game design and democratic education reflect larger tensions in the field. It also reflects the tension for organizations such as iCivics that want to both reach a broad audience, and therefore feel the need to align closely with state standards and textbook content, and hope to

work toward ambitious democratic education goals for producing active democratic citizens. It is important to note that this tension goes well beyond iCivics; it is present in almost any civic education curriculum or civic-based game.

The iCivics games we studied have the potential to meet some of the goals of democratic education. Specifically, the iCivics games place the player in a simulation environment related to government officials, which is promoted by Gould (2011), and the alignment with civic skills and roles in the framework presented by Raphael et al. (2010). However, two other key recommendations from this work are not reflected. The games do not fully guide players in the kinds of deliberation of controversial issues and engagement with different perspectives necessary for deliberative democratic education (Hess, 2009; McAvoy & Hess, 2013). The player is rarely if ever asked to weigh multiple positions and evidence on the same issue in a way that would promote the kind of “best case, fair hearing, of competing points of view” identified by Kelly (1986). Further, although the games align closely with middle-grades civic content, they do not align as well with civic skills nor do they actively ask players to apply what they have learned in the game to situations outside of the game—in terms of taking the kind of civic action indicative of strong democracy (Raphael et al., 2010).

These issues reflect larger issues in the field of civic education. These tensions exist in large part because there is no consensus about what the goals of citizenship education should be (e.g., content vs skills) nor what a “good” citizen looks like (Westheimer & Kahne, 2004). Therefore, the content to which the game is aligned, and which is present in most civic textbooks and curriculum, is written to appear apolitical and is not designed to engage young people in contemporary issues for fear of the perception that teachers are attempting to indoctrinate students toward particular political views (McAvoy & Hess, 2013; Hess & McAvoy, 2014). What iCivics games have the potential to do, however, is to at least engage students outside of the classroom in civic-related content and roles that may help them to understand the roles of government and important contemporary issues, even if not in the most authentic context or with the most accurate information. Given the limited access to democratic education in many areas of the United States, these games provide access to informal education that contributes to some key aspects of democratic education through an engaging medium.

Given the virtual and abstract nature of these games, however, what will young players take away from playing these games? The games represent major contemporary issues but are not designed to engage players in the issues in a way that represents the contemporary context. Will a young person think that taking on debt at the federal level is a bad but necessary evil? That the law is as simple as identifying cases where a client has a right and therefore will automatically win their case? That immigration officers identify good people who get to enter the country and bad ones who do not? That a good president is one who does things to keep constituents happy and the wars short regardless of cost in dollars or lives? They also do not prepare young people to engage in civic action in

today’s media driven political environment (Kahne, Hodgin, Eidman-Aadahl, 2016).

These narratives that players construct are the result of context, the players’ knowledge and experiences, and the designed experience created by game producers, experiences that often reflect the ideologies and realities of the time and place where the game was produced as well as the views of those who made it (Squire, 2006). For example, the designed affective response to *People’s Pie* we described—that taking on debt to fund programs was a necessary evil of sorts—represents a particular ideological view promoted often by conservative groups who favor austerity. Similarly, the examples of potential immigrants in *Immigration Nation* makes the issue of immigration seem as if it is a good/bad distinction in many ways and does not include the poor working-class immigrant attempting to access the United States in order to make money to support his or her family back home.

How can we ensure that the goal that Raphael et al. (2010) and others identified as essential when games are used in democratic education—of having young players apply the concepts and content from games to the world outside of the diegesis of the game—is met? Put differently, how can teachers take advantage of the affordances of iCivics and limit the constraints? Without the application of gameplay and concepts to contemporary issues, as well as a recognition that the games represent particular views on these issues, iCivics players may believe that Homeland Security really is trying to train sniffing cats or that there is only one sensible policy that a president can follow when it comes to defense. Game designers and educators need to collaborate with each other to find the best way to align gameplay with the types of specific skills necessary for democratic citizenship and outcomes where winning represents the goals of citizenship in a game that is still found to be fun and engaging. It may be that the kind of gamification of civic and governmental roles in the iCivics games may not be the best medium for preparing democratic citizens; simulations such as *The Redistricting Game* (<http://www.redistrictinggame.org/>) that represent more authentic contexts and data may be more useful for young people to develop the key concepts and skills for democratic engagement.

The most direct solution for the constraints of the games, and the one that the iCivics developers are counting on, is thoughtful teachers who will help players debrief their game experiences and apply their new knowledge to relevant real-world issues. However, as we know from many previous studies (e.g., Cuban, 1986, 2001), this assumption that teachers will seamlessly integrate new technologies and media into high-quality practice is not grounded in evidence. Although iCivics includes many quality lesson plans and resources on its site, these are more traditional lessons that extend from the content in the games but do not promote models or specific strategies for engaging students in playing and directly applying this content from the games.

The role of the teacher (or facilitator, mentor, or parent) in game-based pedagogy and curriculum is a major issue yet to be seriously addressed in much of the game-focused research. This is in part because the vast majority of this research is being done outside of classroom settings or by researchers in fields such as the

learning sciences, whose focus is on constructing students' learning environments with the games and not on large-scale implementation in schools. In order for iCivics to overcome the constraints described previously, the teacher needs to be central, and the resources that accompany iCivics online need to include more built-in scaffolding for teachers in the same way they do for players. For example, the iCivics site could provide prompts for students to think about while playing and questions or activities to help them debrief and reflect on their play.

In addition to helping teachers think about strategies for engaging their students in the games and questions to ask and ideas for debriefing the games, iCivics could use new media tools to help players tie the abstract issues to real-time data. This aligns with the ways in which many young people become informed of social and political issues and could be combined with developing skills in critically reading and understanding news and political sources. After playing *People's Pie*, students could be sent automatically to links to polls looking at what the public really views are priorities in spending or views on the retirement age or to graphs showing the real impact of decisions in these areas to be compared with what the player did in the game. There are limits on what can be done in a game designed to be easy to access and use, but one of the goals of using a game with the affordances of the iCivics games should be taking advantage of more dynamic and contemporary issues and data. It is likely that more recent iCivics games are working toward these goals. These types of engagements could more powerfully model the skills and knowledge of young democratic citizens engaging in the types of participatory politics using online and social media documented by Banaji et al. (2009) and Cohen and Kahne (2012).

In this way, the games are a first step to young people developing the concepts that can be used to participate in or take civic action. Even this, however, will likely require a role for a teacher or parent to help them reflect upon, and apply, the concepts that they learn in the games to those helpful for democratic participation. It is with these goals in mind that game designers, democratic educators, and researchers should work together to take advantage of the many affordances evident in the iCivics games to more strongly work toward the goals of democratic education.

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