Let the Games Begin: Civic Playing on High-Tech Consoles

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The author presents an overview of an emerging field that looks at the impact of video games on civic engagement. Some video games have explicit civics-related content and engage players in simulations of civically related projects, but most others do not. However, research has shown that video game playing engages players in civically oriented experiences that previous research has found to promote civic outcomes in classroom-based programs. These include helping and guiding others; learning about problems in society; exploring social, moral, or ethical issues; organizing groups; and making decisions about how a community, city, or nation should be run.

Playing video games is a popular activity among young people, and it has the potential to promote social and civic engagement. The term *video game* actually encompasses a gamut of human–machine experience, including computer-based games, online games played on the Internet, and console games (such as Xbox 360, PlayStation, and Wii). Simply put, any game with a user interface and a monitor screen may be considered a video game.

A report from the Pew Internet and American Life Project (Lenhart et al., 2008), the first nationally representative study of youth video game play, examined data from a survey of 1,102 youth between the ages of 12 and 17 and found that 97% of American teens—99% of boys and 94% of girls—play some kind of video game, with most players dividing their time between at least five categories of games such as racing, puzzles, sports, action, adventures, role playing, or other games. Approximately 76% of these youth play games with others at least some of the time. As such, available data suggest that video game playing is pervasive and universal among youth and that game playing is often social. In the Pew study, at least 38% of teen boy gamers and 22% of teen girl gamers play some sort of video games daily; and boy gamers tend to report playing for a longer period of time than girls, with 34% of boys and 18% of girls playing for more than 2 hr a day. This trend seems to be shared by teens of all ages. Of all teens in the study who reported playing video games on a regular basis, 54% of them were younger teens (12–14 years) and 46% were older teens (15–17 years).

Although recent trends point to a rise in computer-based games, console games remain most popular. The Pew survey reported that 83% of the teens in the study play console games, and 73% of them play computer-based games. Handheld and mobile devices are becoming popular as video gaming platforms, with 60% of surveyed teens owning a handheld device, and 48% reporting having played a game on their cell phone. Certainly, these numbers overlap as some teens play video games on multiple platforms.

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Game play on these platforms does not indicate ownership of these systems as many teens (65%) play video games in groups and with peers in the same room together. There were no differences found regarding the type of platform teens play on with respect to socioeconomic status, gender, or age. One exception regarded cell phone games; 53% of girls reported having played games on cell phones in contrast to 43% of boys. African Americans and low-income teens are more likely to play cell phone games. Again, not all teen players of cell phone games own cell phones, as approximately 21% of teens who play games on cell phones do not own a cell phone and thus are likely using a friend's phone to play.

Besides playing on multiple platforms, teens reported playing many different genres of games. More than half of all teen gamers (52%) play between five to eight different genres of games. Game genres include racing, puzzle, sports, action, adventure, rhythm/music, strategy, simulation, fighting, first-person shooter, role playing, MMOGs (i.e., massively multiplayer online games), virtual words, and others. Of these genres, racing games are the most popular (74%). Ethnic differences were found most significantly in choice of genre. African American teens are more likely to play racing games than White or Hispanic teens, and they are more likely to play sports and adventure games than White teens. Fighting games seem to be more popular among African American and Hispanic teens than White teens. But White and Hispanic teens are more likely to play rhythm games such as *Dance Revolution*. In the category of MMOGs, White teens seem to have a stronger preference than African American teens. Lower socioeconomic status teens are more likely than higher income teens to play racing games (80% vs. 70%), adventure games (72% vs. 63%), or survival horror games (40% vs. 28%).

Only a few years ago gaming was mostly viewed, in the best case scenario, as a waste of time and most commonly as a risky activity that might lead to antisocial behavior, aggression, and violence (Grüsser, Thalemann, & Griffiths, 2007; Sherry, 2001) as well as reinforced gender stereotypes (National Institute on Media and the Family, 2008). More recently, a growing body of research is starting to focus on "serious games" that might have a positive impact on young people (Squire & the Games-to-Teach Research Team, 2003). For example, there is increasing interest and expertise in developing and evaluating computer games for promoting

health outcomes (Kato, Cole, Bradlyn, & Pollock, 2008; Lieberman, 2001) and educational experiences (Gee, 2007; Shaffer, 2007). Lately, researchers, policymakers, and educators have also started to pay attention to the impact that video games might have on civic engagement. That is the focus of this article.

Video Games and Community

The Pew Internet and American Life Project's report found that 44% of youth play games that teach them about a problem in society, and 52% play games that cause them to think about moral and ethical issues (Lenhart, 2008). The report also suggests that youth who have these kinds of civic gaming experiences are more likely to be civically engaged in the offline world, and are also more likely to go online to get information about current events, to try to persuade others how to vote in an election, to become committed to civic participation, and to raise money for charity.

Although public debate often frames video games as either good or bad, research shows that the context in which the video games are played and the content of the video games matter more than the amount of play time. For example, researchers such as Williams (2006) suggest that the backdrop for the rise of social gaming is a decline in civic shared spaces for people to meet and converse face-to-face. Echoing Oldenburg's (1997) account of how "third places"—which are neither home nor work, and cross-nationally might include social clubs, taverns, piazzas, pubs, and public squares—are vital for community formation and maintenance, researchers propose that gaming, in particular virtual multiplayer games, come to satisfy the human need for community and social interaction (Steinkuehler, 2006).

However, the need for community and social interaction does not always lead to civic participation and civic engagement. Although in recent years there has been a surge of work on the positive power of computer gaming, the focus on video games and civic engagement is quiet novel.

Youth and Civic Engagement

Recent youth participation in the 2008 U.S. electoral campaign has sparked new interest and debate regarding youth engagement with civic and political activities. According to the Center for Information and Research on Civic Learning and Engagement (2008), youth voter turnout was estimated between 52% and 53% of all youth, an increase of more than 10 percentage points over the past decade. This is a new trend that brings good news as, until this election, youth were often described as lacking in civic participation and involvement in political life (Andolina, Jenkins, Keeter, & Zukin, 2002; Grantmaker Forum on Community and National Service, 2001; Keeter, Zukin, Andolina, & Jenkins, 2002; Michelsen, Zaff, & Hair, 2002).

This recent change in youth engagement trends might be related to the emergence of new forms of youth civic activities that are not necessarily recognized by the public. Levine (2007) cites political blogs, "boycott" movements, and transnational youth networks facilitated by new technologies as new venues and opportunities for youth to engage and lead. Yet, he contends that amid all these new activities, many young people still lack the skills and knowhow to carry debates and dialogues beyond their social networks to participate in politics and address public problems.

Research indicates that young people are more likely to engage in localized, smaller scale activities, such as volunteering and community work (Andolina et al., 2002; Galston, 2001), as opposed to longer term national-level activities. These findings come with research showing that adults are more likely to vote and be engaged in civic life if, as youth, they were involved in community-based organizations, extracurricular activities, and civic education programs in schools (Torney-Purta, 2001; Verba, Schlozman, & Brady, 1995; Youniss, McClellan, & Yates, 1997).

Many psychologists suggest that young people are at a developmental stage in which they start thinking about how they can relate as individuals to society and they begin to form their own sociopolitical orientations (Erikson, 1968; Yates & Youniss, 1999). If that is the case, how is this developmental need funneled into promoting civic engagement? Thus, researchers ask the following questions: What are the ways that people under the age of 18 get engaged in civic behaviors, and what other opportunities besides electoral politics do they have to experience themselves as members of a polity? (Sherrod, Flanagan, & Youniss, 2002).

Engaging with new technologies such as video games might provide some of these civic experiences. This is a particularly appealing option given that in the past 30 years there is a growing trend for the withering away of civic education in schools. Civic classes in the United States have declined and, when offered, the curriculum is limited to knowledge instruction and provides few opportunities for students to communicate about politics and share personal opinions on their own terms (Bennett, 2008). For example, a massive International Association for the Evaluation of Educational Achievement survey of 90,000 14-year-olds in 28 nations suggested that civic education programs limit themselves to imparting textbook knowledge without immersing students in experiencing civic life (Torney-Purta, Lehman, Oswald, & Schulz, 2001).

Video games offer the opportunity to bring civic education back to life by engaging young people in simulations of political processes and immersing them in experiences in which making civic-based decisions are highly rewarded. For example, researchers such as Squire and Barab (2004) have studied the positive learning impact of playing historical simulation games such as *Civilization*. In the next sections, examples of such video games and research-based programs are presented. However, as mentioned earlier, although video games might provide new opportunities for engagement, they might also obscure some of the intricacies of political decision making, which are hidden in the decisions made by game designers when conceiving game models that might be simple enough for simulations to work but do not take into consideration the complexities of political systems. In this sense, authoring kits that enable children to produce their own video games by modeling their own decision-making processes might yield better educational results in the long term, as research has shown that people learn better by making their own personally meaningful, computationally rich projects (Bers, 2006; Papert, 1980; Resnick, Bruckman, & Martin, 1996).

Preliminary studies have shown the potential of computational tools to engage young people in online civic life (Blumler & Coleman, 2001). Researchers such as Bers (2008a, 2008b), Earl and Schussman (2008), Montgomery (2008), Rheingold (2008), and Cassell (2002; Cassell, Huffaker, Tversky, & Ferriman, 2006) contend that the Internet can be a venue for helping young people

develop a sense of volunteerism and activism, for engaging in new forms of civic activities such as online petitioning and civic dialogues, and for promoting traditional types of civic activities such as voting. Several efforts have been put forth for understanding the potential of youth as e-citizens (Montgomery, Gottlieb-Robles, & Larson, 2004); however, the challenge remains in how to promote participation not only in the virtual world but also in the face-to-face world.

Some research is starting to tap into this challenge. For example, TakingITGlobal (Raynes-Goldie & Walker, 2008) is a popular online community that connects youth to find inspiration, access information, get involved, and take action in their local and global communities. TakingITGlobal, as other similar virtual communities, puts effort into using virtual worlds to make a difference in the face-to-face world. Along the same line, programs such as Student Voices explore the potential of the Internet for connecting young voters to the electoral process by providing access to Web-based information about candidates and politics (Woodard & Schmitt, 2002).

The Internet provides a new way for youth to create communities that extend beyond geographic boundaries, to engage in civic and volunteering activities across local communities and national frontiers, to learn about political life, and to experience the challenges of democratic participation (Bers, 2001, 2008a, 2008b; Bers & Chau, 2006). Video games tap into this potential by providing opportunities for young people to contribute to "participatory cultures" with low barriers to artistic expression and civic engagement (Jenkins, 2009).

Video Games and Civic Engagement

In this article, *video games* are defined as software, supported by any type of computer, console, mobile, or virtual platform, that involves interaction with a user interface to generate visual feedback on any display device by manipulating an input device, such as a game controller, joystick, keyboard, or mouse. Video games usually involve the use of different media such as animations, three dimensionality, sound, and so forth.

Different taxonomies of games take into consideration things such as quantity of players, technological infrastructure, goals, and structure of the game. Traditionally, games are defined as goal-directed and competitive activities conducted within a framework of agreed rules. This ample definition makes room for different subgroupings of games, which might include

1. Ludic games, in which players win by taking action and developing strategies;

2. Narrative games, in which players solve conflicts by choosing different paths of action; and

3. Simulations, in which players set themselves to observe emerging behavior patterns to understand how a particular system functions in different circumstances.

Serious Games

Whereas most video games are primarily designed for entertainment, a new kind of game is starting to emerge, *serious games*.

Serious games are software applications developed with game design principles for a primary purpose other than pure entertainment. For example, in 2004, a network of nonprofit directors, game developers, artists, and academics committed to social change through gaming formed the Games for Change (G4C) movement, a branch of serious games focused on social issues and social change. Since then, G4C organizes a yearly event dedicated to showcasing video games for social change—games about poverty, global conflict, climate change—and for bringing together "socially responsible game makers."

Research on civic engagement has not yet produced sufficient studies to find out whether serious games, and most specifically games for change, have more of an impact on civic engagement than entertainment games. However, in the future, as the game industry evolves and more games are developed to engage youth with civic content and processes, studies of this kind will be of great interest. However, before embarking on such an endeavor, it is necessary to articulate fully what is meant by the overarching construct of civic engagement.

Civic Engagement

Some conceive of civic engagement as simply being a good neighbor, obeying rules, and participating in the community, and others think of it as engagement with political processes, such as voting. In this article, the construct of civic engagement goes beyond a focus solely on the procedural aspects of democracy to one that embraces the many facets of a deliberative democracy. One commonly used definition of *civic engagement* that is given by the American Psychological Association (2009) is the following: "individual and collective actions designed to identify and address issues of public concern." Civic engagement can take many forms, from individual voluntarism to organizational involvement to electoral participation. It can include efforts to directly address an issue, work with others in a community to solve a problem, or interact with the institutions of representative democracy. Civic engagement encompasses a range of specific activities, such as working in a soup kitchen, serving on a neighborhood association, writing a letter to an elected official, or voting. A civically engaged citizen has the ability, agency, and opportunity to participate in one or many of these activities while engaging in "civic conversation" (Putnam, 2000); to develop civic knowledge, skills, attitudes, and behaviors; and to participate in community service, activism, and advocacy.

I organize the umbrella construct of civic engagement in four dimensions of civic experiences that game players might encounter: civic knowledge, civic conversations, civic attitudes, and civic behaviors. This typology is similar to the kinds of youth civic engagement identified by Flanagan and Faison (2001). In the next sections, I describe each dimension and give examples of video gaming experiences.

Civic knowledge. Civic knowledge refers to the set of content and processes that people must know to become informed citizens, such as understanding how the government and the political system work as well as their own rights and responsibilities. Although there is disagreement about the level of civic knowledge that people should have to be effective citizens (Carpini & Keeter, 1996), there is shared agreement that information is power, thus, leading to the inclusion of diverse forms of civics education in

public schools. Video games provide another venue for gaining civic knowledge. For example, games such as the 1987's *On the Campaign Trail*, developed at Kent State University's political campaign management program, engages students in decision making regarding the campaigns for United States Senate elections between 1970 and 1986.

Other games allow players to familiarize themselves with the processes involved in democratic societies, such as the government simulation game *Democracy*, first developed by Positech Games in 2005, with a sequel released in December 2007. The player becomes the president or prime minister of a democratic government and introduces or alters policies in seven areas (tax, economy, welfare, foreign policy, transport, law and order, and public services), as well as solves situations affecting factors such as crime, air quality, protests, and homelessness. *Democracy 2* extends the game by introducing an encyclopedia, which provides background reading, statistical data, and other information for making informed policy choices (Positech Games, 2009).

Other games, such as *Power Politics*, *President Forever*, *2008 + Primaries*, and *Doonesbury Election*, focus on domestic United States political campaigns. The players steer a candidate through an election cycle, developing policies and tailoring media appearances. Some of these games use real-time feedback to show how campaign strategies affect polling numbers.

Other games such as *Civilization*, first developed in 1991 and now converted into a series with several sequels such as *Civilization II*, *Civilization III*, *Civilization IV*, and *Civilization Revolution*, present players with the goal to ". . . build an empire to stand the test of time." The game begins in 4000 BC, and the players attempt to expand and develop their empires through the ages to modern and future times by taking the role of rulers of a civilization and competing with already existing civilizations. For example, players need to explore far lands, judge when to engage in war or diplomacy, make decisions regarding when and where to build new cities, and decide which scientific and engineering advances should be made to transform the cities to their maximum potential (Edwards, 2007). Later versions of this game allow for head-to-head play with other players.

Although games of this kind provide opportunities to situate players in a simulation role to make informed decisions, it is important to keep in mind that they are still simulations of civic processes with underlying rules preset by game designers. Thus, one of the challenges of using these games for promoting civic knowledge is to contextualize the rules of the games and the simulation parameters. For example, when games are played in social studies or government classes, the teacher's role involves providing the sociocultural and political context so that students can critically understand the differences and similarities with real-life civic processes.

Civic conversations.   Civic conversations are defined as the ability to initiate or participate in a respectful exchange of ideas about civic life, by taking into consideration the moral dimension and articulating a personal vision or set of values around civic life (Bers & Chau, 2006). Video games that involve multiple players interacting around issues involving civic processes are very likely to engage players in civic conversations. For example, games such as *SimCity*, a city-building simulation game first released in 1989, allow for multiple players in some of its releases and platforms. Thus, players engage in conversations about how to add buildings,

adjust tax rates, build the city's transportation systems and other infrastructure, and at the same time, provide responses to natural disasters such floods and tornadoes. Other games such as *Europa Universalis* offer similar kinds of experiences for players (Paradox Interactive, 2009), allowing them to build nations through the management of diplomacy, economics, and military strategy.

Civic conversations through video games are facilitated by the rapid development of platforms that involve synchronous and asynchronous multiple players. Some of these games are Web-based and do not include sophisticated 3-D graphics. For example, forum-based role-playing games of government and nation simulations, such as *Superpower*, put the players in the role of leaders of real-world nations (see http://itake.se/spcoldwar/). Players interact online in a dynamic forum and shape the world through actions passed through the administrators.

Civic attitudes.   Civic attitudes are defined as the predisposition to engage in reflection and informed judgment about civic issues and to move beyond one's individual point of view and self-interest in order to commit to the well-being of some larger group. Perspective-taking or the ability to appreciate someone else's point of view is an essential component for developing civic attitudes (Selman, 1980). Government or political simulation games engage players in considering geopolitical situations and the creation of domestic political policies. One of the earliest titles in this genre is *Balance of Power*, published in 1985, which engages players in considering policy decisions, rather than warfare, to shape outcomes at the height of the Cold War. Other video games such as *Conflict: Middle East Political Simulator* and *Crisis in the Kremlin* also encourage players to assume civic attitudes conducive to peace. Games such as *Superpower* and its sequel, *Superpower 2*, put the player in the seat of a state leader whose goal is to produce economic stability and prosperity. The game mainly evolves around decisions on foreign policies, and players are given real-life treaties so that they can understand their influences on different countries.

Although most of these games share similar characteristics with some of the games mentioned earlier when referring to civic knowledge, in particular with government simulation games that put players in the role of decision makers by teaching them about civic processes, a profound difference is that games in this category ask players to assume multiple perspectives to understand a conflict.

Civic behaviors.   Civic behaviors support and further the self, family, community, and civil society by promoting the common good and the formation of institutions and systems of social justice, equity, and democracy. Community service, activism, and advocacy can be examples of civic behavior. Currently, there are several Internet-based projects that encourage civic behaviors, such as online petitioning, grassroots community organizations, social networking, and fundraising sites. For example, programs such as DOTCOM (2009) engage Armenian, American, and Azerbaijani youth in creating socially conscious media that will affect communities across the United States and the Caucasus. The program is sponsored by the U.S. Department of State and supported by a global network of youth media organizations. Other times, technology enables large and sustained political networks, as in the formation of Indymedia, a global political information network that began during the Seattle protests against the World Trade

Organization in 1999 for protesters to communicate among themselves and produce their own news coverage (Bennett, 2008).

Organizations such as Global Kids created the Online Leadership Program that uses multiplayer virtual environments and simulation video gaming platforms to facilitate civic engagement in afterschool or informal learning experiences (Global Kids, 2006).

No popular video games yet tap into the potential of linking game playing with real-life civic behaviors and community participation. Yet, in the virtual world, both realms of experience have been successfully integrated. For example, there have been reports of political protests in game environments. The popular multiplayer game *World of Warcraft* was disrupted by demonstrations over vaguely defined class issues facing the warriors, resulting in protesters being banned from the game (Bennett, 2008) and "tax revolts" occurred in *Second Life* (Benkler, 2006).

Research suggests that there is evidence of young people adapting online behaviors from social movements when pressuring entertainment corporations regarding management and distribution of online products (Earl & Schussman, 2008). And work has examined the link between Internet behavior and voluntary group membership, suggesting that certain forms of Internet use may sustain and encourage community participation (Glavin, 2007). In the future, as the gaming industry evolves and serious games take on a more prevalent role in society, it will be likely that new games that promote face-to-face civic behaviors will emerge.

The multifaceted framework of civic engagement provides grounds for developing a rich understanding of the role that video games could play and for developing interventions and programs that provide educational opportunities beyond the traditional pathways of community service or volunteering activities.

In Which Ways Do Video Games Promote Civic Engagement?

Recent research has found that playing video games, even if they are not specially designed with the purpose of promoting social change, might have a positive impact on civic engagement. For example, the recent survey conducted by the Pew Internet and American Life Project found that more than four in 10 youth say that video games have taught them about a societal problem (Lenhart et al., 2008), and that game-playing youth were found to be more likely to search for information about current events online, advocate for political candidates, and raise money for charity. Even more, Kahne, Middaugh, and Evans (2008) found that "the stereotype of the antisocial game" was not reflected in the data from their study as "youth who play games frequently are just as civically and politically active as those who play games infrequently" (p. 27).

Although some research has looked at the potentially isolating effect of playing video games, the Pew report shows that more than seven in 10 youth, ages 12 to 17, play video games with others, and more than seven in 10 youth say they have helped others while playing video games. Thus, playing video games provides opportunities for socializing, an important element of civic engagement. Kahne et al. (2008) examined civic gaming experiences in relation to civics outcomes and found that the quantity of game play is not strongly related to civic and political engagement, but that some aspects of the social context of game play are related to civic outcomes, specifically playing games with others.

Research has established that several aspects of video game play parallel the kinds of civic learning opportunities found to promote civic engagement in other settings. For example, research has found that video games that engage youth in simulations of civic and political action, consideration of controversial issues, and participation in groups of shared interests, all activities that are done in school settings as part of civics education programs, are effective in encouraging civic participation (Kahne et al., 2008). Whereas some games have content that is directly relevant to civics, such as *SimCity* and *Civilization* that engage players in simulations of civic processes, other video games lack explicit relevant civic content but still might promote habits of mind that are critical for civic life. For example, multiplayer games involving virtual worlds such as *World of Warcraft* and *Everquest* engage players in governance, team building, leadership, and organizational processes.

There are also examples of research-based projects that use specifically developed virtual worlds to purposefully provide civic engagement opportunities for students. For example, *Quest Atlantis* embeds civic learning opportunities in the quest for students to find solutions to the problems faced by the fictional world Atlantis (Barab, Thomas, Dodge, Carteaux, & Tuzun, 2005). *Zora* provides an authoring toolkit for students to create, inhabit, and regulate their own virtual cities while engaging in discussions of moral values and finding personally relevant role models that can inform their decisions. The *Zora* virtual world provides a safe "social laboratory" for youth to experiment with some of the skills and attitudes needed to become good citizens (Bers, 2008a; Bers, 2008b).

Zora has been used in the Active Citizenship Through Technology (ACT) freshman-orientation program at Tufts University to encourage incoming students to explore the civic responsibility of a college campus and the relationship to its neighbors (Bers, 2008a; Bers, 2008b; Chau, Mathur, & Bers, 2006). ACT engages students in civic dialogue early in their academic experience and fosters a long-term peer-support network. It leverages youth's interest in Internet technologies to engage them in civic discussions and activities. In this 3-day preorientation program, participants use the *Zora* 3-D virtual environment to design and inhabit a virtual campus of the future to express concerns and ideas about community issues that interest them. ACT provides program participants a space for civic discussion, simulated electoral activities and deliberations, collaborative construction of virtual exhibits, and an imagined ideal campus to express their ideas. In addition, students participate in face-to-face activities to promote civic skills and learn about their college community.

The ACT program was conducted over 2 years. During their freshman year, students reported a higher likelihood than nonparticipating freshmen to increase engagement in activities that express their political and social viewpoints in face-to-face settings. Results suggested that regardless of participants' level of comfort with technology and their degree of engagement in civic life, students of various backgrounds benefited from the program. Findings indicated that participants showed an increased level of civic engagement regarding political voice by the end of the academic year, and that the program had a significant impact on their attitudes about political and civic issues. In contrast, our results (Bers & Chau, 2010) indicated that ACT participants did not differ significantly in their development of civic and electoral indicators

throughout the year when compared with control participants. This may be due to the specific focus on civic discussions and deliberations in *Zora* activities, whereas a lesser effort was put into the ACT curriculum regarding electoral and volunteering activities in real life throughout the year.

Conclusions

Today's youth are fascinated by new technologies and are avid video game players. Although a new trend in video game design focuses on developing serious games for social change, there is still a large market of video games that favor violence and anti-social behavior. However, studies have shown that, even in the case of youth playing with general purpose entertainment video games that involve them in a range of experiences from strategy games to first-person shooter games, there appears to be some positive relationships between video game playing and civic engagement. However, it is crucial to understand the social context of video game play in order to understand the potential of the gaming experience with respect to civic engagement, as well as the design aspects of the game itself as displaying features that might encourage civic engagement.

Thus, there is a need to further advance a research agenda that addresses questions such as the following: Which games are better than others? In which sociocultural contexts should they be played to have an impact on civic engagement? What kinds of civic interactions should games invite from players? What are the psychosocial characteristics of young players, in particular, their attitudes, predispositions, and previous knowledge about civics, that can be hindered or fostered by playing games? What is the role of parents, teachers, and other adults when children are playing computer games in terms of supporting long-lasting civic engagement? How do we purposefully design programs that leverage youth interest in technology and foster new ways of civic engagement and participation? How does one successfully integrate these technologies into existing educational programs so they can be scalable and sustainable? What kinds of games are most effective in encouraging youth interest and discussions of governance processes, rule making, community involvement, and other civic issues?

The potential of video games goes beyond the four walls of the classroom, thus making civics education more widely available, particularly during these times when there is a decrease of civics curricula in schools. Video games can go beyond providing knowledge and information, as they afford opportunities for learners to engage in civic discourse and action, supporting students to construct experiential knowledge through which they can become effective citizens.

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