

# **The Civic Implications of Kids' Participation with Digital Media Findings from Year 1**

Working Draft

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# **The Civic Implications of Kids' Participation with Digital Media**

## **Findings from Year 1**

### **Executive Summary:**

**The Study:** We surveyed a diverse sample of more than 2000 high school juniors and seniors in California about their civic commitments, capacities, and activities and also about their engagement with digital media. Longitudinal follow-ups will occur following the 2006 and 2008 elections. This analysis is derived from the first phase of the study. It describes the relationship between varied forms of digital media participation and a range of civic outcomes.

#### **Findings:**

*A. How one participates on-line is related to civic and political outcomes.*

- Gathering information on the internet was positively associated with civic and political commitments, capacities, and activities
- The relationship between playing digital games and civic outcomes depended on the nature of the game. Playing games that simulate violent or destructive social situations (like Grand Theft Auto) was negatively related to many civic outcomes – though it was positively related to political action. Playing games that simulate a variety of social and community situations and playing games with others were both positively related to political interest and to several kinds of action.
- Communicating via digital media was positively related to many civic outcomes such as the intention to vote, appreciation for diversity, and civic skills. It was also related to charitable action to political action and to civic and political engagement that employs digital media. These relationships were particularly strong for those who use social networking or related outlets (blogs, diaries, for example) to socialize.

*B. Experiencing both broadening and deepening civic and social connections on-line is related to related to civic outcomes.*

- We found that having on-line experiences that mirror Dewey's description of a democratic community (opportunities to connect with those who share one's interests AND opportunities to connect with those who endorse divergent perspectives and interests) were consistently associated with civic outcomes. We found that digital communication and some forms of game playing made experiencing this kind of democratic community more likely.
- Some are concerned that the internet will promote an echo-chamber where individuals interact only with those who share their perspectives and interests. We did not see evidence that this experience was common.

**Next Steps:** We discuss several broad questions that are raised by this first stage of analysis. We also discuss how the upcoming longitudinal analysis will examine 1) how digital media participation may be transforming public spaces, 2) how it is related to civic recruitment and later civic involvement, and 3) factors that mediate the impact of digital media. We also describe an upcoming related study of digital gaming among youth.

## **The Civic Implications of Kids' Participation with Digital Media Findings from Year 1**

### **Will Digital Media Transform the Civic and Political Lives of Young People?**

We have strong reasons to believe that digital media (such as internet, cell phones, and video games) are transforming multiple aspects of young people's lived experience. Will it also transform the civic and political development of young people? There are reasons, outlined below, to believe that it might—in both desirable and less desirable ways. This study examines whether and how young people's participation with digital media relates to their civic and political commitments, capacities and activities, and, by extension, the functioning of our democracy.

Although its relationship to young people's civic and political development is not clear, we do know that participation with digital media and with media more generally, is ubiquitous. On average, young people (8-18) spend approximately 1/3 of their waking hours with media, and an increasing proportion of this time includes internet and video games among other forms of digital media (Kaiser, 2005). The large majority of teenagers aged 12-17 use the internet (87%). Each day the typical 15-18 year old spends more than an hour on the internet, close to 2.5 hours each watching TV and listening to music, and ½ hour playing videogames and frequently multi-tasks engaging in one or more of these activities simultaneously (Kaiser, 2005). With the increasing availability of TV, video, radio, and magazine content through the internet (via computer, cell phone, etc), it seems likely the proportion of time youth spend with digital media will only increase in the years to come.

The benefits of such participation may be significant. With the advent of new technologies that facilitate communication, information access, and the ability of users to create and share media over the internet, scholars have called attention to the ways participation with digital media may enhance the intellectual, creative, social, and civic development of young people (Jenkins, et al, 2006). Young people who spend time on-line now have tools that allow them to access, modify, and create a wide array of media (written works, music, video, radio, art, games) and to share, learn about, and discuss those works well beyond their local geographic communities. At their best, these activities encourage young people to form diverse and productive social groups, to take on leadership roles, to explore different aspects of their identity, to develop creativity, to engage in collaborative problem solving, and to participate in public discourse in ways not previously available to them in every day life (Jenkins, et al, 2006; Livingstone, 2003; Gee, 2004).

The benefits to civic and political life may also be substantial. For example, digital media may dramatically expand users'/citizens' access to information in ways that spark their interest in or knowledge about civic and political issues. Some forms of participation with digital media appear particularly suited to facilitate individuals to be producers as well as consumers of perspectives on social issues and to open up vast possibilities for connection and dialog. Those who expand their social connections through on-line activities may be more likely to be recruited to work on civic and political issues. The social connections fostered by the internet (even when those connections do not revolve around explicitly political issues) have the

potential to link youth to the public sphere where dialog, debate, and identification of common interests takes place in ways that strengthen a sense of democratic community.

It is unclear how frequently any of these experiences happen for youth. Understanding whether and when youth have democratic experiences through digital media is crucial for understanding whether participation with digital media leads to forms of civic participation that differ in quality or provide more effective voice for young people.

While the positive civic potential of digital media participation is considerable, less desirable outcomes are possible as well. Participation with digital media likely won't always function to strengthen the civic and political development of individuals and the overall functioning of democracy. Indeed, some less desirable consequences may flow from participation with this medium. For example, participation might lead individuals to interact only with those who share their views – or some forms of participation might become a distraction, a way of spending time that leaves little time for civic endeavors. (See, for example, Sunstein, 2001; Van Alstyne and Brynjolffson, 2005; Nie and Hillygus, 2002)

At present, the civic and political implications of these new opportunities and experiences are not well understood. We have limited knowledge of how typical desired forms of participation are and whether, when, and how they may influence adolescents' civic and political development. These concerns are the subject of our study.

### **Background: Why study the impact of digital media on the civic and political outcomes of late adolescence?**

*The quantity, quality, and equality of young peoples' civic and political commitments, capacities, and engagement are less than desirable for a democratic society.*

The strength of our democracy will shape, in many respects, our ability to pursue a more productive, just, humane, and free society. And while democratic institutions are a necessary support for democracy, they are not sufficient. The commitments, capacities, and participation of citizens are also fundamentally important. Unfortunately, numerous studies have found that levels of informed civic engagement in the United States, particularly that of young people, are lower than desirable, and in many cases, are declining (Galston, 2001; National Conference on Citizenship, 2006; Niemi & Junn, 1998; Putnam, 2000). As a panel of experts convened by the American Political Science Association recently found, "Citizens participate in public affairs less frequently, with less knowledge, and enthusiasm, in fewer venues, and less equitably than is healthy for a vibrant democratic polity" (Macedo, et al., 2005).

Low rates of citizen participation are particularly pronounced among youth. For example, voting rates of those under age 25 in US Presidential elections have declined steadily from 52% to 37% between 1972 (the first election when 18 year-olds were given the right to vote in a Presidential election) and 2000 (Levine and Lopez, 2002). Similarly, youth interest in discussing political issues declined to their lowest levels since historic highs in the 1960's (Sax, 2000). Although young people's voting rates increased somewhat in the November 2004 & 2006 elections in the United States, youth voters remained roughly the same proportion of the total electorate (see CIRCLE, 2004)<sup>1</sup>. Furthermore, it is unclear whether this up-tick in turnout will be sustained and whether it has been accompanied by increases in related activities. Findings from a 2005 national survey of youth aged 15-25 found "less than 20% of young people from any surveyed racial or ethnic group participated in traditional political acts," suggesting that

increased voter turnout may not indicate an overall increase in political engagement (Cohen, et al, 2007).

These trends are troubling both because youth are under-represented in our political system and because developmental theory suggests that late adolescence is a critical period for development of sociopolitical orientations (e.g., Erikson, 1968). The concern is that if young people do not develop a sense of commitment to and capacity for civic and political engagement, they will be less likely to engage in such activities both as youth and as adults.

The good news is that some school and community based opportunities appear able to help reverse these trends. Youth who learn about and have opportunities to practice civic and political engagement tend to report greater interest in participation in civic and political life than those who do not. For example, a recently completed longitudinal study found that exposure to a set of civic learning opportunities<sup>1</sup> was strongly related to the development of young peoples' commitments to civic participation even controlling for prior interest, for academic and demographic factors, and for levels of engagement in families and neighborhoods related to these issues (see Kahne and Spote, Forthcoming). Unfortunately, it also appears that many youth do not have access to these kinds of opportunities in schools or elsewhere and those who do are disproportionately college-bound or in the highest academic track -- suggesting some inequality in distribution of civic opportunities (Kahne, Middaugh, & Croddy, 2007).

*It is unclear whether, when, and how digital media participation provides civic learning opportunities or promotes civic outcomes.*

Given that young people are engaging in fewer traditionally measured civic and political activities and spending increasing amounts of time engaged with digital media, understanding whether such activities facilitate, discourage, transform or are unrelated to civic and political participation is important. Current research that examines the relationship between internet use and civic and political engagement comes to varied conclusions.

Some recent research suggests "that participation on the Internet exerts a positive influence on political participation" (Weber, Loumakis, and Bergman, 2003, 39) and on indicators of civic engagement (Jennings & Zeitner, 2003). In contrast, Robert Putnam (2000) declares that "once we control for the higher educational level of internet users, they are indistinguishable from nonusers when it comes to civic engagement," (170). Reaching a similar conclusion, Bruce Brimber (2003: 24) writes that "[t]he new information environment has not changed levels of engagement in any substantial way," (cited in Lupia and Philpot, 2005; also see Davis, 1999). Cass Sunstein (2001) comes to a third conclusion -- that the internet will draw people away from the public sphere. This view aligns with Shah's (2005) contention that the Internet could undermine social connection through "time displacement and social withdrawal." Indeed, heavy internet users have been found to have fewer real-life social ties (Nie & Erbring, 2000) and to be more depressed, stressed, and isolated (Kraut et al., 1998).

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<sup>1</sup> These opportunities include: learning about problems in society, working on service learning projects, learning about current events, studying issues about which one cares, experiencing an open climate for classroom discussions of social and political topics, hearing from civic role models, learning about ways to improve their community, participating in simulations, and taking part in after school activities other than sports.

All three of these dynamics likely occur. The key questions are when and why. Indeed, one source of divergent findings may stem from the fact that much of this research treats internet participation as a uniform activity. Studies often measure how much time people spend on-line, but fail to distinguish between the kinds of activities in which individuals participate. The current internet user may participate in any number of activities ranging from playing games, to shopping, to watching TV shows, to blogging, and beyond. Furthermore, for any broad category of activity, the nature of that activity will vary depending on whether it is done in isolation or in interaction with other users, how the users interact with each other, and whether the skills and content learned in the activity have real life applicability. Given the variations in form and purpose of on-line activities, it is hard to imagine that one global dimension of “internet use” will serve as a coherent predictor of civic and political activity. Instead, it is likely that some of these forms of engagement with digital media spur social activity, develop social networks, and prompt informed participation while others serve as alternative to authentic social interaction, foster greater inequality in access to information, and diminish young peoples’ social integration. Thus, as Lupia and Philpot (2005) argue, it is important to identify when, why, and for whom different forms of participation with digital media foster different civic outcomes.

In addition to questions of quantity (whether experiences with digital media increase or decrease young peoples’ engagement in civic and political affairs) and questions of quality (does participation with digital media foster skills, knowledge, concern for the ways policies impact others, appreciation of diversity, etc) are questions of equality. For example, Putnam, among others (see Fukuyama, 1999), has called attention to egalitarian nature of on-line interactions. Specifically, Putnam notes that on-line interactions have been found to be less hierarchical and status-conscious and that “women...are less likely to be interrupted in cyberspace discussions,” (Putnam, 2000, 173). But the Task Force on Inequality and American Democracy of the American Political Science association (2004) finds evidence that the internet is “reinforcing existing inequalities because it is disproportionately accessible to – and used by – the affluent, non-Hispanic whites, and the highly educated.” (p. 8). In short, we need to better understand how or when engagement with digital media augments young peoples’ civic and political knowledge or capacities to mobilize others, for example, and the contexts in which the differential access young people have to this medium exacerbates or helps level various inequalities in the civic and political realm<sup>2</sup>.

### **The Focus of this Study:**

The first phase of this study – the results of which are reported on here - aims to build on and deepen our understanding of the issues outlined above. In particular, our survey assesses how high school students in California are participating with digital media and quantifies several key qualities of that participation. We examine how common potentially important experiences are and for whom and we assess the relationship between these forms of participation and varied civic outcomes (commitments, capacities, and activities). For example, how does student use of the internet to get information relate to their levels of civic and political knowledge, controlling for other factors? Similarly, we want to see if some forms of participation with digital media

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<sup>2</sup> Weber, et al. (2003) find, for example, that the internet exacerbates the socioeconomic inequality that already exists with respect to civic and political participation.

offer more (or less) opportunity to connect with others in ways that foster an experience that aligns with a Deweyan conception of a democratic community (a community that exposes participants to discussion of divergent perspectives and that builds a sense of common interests)?

In the second and third phases of this study we will be aided by our ability to draw on a longitudinal data set that we are currently constructing. This will strengthen the analysis outlined above by helping us better understand the relationship between digital media experiences and civic outcomes. Specifically, we will look at how schools and parents may serve as mediating influences that shape participation and its impact. We will also examine whether varied forms of participation – by virtue of the social networks they develop, may facilitate recruitment into civic and political spheres and/or the development of relevant skills.

In addition, through a variety of mechanisms, digital media may radically expand young people's access to an audience for their perspectives. Indeed, the internet has dramatically expanded and in some important ways transformed the ways ideas, images, and sounds can be produced, blended, and shared. It may have also altered the skills young people develop and the ways they enact leadership. Thus, in addition to seeing how participation with digital media may be related to traditional forms of civic and political engagement, we will also be examining the degree to which it has created new forms of engagement and a new public space, the qualities of these forms of participation, how common they are, and how they relate to a range of traditionally recognized civic and political outcomes.

## Method

*Design & Sample:* The data discussed in this report draws from a larger study of youth civic engagement that began in 2005. The study employs both a cross-sectional and longitudinal design. The cross-sectional sample with both digital media and civics items includes includes two cohorts—1) 898 CA high school seniors from the class of 2006 and sampled in the Spring of 2006 and 2) 1253 Juniors, from the class of 2007 and sampled in the spring of 2006 creating a total sample of 2151. For the longitudinal sample, we follow a sub-sample of each cohort (those who volunteered contact information) and survey them at two time points following survey administration (Winter/Spring of 2007 and Winter/Spring of 2009). At these same times, we will also follow up with roughly 550 high school seniors from the class of 2005 who did not answer questions related to digital media during their initial survey but said that we could contact them to ask them to be part of our longitudinal study. Phase one of the study (the findings reported in this paper) draws on the surveys of juniors and seniors sampled in the Spring of 2006. Phase two of the study will draw on the longitudinal follow-up collected in Winter/Spring, 2007 (following November, 2006 election). Phase three of the study will draw on the longitudinal follow-up collected in Winter/Spring 2009 (following the November, 2008 election). (contact authors for a full demographic description of the sample).

*Measures:* The California Survey of Civic Education was constructed drawing on scales widely used in the political science and civic education literature, prior work of the authors (much of which was created in collaboration with Joel Westheimer) and items created for the purposes of this study. The survey measures are organized into four categories: 1) Civic Commitments, 2) Civic Capacities, 3) Civic Activities, and 4) Civic Opportunities. Factor (principle components) and reliability analyses (Cronbach's alpha) were performed on sample of 2,366 surveys (from

spring, 2005) for all multi-item scales (alphas range between .67 and .83). Each of the scales presented here were confirmed as single factors (contact authors for a full list of scales).

As part of this project, we have created new measures associated with the use of digital media. These were added to the survey in the Spring of 2006. Specifically, we created measures to provide indicators of:

- *Quantity of Digital Media Experiences*: How and how much young people use digital media for such activities as communication, information gathering, and play (via games).
- *Civic Participation Through Digital Media*: The extent to which young people use digital media for civic ends such as organizing and discussing social and political issues and activities.
- *Experience of a democratic community through participation with digital media*: Do young people have opportunities to experience a democratic community through their participation with digital media? For example, does their participation with digital media expose youth to new ideas or perspectives, to meet others who share core commitments, to develop or join networks through which they can work to advance desired goals, to enter into dialogs)?

These items were created in close consultation with leaders of the MacArthur-funded ethnographic study, “Kids’ Participation with Digital Media” so that our findings can inform and strengthen the overall effort.

### **Conceptual/Analytic Strategy**

Our study is premised on the belief that both the form and the qualities of experience matter for trying to understand the relationship between civic and political participation. Given space constraints on our survey, our analytic strategy does not aim to conceptualize or operationalize all relevant differences in form and quality of digital media experience, but it does aim to highlight some and to explore their significance as a means of advancing the kind of conceptual and analytic work needed to better understand the multiple ways participation with digital media may support (or in some cases constrain) varied civic and outcomes.

The first phase of this study (the findings we are reporting on in this paper) examines the relationship between digital media participation and civic/political outcomes in two ways. First, we examine how broad categories of digital media participation (communication, information seeking, and gaming) relate to varied civic and political outcomes. Then, because we believe that the form and focus of these uses are likely related to desired outcomes in different ways, we examine how different forms of communication and gaming relate to these outcomes. We examine, for example, whether the kind of game that is played matters when it comes to the association between digital media participation and civic and political outcomes.

Second, we examine the extent to which young people experience a Deweyan Democratic Community through their on-line activities. This focus reflects our belief that the experiential qualities of digital media participation can influence civic and political development. John Dewey (1916) argued that the quality of a Democratic Community can be assessed by two

standards 1) whether individuals are connected to different groups of people and ideas – opportunities that might expand commitments and awareness, and 2) whether individuals are exposed and connected to people who provide a sense of community and identity through interests that are consciously shared. We examine whether and when digital media participation provides the experiences identified in Dewey’s framework because of its clear links to democratic theory, to the relationship between democracy and education, and because these two experiential goals are particularly well aligned with much that is emphasized by proponents of digital media.

At this point in time, of course, it is an open question whether participation in on-line activities develops these kinds of democratic communities. Many are hopeful that digital media will pull highly diverse individuals and groups of people together for meaningful exchange (Sproull & Kiesler, 1992) – but this outcome is hardly assured. As noted earlier, some suggest that by erasing geographic boundaries and allowing people to associate by interest alone, the internet runs the risk of creating an echo chamber in which people only connect with others who share their opinions and their particular interests and allows them to avoid those with whom they may disagree (Sunstein, 2001; Van Alstyne and Brynjolffson, 2005; Nie and Hillygus, 2002). However, it is possible that on-line groups based on one shared interest (as in a fan site, a math forum, a wedding site, etc.) are simultaneously diverse in life-circumstances, political perspectives or otherwise. In addition, it is unclear whether participation in on-line communities with democratic qualities translates into increased commitment and capacity for civic and political participation (on-line or otherwise).

We plan to explore these dynamics by examining 1) the extent to which youth report experiencing a democratic on-line community, and 2) the relationship between participation with different forms of digital media (games vs. communication vs. information seeking) and the likelihood of experiencing a democratic on-line community.

## Findings

### I. *Variations in individuals’ participation with digital media relate to differences in those individuals’ civic commitments, capacities, and activities.*

We ran regressions to test the relationships between varied forms of participation with digital media and varied civic outcomes, controlling for demographics. The findings are outlined below. See Figure 1 for a summary of statistically significant results and see Table 1a in the appendix for complete regression results.

- Communication: We found that communication practices were positively related to 2 of 5 civic commitments (intention to vote & appreciation of diversity), to civic and political activities both on-line and off (e.g. charitable action, political action, and DM Organizing), and with self-reported civic skills but, not with other civic capacities.
- Information: Using the internet to get information was related to 4 of 5 civic and political commitments (commitments to participatory citizenship, political interest, intention to vote, and appreciation for diversity) and capacities (including having civic skills & political knowledge). In addition, the magnitude of these relationships to commitments and capacities was greater than was the case for communication. Information seeking was

- also positively related to engaging in charitable action and to on-line civic and political action, though not to real-life political action.
- **Games:** Interestingly, we found that playing games was negatively related to many civic commitments (commitments to participatory citizenship, political interest, & intention to vote) and to having civic skills. There were no statistically significant relationships between gaming and civic or political activities. However, a negative relationship between game playing and charitable activities was approaching statistical significance as was a positive relationship between game playing and on-line democratic organizing.

Figure 1

	Civic Commitments					Civic Capacities		Civic Activities		
	Participatory Citizen	Political Interest	Intention to Vote	Social & Political Trust	Appreciation for Diversity	Civic Skills	Political Knowledge	Charitable Action	Political Action	Civic Participation Through Digital Media
Communication			POS		POS	POS		POS	POS	POS
Information Seeking	POS	POS	POS		POS	POS	POS	POS		POS
Games	NEG	NEG	NEG			NEG				

We also examined whether different forms of communication and gaming were related in different ways to these civic and political outcomes. What we found underscores the importance of attending to the differing ways in which individuals use digital media and the differing ways they experience that use. For gaming, the significance of these distinctions is the most pronounced.

**The relationship between game playing and civic outcomes depends on whether one plays alone or with others:** Frequently playing games on a computer or console was negatively associated with commitments to civic participation and to social and political trust. It was also negatively related to civic skills, to charitable actions, to political actions, and to civic and political engagement that employs digital media. In contrast, frequently playing games with others was positively associated with commitments to civic participation, to social and political trust, and to charitable action, to political action, and to civic and political engagement that employs digital media. Interestingly, playing games alone was positively associated with political knowledge while playing with others was negatively associated with political knowledge. See Figure 2 below for a summary of statistically significant results and see Table 1b for complete regression results.

Figure 2

	Civic Commitments					Civic Capacities		Civic Activities		
	Participatory Citizen	Political Interest	Intention to Vote	Social & Political Trust	Appreciation for Diversity	Civic Skills	Political Knowledge	Charitable Action	Political Action	Civic Participation Through Digital Media
<i>Communication</i>										
Use DM to communicate with friends/family.				NEG						
Use blogs/social networking to socialize.			POS							POS
Use digital media to share or create media.									POS	POS
<i>Information Seeking</i>	POS	POS	POS		POS	POS	POS	POS		POS
Use the internet to get information.	POS	POS	POS		POS	POS	POS	POS		POS
<i>Games</i>										
Play games.	NEG			NEG		NEG	POS	NEG	NEG	NEG
Play games with others.	POS			POS			NEG	POS	POS	POS
Play strategy games?		POS						POS	POS	POS
Play Grand Theft Auto, etc.	NEG	NEG	NEG	NEG	NEG	NEG	NEG		POS	
Play MMORPGS										

**The relationship between game playing and civic outcomes depends on which games are played:** After controlling for demographic variables, academic performance, and for whether a game is typically played with others, the relationship between game playing and civic outcomes varies dramatically depending on the game. Playing games that simulate a variety of societal situations and processes (daily life, creating a city, etc), as do the Sims and Civilization, was positively associated with political interest, but not with other civic commitments. There was a marginally significant and positive relationship to students' sense of their civic skills, but no relationship to their political knowledge. However, playing these games was positively associated with charitable action, political action, and to civic participation through digital media. In sharp contrast, there were statistically significant negative relationships between playing games like Grand Theft Auto, Driv3r, or the Getaway (which simulate societal situations but often focus on violent or destructive activity) and all 7 of our measures of civic and political commitment. Playing these games, (again, with controls for demographics and academic performance) was negatively associated with students' sense of their civic skills, and with their political knowledge. Playing these games was not related to charitable action or to civic and political engagement that employs digital media. Interestingly, it was positively associated with political action. Finally, we asked students about whether they played multi-player on-line games like Halo II and World of Warcraft. We found no statistically significant relationships to any of our measures.

**The relationship between communication activities and civic outcomes depends on the form and focus of the communication activities:** When it came to action, there were several differences between types of communication in their relationship to civic and political outcomes. Using digital media to share or create media was positively related to political action – in fact, it was the form of digital media participation we identified that was most strongly related to political action, but the other two forms of communication were unrelated to this outcome. And, while using email to communicate with families and friends was unrelated to civic participation through digital media, the other two forms of communications were positively related to this outcome.

II. *Experiencing both broadening and deepening civic and social connections on-line is related to related to civic outcomes.*

Some have expressed concern that digital media might constrain civic bonds and democratic society by promoting an echo-chamber where individuals interact only with those who share their interests or values. Others have argued that digital media might foster societal understanding by facilitating interaction among those with divergent interests and values. In examining these issues, we employ a Deweyan conception of the features of a democratic community. Dewey argued that the strength of a democratic community could be assessed by the degree to which it provided opportunities for interaction among those who share one's interests and full and free interplay with those who hold divergent views and priorities.

**Experiencing a Democratic Community was positively associated with civic and political commitments, capacities, and activities:** We began by testing the hypothesis that differences in the way on-line activity is experienced relates to differences in civic outcomes. This investigation reflects our interest in how particular experiential qualities of digital media participation may relate to various civic and political outcomes. As detailed in Table 2 there was a consistent and statistically significant positive relationship between reports of experiencing a Deweyan Democratic Community on-line and all civic and political commitments, capacities, and activity. In other words, with controls for demographic and academic factors in place, those students who reported experiencing a democratic community on-line were also more likely to report higher levels of civic and political commitments, capacities, and activities. To illustrate, when we compared the responses of students with high levels of on-line experiences of democratic communities to those with low levels of on-line experience with democratic communities, we found that 57% of the High Democratic Communities group agreed they were interested politics compared to only 39% of the Low Democratic Communities Group. Similarly, 81% of the High Democratic Communities group agreed that it was important to be involved in improving their community, compared to 74% of the Low Democratic Communities group. Furthermore, 25% of the Low Democratic Communities group reported “never” participating in volunteering compared to 16% of the High Democratic Communities group. Of course, this relationship may not be causal, but it is interesting to note that experiencing these opportunities is consistently associated with a broad range of civic outcomes.

**Participation with digital media leads some young people to experience an on-line democratic community, but such an experience is not guaranteed:** To examine whether and when participation with digital media provides youth with experiences with an on-line democratic community, we first looked at the extent to which youth in our sample reported opportunities to connect with those who share their interests and with those who hold divergent interests<sup>3</sup>. We found that twenty-six percent of the sample reported experiencing both kinds of interaction. 24% reported rarely experiencing either of these two kinds of opportunities. Interestingly, few students, only 5%, reported conditions that have been characterized as an echo chamber -- frequent interactions with those who share their interests but infrequent interactions with those who hold differing perspectives. Similarly, few students, only 7%, reported experiencing opportunities to interact with those who hold differing perspectives but not opportunities to interact with those who share their perspectives. Consistent with these findings, we found that the group of items we associated with experiencing a democratic community -- which requires exposure both to those who share their perspectives and to those who do not -- formed a single measure (one factor) with a relatively high inter-item reliability (.84).

We believe this indicates something interesting and important about the qualities of digital media experience. First, we do not find that digital media is promoting an echo chamber or what some have called “cyberbalkanization” (VanAlstyne & Brynjolffson, 2005). Only 5% said they had many opportunities to connect with those who share their perspectives but few opportunities to connect with those with differing perspectives. Instead, these results indicate that some forms of participation provide exposure to both those with similar and divergent perspectives and that some forms of participation provide neither. And while much deeper examination of these issues is certainly warranted, the analysis that follows provides some indications regarding the forms of participation associated with these differing qualities of experience.

**Some forms of digital media use enhance the chance that a young person will experience an on-line democratic community more than others:** Given that substantial numbers of young people do not experience an on-line democratic community, while others do, we used regression analyses to test whether differences in the form of digital media participation account for some of the variation in the likelihood that youth experienced an on-line democratic community. The findings are outlined below. See Figure 3 for a summary of statistically significant results and see Tables 3a & 3b in the appendix for complete regression results.

- Communication: Controlling for other forms of DM participation, the more young people communicated on-line the more likely they were to report experiencing a Democratic Community through digital media. In addition, because we believed that the form and focus of this communicative behavior might matter, we examined how different forms of communication related to experiencing a Deweyan democratic community. We found that some types of communication via digital media were more strongly associated with experiencing a democratic community on-line than others. Specifically, while all of the forms of communication we looked at appeared positively related to experiencing a democratic community, the use of blogs, on-line journals, social networking sites (like My Space), wikis, web communities, and auction sites to share or create media were more

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<sup>3</sup> All students reported at least some experience with on-line activity.

strongly related to experiencing a democratic community than socializing with friends or family via digital methods (see table 3b).

- Information: Gathering information over the internet appears to be a relatively solitary affair. Controlling for other factors, young people who spent time using the internet to access information were very modestly more likely to report experiencing a democratic community (see Table 3a). This relationship disappeared altogether in the more detailed item analysis (see Table 3b). On one level, this isn't surprising. Much research and fact gathering is done individually. At the same time, this finding indicates that the internet is not currently fostering collective forums related to information gathering and that using the internet to gather information does not increase the likelihood that one will enter into discussions with others about that information on-line. Of course, this does not mean that the ways the internet makes information gathering more efficient might not support civic and democratic participation in other ways (for example, as individuals learn more about issues they might become more motivated to be civically engaged) – it simply means that this practice does not appear to foster such engagement by providing an experience within a democratic community.
- Games: Understanding the degree to which playing games on-line provides opportunities to experience a democratic community is complex. Overall, and with controls for the demographic and academic characteristics of individuals, those who reported playing games on-line were more likely to also report experiencing a democratic community (see Table 3a). This finding masks some potentially important differences, however. Some gaming experiences appear to promote experiences consistent with a Democratic Community while others do not. For example, some games such as the Sims and Civilization simulate dynamics associated with community life and societal processes. Perhaps not surprisingly playing these games appears to provide opportunities to experience a democratic community. In addition, some ways of playing games (with others) were positively associated with this democratic experience. Playing on a computer or console was negatively associated with experiencing a democratic community. Once we controlled for the fact that multi-player games like World of Warcraft or Halo 2 or games like Grand Theft Auto were played with others, these games were not related positively or negatively to this outcome. In short, it appears that a nuanced assessment of gaming in relation to experiencing a democratic community is needed. The positive association between gaming and experiencing a democratic community stems in some cases from content (games that simulate a variety of community and societal activities) and from the social networks that many (but not all) games foster. (see table 3b).

FIGURE 3

	Regression Model 1: Democratic Quality of Digital Media Participation	Regression Model 2: Democratic Quality of Digital Media Participation
<b>Communication</b>	<b>POS</b>	
Use e-mail, text messaging, or instant messenger to communicate with friends or family.		<b>POS</b>
Use blogs, diary, or social networking sites (like My Space) to socialize with people.		POS <sup>4</sup>
Use blogs, on-line journals, social networking sites (like My Space), wikis, web communities, and auction sites to share or create media.		<b>POS</b>
<b>Information Seeking</b>	<b>POS</b>	
Use the internet to get information.		
<b>Games</b>	<b>POS</b>	
Play games with other people.		<b>POS</b>
Play strategy games (like The Sims, Civilization).		<b>POS</b>
Play Grand Theft Auto, Driv3r, or The Getaway.		
Play World of Warcraft, Halo II or other multi-player on-line games.		

### Exploratory Discussion

This largely exploratory phase of the study examines the relationship between varied forms and qualities of participation with digital media and varied civic outcomes. We aim to create a basis for firmer and clearer hypotheses that can then be tested and examined through more formal longitudinal and experimental designs as well as through qualitative case studies. Indeed, we must underscore that the cross-sectional nature of our data limit our insight into the nature of causal relationships. If we find, for example, that playing a particular kind of digital game is associated with a particular civic commitment, that does not mean that playing the game caused that commitment – though that is one possibility. It could also be that individuals with that commitment are drawn to the game or that a third, unspecified factor, prompted both the commitment and game playing activity<sup>5</sup>.

Our goal is to explore and consider possibilities, to expand and better frame our thinking, and to ask better questions about the relationship between participation with digital media and civic and political development of young people. The discussion that follows aims to highlight questions and hypotheses that have emerged from phase I of our study. As a starting point, the study demonstrates the degree to which generic statements or investigations into the impact of digital media or even the impact of broad forms of that media such as communication or game playing may obscure important variation within that given form. For that reason, the issues raised below focus on better understanding that variation and its relationship to civic outcomes.

<sup>4</sup> Marginally significant  $p < .1$

<sup>5</sup> For example, while we have been able to control for many demographic factors, we are not able to assess whether those who play simulation games like the Sims and Civilization were drawn to them because of their civic interests or whether playing the games promoted political interest. We suspect that both dynamics are operative – that civically minded youth are drawn to civically oriented games like the Sims and to playing with others and that those experiences, in turn, further socialize these young people towards civic commitments, capacities, and activities.

**Of the broad forms of digital media participation, information seeking was most strongly associated with civic outcomes. Why?** Since information seeking appears to be a relatively solitary affair (it is not strongly related to experiencing a democratic community) our hypotheses must focus elsewhere. It may be that those who are interested in the world around them (and committed to participation) spend more time on-line seeking information about a variety of things. In addition, and this is something we will examine in the next phase of the study, those who spend a lot of time looking up information may be more likely to become aware of social issues or political activities or to be recruited into varied forms of civic and political activity.

**Why was using blogs, diary, or social networking sites, wikis or web communities to share or create media related to political action when it wasn't related high school students' civic commitments or capacities or to charitable activities?** In fact, though not statistically significant, sharing and creating media in this way was negatively associated with political interest, but positively associated with political action. It would be important to know more about the sub-set of youth that engage in this activity. Is it that the nature of their civic and political commitment and capacities are not well captured by our measures? If so, how so? Might it be that the capacity or skills needed to create media in this way draws one into political activities (or perhaps leads to recruitment into political activities) even when political interest and commitments to participation are not particularly strong? This is something we will examine in phase 2 of the study. In addition to its impact on the volume of activity, it may also be that this kind of media creation and distribution – something that has become far more common as a result of digital media – is an example of the way that digital media is transforming civic and political engagement.

**How should we understand and explore the attitudes and actions of youth who play games like Grand Theft Auto, Driv3r, or the Getaway?** Those who play these games have markedly lower expressed commitments to civic participation than those who play other games. Indeed, it appears that those who play such games account for much of the broader negative associations between game playing and civic commitments and skills. But, interestingly, these individuals are more, not less, likely to be politically active and they are no different from others when it comes to charitable activities – hardly the portrait of alienated anti-social individuals. Again, this raises many questions. Is there something about these games that lessens individuals' sense that they have civic commitments, their desire to express civic commitments, or which appeals to those who already are less inclined to express civic commitments, despite their actual likelihood of participating? Obviously, many possibilities exist. Qualitative study may be particularly well suited for unpacking some of these dynamics.

#### Next Steps:

The next phases of this study aims to deepen our understanding of the relationship between digital media participation and civic and political outcomes and, where possible, to strengthen our ability to identify causal relationships.

For example,

*Studying Recruitment:* In the next phase of this study we will look at whether different forms of digital media participation promote civic and political outcomes by providing opportunities for recruitment into civic and political activity. Verba, Scholzman, & Brady (1995) identified requests for participation (issued by coworkers, churches, and/or non political organizations) as an important predictor of political activity. It is possible that digital media participation exists as a new mode of association (in addition to work, church, and CBOs) through which young people may be recruited for political participation (through social networking sites, email, information seeking, etc). In examining this dynamic during phase two of our study, we will take advantage of having pre measures of civic and political commitments. Thus, we will be able to see if high and low users of a various on-line practices who began the study with similar levels of civic and political interest are differentially recruited into civic and political activities and whether this participation is associated with the development of relevant skills and commitments. We will also ask if individuals learned about varied civic and political opportunities for engagement through their on-line activities. To the extent that they do, we can examine the profile of these individuals.

*Studying Mediators:* Drawing on our longitudinal data we will also look to see whether having a teacher or teachers during one's senior year who provides support, encouragement or direction when it comes to engaging with digital media influences the ways and degree to which students engage with digital media and the impact of that engagement, holding constant prior civic commitments and levels of digital media participation. For example, teachers might encourage students to engage with media to learn about, discuss, or produce perspectives on civic issues. This analysis will help us gain a clearer sense of the ways teachers (and potentially others such as parents) may help guide and support productive participation with digital media. We will also be able to assess the degree to which any helpful practices are distributed among differing groups of students.

*Studying Gaming:* While space on this survey limits our ability to significantly expand our examination of different forms of engagement (playing different games) and differing qualities of that engagement, we are hoping to explore these issues more fully in an upcoming study of youth gaming and its relationship to civic outcomes. In particular, we plan to examine the opportunities for civic skill development (leadership, collaborative problem solving, etc.) that some games may provide. In addition, we want to see if personal psychological traits (such as tendency toward hostile attributions) and parental actions may influence game playing and mediate the impact of gaming experiences.

*Studying DM Participation and Later Civic Involvement:* We have found that DM participation is associated with varied civic commitments and activities. Drawing on our longitudinal data we hope to deepen our understanding of whether causal links exist and, if so, the nature of these causal pathways. One such pathway may involve recruitment (noted above) but others exist as well. We will examine these links quantitatively by examining whether particular forms of digital media participation may be related to varied civic outcomes once one controls for initial levels of civic and political commitments, capacities, and activities. If it turned out, for example, that a given civic outcome such as political interest is positively related to experiencing a higher than average level of on-line democratic community even after controlling for the initial level of

interest that may have led a student to such an experience, we would have greater confidence that such experiences do indeed foster political interest.

*Transforming civic and political public spaces:* Those studying participation with digital media frequently point out that digital media may not just promote more frequent interactions or facilitate civic and political outcomes, digital media may also transform the nature of interactions and, more generally, the nature of civic and political public spaces. We therefore hope to gain a sense of how often and in what ways young people are taking part of civic and political actions on-line (through blogging, social networking sites, etc) and the ways these individuals are similar or different than those who engage civically or politically through more traditional means? We are also interested in some of the potentially unique forms of skill development and collaborative experience (such as media creation and distribution) that digital media participation may provide and hope to gain a better understanding of ways particular experiences may help foster particular skills and ways those skills may relate both to attitudes and behaviors.

*Equality of participation in consequential digital media activity.* In the second and third phases of this study, we will identify forms of participation with digital media that foster or constrain civic or political development. We will conduct analysis that examines whether groups with differing demographic and academic characteristics are equal participants when it comes to forms of participation with digital media that appear strongly related to civic and political development.

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