

**Educating Digital Citizens:
The Influence of High School Civics Instruction**

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As Americans increasingly use digital media and technology to engage in politics, there is a growing need to teach these skills in the classroom. Civic education classrooms, an important location for political socialization, are a good fit for instructing the next generation of citizens in the skills necessary for digital engagement. Using data from a 2014-2015 original survey of civics teachers and their students, this study analyzes how well high school civics courses prepare students for digital engagement. Teachers were surveyed about their use of instructional methods involving digital technology. Students were asked about their attitudes toward political participation and the likelihood of future engagement. Results indicate that students who took civics from teachers who incorporate digital pedagogies into their classroom report having greater confidence in their ability to participate and a higher likelihood of engaging. However, an open and active class climate most effectively develops student participatory orientations.

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Americans increasingly use digital media to engage in political life. Citizens communicate with officials, participate in election campaigns, take part in community affairs, share information and opinions, and engage in protest activities via digital platforms. Still, many citizens, including young people who are open to innovation, do not make the connection between digital media use and politics. They lack the requisite competencies required for effective and responsible digital political engagement.

The secondary school civics curriculum is a logical locus for the transmission of digital political engagement skills. However, schools generally have been slow to incorporate digital politics meaningfully into the civics curriculum, focusing instead on more traditional aspects of engagement, such as voting and community work. Restricted resources, lack of teacher training, limited instructional time for civics, and uncertain outcomes can preclude schools from integrating digital media for political engagement into classes. Civic educators must ensure that they do not shortchange the basics--Constitutional principles, institutional structures, and fundamental political process--in favor of pedagogic novelties. Further, instructors increasingly find themselves competing with technological devices for students' attention, making them reluctant to embrace the source of the distraction.

Teaching students to be digital citizens goes beyond simply using technology as an instructional tool in the classroom. It requires fundamental changes in the learning environment that emphasize personalization and customization as opposed to general instruction. It calls for an open classroom climate that fosters civil discussion and debate. It necessitates integrating digital resources into the curriculum in a manner that facilitates engagement in political life including and beyond acquiring information. At the same time, it requires teachers to develop

mechanisms for digital instruction that ensure students remain engaged with the lesson rather than playing on social media.

The requirements of democratic engagement have increased with the digital revolution, placing greater responsibility on the schools. Thus, this paper addresses the broad research question: To what extent does high school civic education prepare students to engage in politics via digital media? The study examines whether or not high school civics classes have a demonstrable influence on students' self-professed confidence in political engagement and propensity to participate in politics. It uses data from an original 2014-15 survey of teachers and students in Indiana to empirically examine civic education for digital citizenship.

Shifting Citizenship Paradigms and Civic Education

Civic education is a critical facet of the broader political socialization process by which people develop their citizen identities and acquire their political worldviews. It constitutes intentional political socialization that involves explicit programs of instruction administered by identifiable agents and occurs within a formal institutional context. Citizenship training can be accomplished through the interplay of various agents, among them the family, peers, social groups, labor organizations, religious institutions, political parties, the judicial process, the military, and the media. Schools occupy a distinct position among these agents as they are charged with preparing young citizens through deliberate, institutionalized lessons and programs. At present, schools have the greatest potential to productively take on the task of educating citizens for political engagement. Civics instruction in junior high and high school can impart lasting democratic proclivities and prime citizenship orientations that develop over a lifetime. Exposure to basic information about government and democratic processes in adolescence provides a foundation for the further acquisition of political knowledge and greater development

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of civic skills in adulthood (Niemi and Junn, 1998; Galston, 2001; Milner, 2010; Campbell, 2006; Delli Carpini and Keeter, 1996). A little bit of civic education can go a long way toward promoting civic consciousness and political engagement (Owen, 2008; 2013).

Civics classes long have provided a training ground for civic responsibility and engagement. Teachers impart the knowledge of political institutions and processes necessary for informed and responsible political participation. They encourage active engagement through experiential learning. Civics courses offer opportunities to link classroom studies with real world experiences through service learning, internships, hands-on civics programs, and extracurricular activities. Classes and programs can provide a conduit between students and their communities, and facilitate volunteerism and service (Hess and Torney, 1967; Langton and Jennings, 1968; Carnegie Corporation and CIRCLE, 2003; Johaneck, 2012; Crittenden and Levine, 2013).

Schools face numerous challenges as they seek to meet the demands of 21st century citizenship. They have been the locus of citizenship debates since the early days of the republic, as the civics curriculum comes to reflect changes in the political fabric (Shafir, 1998; Lagemann and Lewis, 2012). Democracy has become more complex, and requires greater knowledge and technical competency to negotiate. Media--both traditional and digital--play an increasingly prevalent role in the political socialization process, often incidentally. The mass media bombard the public with political messages through news, information, and entertainment programming. Schools have the potential to teach students to be critical information consumers. Importantly, digital media have transformed the character of communication and the nature of political participation. Citizens can use digital media to create and distribute political content and engage in politics in ever-expanding ways. They have renewed capacity to subvert established political

hierarchies. In this constantly unfolding communications environment, people must be able to scrutinize the glut of competing, confusing, polarizing, and frequently misleading messages about democracy and citizenship. They also must acquire the skills necessary to take part in the evolving digital public sphere (Sanford, 2007; Dahlgren, 2009; Owen, et al., 2011; Owen, 2014). At the same time, the very notion of what constitutes a citizen is shifting from one focused on conformity and obedience to one emphasizing engagement and individual expression (Thorson, 2015). Schools are charged with translating shifting concepts of citizenship into political practice.

21st Century Citizenship

In America over the last century, political participation and expressions of citizenship have changed. Schudson (1998) observes that in the early 20th century good citizenship was marked by strong party identification, an adherence to the rule of law, and belief in the necessity of voting. In short, a good citizen believed in duty to the government and structures of authority. As the nation changed, so too did political participation. The middle of the century saw the rise of group-based “identity politics” as well as acceptance of subversive protest activity as an important check on governmental infringement on citizens’ rights.

Today a politically engaged citizen looks much different. The realm of political participation has expanded (Kahne, Middaugh, and Allen, 2015; Thorson, 2015; Gainous and Wagner, 2014; Wells, 2015), includes behaviors that challenge traditional notions of political behavior (Dalton, 2006, 2015; Copeland, 2014; Hooghe and Oser, 2015). Political and community participation are intermeshed in the minds of many people (Gil de Zúñiga, et al., 2014). At the same time, media technology use and its proliferation into all aspects of life is greatly increasing. Engaged citizens may participate by buying local produce, donating money

to a non-profit's Kickstarter campaign, signing an e-petition, talking about politics online, and a host of other activities that reflect their personal political beliefs. Authors employ different terms to describe these emerging citizenship norms as a move away from 'dutiful citizenship' (Schudson, 1998; Bennett et al., 2009) and towards a 'self-actualizing' (Bennett, 2012), 'critical' (Norris, 2011), 'monitorial' (Schudson, 1998), 'engaged' (Dalton, 2015), or 'assertive' (Dalton and Welzel, 2014) citizenship.

The shift away from the "dutiful citizen" toward the "self-actualizing" model is natural for today's youth (Mihailidis, 2014). Scholars have documented the decline in political participation among young people (Putnam, 2001; Cook, Page, Moskowicz, 2014; Verba, Schlozman, and Brady, 1995). However, these trends are largely apparent for traditional forms of political participation, like voting and campaign engagement (Bermudez, 2012). Inglehart and Welzel (2005) claim that younger age groups are more critical of political institutions, and instead prefer an individualized form of engagement that allows them to express their personal values and preferences. Bennett (2012) observes that despite the continued efforts of institutional authorities to press traditional political practices and ideals on younger generations, they are increasingly unlikely to find receptive audiences, as Millennials and digital natives instinctively conduct their politics in the same manner they conduct much of the rest of their lives—online.

Digital natives, who have been "born digital," and whose lives are fully immersed in technology (Palfrey and Gasser, 2008; Mihailidis, 2014; Cunningham, 2007; Shah and Abraham, 2009), exhibit different sets of technological skills than generations before. They use new avenues to engage, as social media allow them to seamlessly align the information they gather from peer-to-peer networks to the political information they encounter through both media

outlets fostering conversation and the spread of information (American Press Institute, 2015). However, a gap exists between young people's understanding of media as a social tool and its potential to be used for civic engagement (Mihailidis, 2014). Young people may feel adequately equipped to cultivate social networks, but they require further training on how these same information sources and network platforms can be used to engage politically. There is a need for novel strategies for teaching citizenship practices and creating media literate citizens.

Media Literacy Education in Civics Classrooms

Media literacy education teaches students “how to decode contextual media messages in film, music, television, corporate advertising and communications technology” and gives them the tools to understand the “influence and impact the media have on their lives” (Vraga et al, 2009: 71). Greater media exposure and social networks that foster conversation and engagement provide both advantages and challenges for today's young citizens. In order to maximize the effective use of digital tools and minimize the influence of vast negative, uncivil media messages on students' perceptions of politics and government, media skills must be approached in the classroom. Kellner and Share (2005) provide a model for a media literate individual that includes three criteria: 1) the ability to access media in an informed manner; 2) comprehension of the messages conveyed; and 3) the ability to create media content with a clear understanding of the message, delivery, and implications attached. These criteria can be applied to digital media literacy instruction for civics. Students can be taught to access and evaluate the vast amount of political information that is disseminated through a proliferating number of channels. More of a challenge is developing instructional methods that will encourage students to create and distribute their own political content responsibly and effectively.

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As media continue to shape political conversations and opinions through the spread of information across myriad platforms, it is vital that students acquire the skills to decipher messages and make informed decisions when preparing for civic life. Media literacy must be directly addressed for students to recognize that it takes a cognitive effort to decipher media messaging (Vraga and Tully, 2015). However, these complex skills are rarely taught explicitly in civics classrooms. Owen (2014) finds that technology is inconsistently incorporated across curricula, leading to students developing many different habits for media use. Further, Buckingham (2005) discovers that media literacy training is more of an implied aspect of using media in the classroom, rather than an area given specific focus.

The lack of media literacy training for teachers presents a challenge in the classroom. In order to teach media use for civic life, teachers of civic education are expected to have greater knowledge than their students about media tools and effects, as well as how to use media technologies to engage. The most recognized barrier to media literacy integration is the lack of resources and professional development for educators to teach media use for politics. A Center for Information & Research on Civic Learning & Engagement (CIRCLE) report revealed just 39% of 720 American civics educators surveyed “reported knowing ‘a lot of resources’ to teach students how to sort fact from fiction in a digital age” (Godsay and Sullivan, 2014: 6). Similarly, 80% indicated that they were at least somewhat interested in having more resources to teach topics such as media literacy (Kawashima-Ginsberg, 2014a). While only a third of civics teachers surveyed felt “very confident” in covering media literacy, the overwhelming majority felt that teaching media literacy is critical for students to become effective consumers and sharers of information in the political sphere (Kawashima-Ginsberg, 2014b).

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Maintaining an open classroom climate is key to establishing media literacy skills, and is conducive to civic learning. A class environment where students feel comfortable expressing their ideas encourages students to develop democratic capacities, including political knowledge, efficacy, and voting intentions (Harwood, 1992; Campbell, 2006, 2008; Gainous and Martens, 2012; Beaumont, 2011; Voight and Toney-Purta, 2013; Hess and McAvoy, 2015), especially when combined with traditional teaching methods (Martens and Gainous, 2013). Open classroom discussion, especially in civic education and social studies, increases students' likelihood to engage in class, express their opinions, and develop intentions to participate in civic life in the future (Kahne, et al, 2013; Ehman, 1980). Students can influence their less motivated peers to aspire to active citizenship (Ichilov, 2007). Instead of approaching skill development as a process of transference from teacher to student, students are given a space to explore media and the platforms to access it by asking questions and working with their peers. An open classroom allows for students to create their own best practices in using media for civic engagement.

Complimenting an open classroom environment, active pedagogies that incorporate media components can contribute to the development of media literacy, civic dispositions, and political skills (Milner, 2010). Studies of secondary school civic education programs that include a media component find that students develop habits of attending to political media and engaging in discussions. Research on Kids Voting USA (Chaffee, 2000; McDevitt and Chaffee, 2000; McDevitt and Kiouisis, 2006) and Student Voices (Pasek, et al., 2006; Pasek, et al., 2008) reveals that while neither program had a direct influence on voting, participants came away with a heightened sense of political awareness and an increased inclination to follow political news. These tendencies contribute to the development of higher levels of political efficacy which can lead to participation. Further, digital media literacy education is associated with higher levels of

online political engagement and exposure to diverse opinions among high school students (Kahne, Lee, and Feezell, 2012; Kahne, Middaugh, and Allen, 2015). The positive influence of civic education on citizens' political use of social media continues into adulthood (Owen, et al., 2011).

Hypotheses

Teaching students to engage in politics effectively via digital technology is not at the forefront of the civic education agenda for most high schools. Digital media literacy training for civics is rarely integrated into the curriculum. However, instructors are using digital technology in their teaching which may transfer to civic orientations, even indirectly. Civics instructors routinely maintain an open class environment and employ active learning strategies for instruction which can encourage interest and engagement in government and politics. Thus, we test the following hypotheses in this study:

H₁: Students whose teachers employ digital media instructional techniques in their civics classes will develop a greater propensity to use digital media to engage in politics than students of teachers who do not use these methods.

H₂: An open classroom environment is conducive to students developing a propensity to use digital media to engage in politics.

H₃: Students whose civics class involves active learning techniques will be more likely to develop a propensity to use digital media to engage in politics than those whose civics class do not involve active learning.

H_{3a}: Civics programs and classes that incorporate active learning as a routine part of the curriculum are more likely to convey participatory orientations to students than standard civics classes.

Data

This research employs data from a study of high school teachers and students in civics, social studies, and American government classes conducted in Indiana during the 2014-15

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academic year. Survey data on students' attitudes toward political engagement, their propensity for future engagement, classroom climate, and the civics classroom pedagogies used by their teachers were collected. Teachers provided data on their instructional methods for each civics class that they taught.

Teachers and students from multiple school sites across the state of Indiana were enrolled in the study in the fall semester of 2014. Schools with teachers who instruct classes using the *We the People* (WTP) curriculum were recruited to participate. WTP is a long-standing curriculum intervention that has involved over 28 million students and 75,000 teachers in all fifty states since 1987. The program instructs students in the foundations and institutions of American government, and is distinctive for its emphasis on Constitutional principles, the Bill of Rights, and Supreme Court cases. Students take part in simulated congressional hearings that engage them in a range of learning activities. Civics instructors who had not gone through the WTP professional development program constitute a comparison group. Twenty-one teachers from twelve high schools took part in the study. In three of the schools there is only one instructor who teaches all of the civic education classes. The WTP teachers taught other civics/social studies classes in addition to their WTP class with one exception. The schools vary in size, location (urban/suburban/rural), and type (neighborhood/selective enrollment/technical; public/private). The student samples per school range in size from 39 to 169, with a mean of 85 students.

The comparison group teachers were matched to the extent possible with the WTP teachers based on their educational background and years of experience. The WTP and comparison group teachers in the study are highly comparable on these indicators. The average number of years teaching civics—twenty—is identical for each group, and ranges from 5 to 36

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for the WTP teachers and 7 to 34 for the comparison group teachers. 27% of the WTP teachers have bachelor's degrees and 73% have advanced degrees (master's/law degree). 33% of the comparison group teachers hold bachelor's degrees and 67% have master's degrees. All of the teachers in the study had participated in professional development of some type. The WTP teachers took part in five to seven day WTP summer institutes that conveyed the content knowledge and specialized skills required of instructors in the program. These teachers also had follow-up services, including one day seminars and engagement in a network of WTP instructors.

Teachers completed a baseline survey online in September 2014 prior to the administration of the student surveys. The questionnaire included information about their educational background and teaching experience, the characteristics of their school, their teaching philosophy, the educational resources to which they have access, their pedagogy, and their student assessment techniques. For this study we use questions that measure the extent to which teachers employed pedagogies that encourage digital political engagement, such as having students access government websites and contact government officials via online platforms.

Teachers administered pretests to students online near the beginning (early September) and posttests at the end (late December) of the fall semester 2014 during class periods. There are no confounding factors in the study, as the WTP teachers had no contact with the comparison group students, and the tests were administered to all students during the same time period in each school. Close contact with teachers was maintained by the researchers throughout the study in an effort to minimize sample attrition. All teachers were provided with a stipend for participating in the study, and there was no teacher attrition. Students who were absent could make up the test on another day. Thirty-eight students dropped out of the study, for an overall

attrition rate of 3.6%. There is no evidence of differential attrition for the comparison or intervention groups, or for particular schools.

Complete pretest/posttest data were collected on 1,014 students. 663 students were in classes taught by WTP teachers; 386 of these students were enrolled in the *We the People* program and 277 took a traditional civics class. 351 students took civics with nonWTP teachers. The vast majority of students (84%) took civics as a required class. 58% of students took *We the People* as a required class and 42% took it as an elective. 399 (32%) of the students were enrolled in an Advanced Placement (AP) class. 51% of students were taking WTP as an AP class. There are no statistically significant differences in the gender composition of the students in the comparison and intervention groups. The majority of students in the sample are white. However, the comparison group has a greater percentage of black students than the WTP teacher groups, which have more Asian American/Pacific Islander students. All groups have approximately the same percentage of Latino students.

Operations

We employ two sets of dependent variables in this analysis representing the degree of political confidence students have to engage in politics as a result of their civics class and likelihood that they will engage in specific aspects of political life. The core independent variables consist of measures of teachers' instructional use of digital media, classroom climate, classroom pedagogies, and class type. We also include controls for students' grade point average (GPA), grade level, and gender in the analysis. (Question wording and index reliabilities appear in Appendix A.)

Dependent Variables

Political Confidence

Students were asked how prepared they felt to engage politically as a result of their civics class. The study includes three items tapping their confidence to: 1) use social media to engage in political and civic affairs; 2) handle a problem in their community; and 3) to take part in politics. Each of these items is measured on a scale ranging from 1 “very unprepared” to 4 “very prepared.” These variables only appear on the posttest.

Political Engagement

The political engagement measures represent students’ reports of the likelihood that they will engage in a particular political activity in the future. We examine six dimensions of political engagement: 1) digital engagement; 2) contacting; 3) campaign engagement; 4) voting; 5) community engagement; and 6) activism. Students were asked how likely they would be to engage in 24 activities each measured on a five point scale where a low score corresponds to “not at all likely” and a high score to “extremely likely.” This study is especially concerned with digital media engagement. The measure reflects students’ inclination to use social media to express an opinion on an issue, share views with others, and engage in a political campaign. It also includes a question about students expressing their views about politics on a website, blog, or chat room. As a basis of comparison, we include five established forms of engagement. Contacting is an additive index that combines two items—the likelihood of contacting someone in government who represents your community and contacting a newspaper, radio, or TV talk show to express an opinion. The campaign engagement index is composed of five items gauging the likelihood of respondents wearing a campaign button, working on a candidate’s campaign, volunteering for a political party, trying to convince others to vote for or against a candidate, and

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working as a political canvasser. Voting is an index of students' disposition to vote regularly in presidential and local elections. The community involvement index consists of three questions representing students' inclination to volunteer, get involved in community issues, and work with a group to solve a problem. Finally, the activism index consists of six items: signing a petition, working to change unjust laws, participating in a boycott, refusing to buy clothes made in a sweatshop, participating in protest activities, and participating in events where young people express their political views.

Independent Variables

Teacher Digital Score

Teachers were asked a battery of nine questions ascertaining whether or not they employed instructional methods conducive to digital political media literacy. These methods include having students access online news sites, critically evaluate online news, use e-government resources, hold online issue discussions, contact government officials using digital tools, use campaign and political party websites, share ideas via a digital platform, create social media posts, create and post video content online. An additive index ranging from 3 to 9 was constructed from these items. Teachers answered these questions for each class that they taught. We assigned a corresponding teacher digital score to each student.

Classroom Climate

Classroom climate indicates the amount of freedom students feel they have to express themselves during instructional periods. The measure gauges students' perception of the openness of their classroom to student input, voicing opinions, discussion about political ideas, teacher-student disagreements, and student-student disagreements. The classroom climate data were collected on the posttest. We constructed an index consisting of seven items scored in the

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direction of an open classroom. These items were adapted from prior works, especially the IEA Civic Education Study (see Torney-Purta, et al., 2001; Campbell, 2005). The classroom climate index ranges from 0 to 29.

Instructional Methods

The survey includes five items that account for the type instruction respondents experienced in their civics class. Students were asked to what extent their instruction was based on lecture, textbook, or current events-based learning. The study also includes questions about whether or not classroom and community-related activities were part of respondents' civic education. Classroom activities include simulated hearings, moot court, debates, and other forms of active classroom pedagogies. Community-related activities take into account actions that involve students beyond the classroom, such as contacting public officials, attending community meetings, and service learning. Each of these survey items is measured on a four point scale indicating if respondents' civics instruction never/rarely (1) or always (4) included the approach.

Class Type

We employ four class type variables in the analysis. The questionnaire includes dichotomous items indicating whether or not a student had taken a *We the People* class or an AP course. There is a degree of overlap in these measures, as some students took WTP for AP credit (21%). 31% of students took either a WTP or an AP class, and 48% took neither a WTP nor an AP class (48%). We also take into account whether a student had taken a class with a WTP teacher (59%), as WTP teachers in the study taught traditional civics and social studies courses in addition to WTP classes. Prior research indicates that students who have taken classes with WTP teachers gain more political knowledge (Owen, 2015a) and develop a heightened sense of democratic norms and dispositions (Owen, 2015b) than students with other instructors. Further,

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students in AP and honors classes are more likely to be instructed in information literacy than those in standard civics courses (Kawashima-Ginsberg, 2014a). The questionnaire also ascertained whether the student had taken civics as a required (83%) or an elective class (17%).

Grade Point Average

Studies have shown that grade point average (GPA) is positively associated with outcomes from civic education classes, including factual knowledge gain (Botsch and Botsch, 2001; Champney and Edleman, 2010). Thus, we include GPA as a control in our multivariate analysis. In cases where students have earned AP credit, their GPA can be higher than 4.0. GPA in this study has been normalized, and is measured on a 4 point unweighted scale to achieve consistency across schools.

Grade Level

Students in the study are primarily seniors and juniors. Grade level is a dichotomy coded as 1 for juniors and the small number of students in lower grades and 2 for seniors. 83% of the students in the sample are seniors. The younger students are not from a single class, but are distributed across schools. It may be the case that students in lower grades who take civics before their senior year are especially interested in the topic and motivated to engage in political life.

Gender

Studies demonstrate long-standing gender differences in political engagement. These differences typically favor men, although women tend to have a stronger sense of civic duty and turn out to vote with greater frequency. Gender effects can be mitigated to some extent by education and other social factors (e.g., Verba, Burns, and Scholzman, 1997; Norris, 2002; Coffe

and Bolzendahl, 2010). A control for students' gender is included in the multivariate analysis. Gender is coded 1 for female and 2 for male.

Analysis

We begin our analysis by ascertaining that civic education positively influences students' propensity to engage in politics. While our focus is on the digital realm, we include analyses of more established forms of political engagement as a basis for comparison. Next, we examine the extent to which teachers use digital media instructional techniques conducive to instilling political confidence and a desire to participate. We then conduct bivariate analyses of the relationships between teachers' use of digital instructional techniques, classroom climate, instructional methods, and class type and the political confidence and engagement measures. Finally, we perform multivariate OLS regression analyses of teacher digital score, class climate, and class type on the confidence and engagement indicators.

Generally we find that civics instruction has less influence on digital engagement than on the more established types of participation. An open and active classroom is most conducive to the development of all types of participatory orientations. Class climate is overwhelmingly the most important factor influencing students' political engagement. Teachers' use of digital pedagogy is positively related to confidence and engagement in the bivariate analyses, but the relationship is relatively weak and disappears in some of the multivariate equations. In fact, teacher digital media score is not a significant predictor of digital media confidence or political engagement in the regression analyses. Students who take a class with a WTP teacher whose professional development conveys active learning pedagogies are more likely to engage politically. Similarly, taking a WTP, AP, or an elective civics courses predicts student political activation.

Civic Education and Political Engagement

Civic education has a positive influence on the development of political confidence and the propensity to engage in politics. As Table 1 indicates, a majority of students believe that they are a lot or somewhat better equipped to engage in politics through digital media, to work to solve a community problem, and to participate in politics as a result of taking a civics class. Students report being somewhat less confident to engage in politics than to engage in digital politics or solve a community problem. 35% of students indicated that they feel only a little or no better prepared to participate in politics, compared to 24% for community problem solving and 20% for digital engagement.

Table 1
Political Confidence Measures Frequencies

Since taking this class, how well prepared are you?	Digital Engagement	Community Problem	Participate in Politics
A lot better	32%	38%	32%
Somewhat better	48%	39%	33%
A little better	14%	18%	22%
No better	6%	6%	13%

n=1102

Table 2 lists the pretest and posttest mean scores and difference of means for students’ political engagement measures. In every instance students’ political engagement increased at the conclusion of their civics class with the notable exceptions of likelihood of voting and community engagement which were not statistically significant. Voting and community service are aspects of civic education that are heavily stressed before students reach high school, where they are reinforced. The mean voting score was near the top of the range at the outset, and a ceiling effect is likely at work. The curricula of the civics classes in this study do not place a great emphasis on community involvement and problem solving, and do not explicitly involve an

integrated community service component. These factors may explain why community engagement is not statistically significant. Important for this study, digital engagement had increased .99 by the conclusion of the class, indicating the positive influence of civic education on students’ confidence in their ability to engage in political affairs online. Campaign engagement saw the largest gains from the pretest to posttest with a positive mean difference of 1.71, followed by activism with a positive mean difference of 1.32.

Table 2
Differences of Means for Pre/Post Political Engagement Measures

	\bar{x} Pre	\bar{x} Post	\bar{x} Difference	Sig.
Digital Engagement	9.08	10.07	.99	.00
Contacting	4.13	4.85	.72	.00
Campaign Engagement	8.55	10.26	1.71	.00
Voting	6.98	7.04	.06	n.s.
Community Engagement	9.21	9.32	.12	n.s.
Activism	12.18	13.49	1.32	.00

Digital Media in the Classroom

Teachers incorporated a variety of instructional techniques involving digital media into their civics classes. On average, teachers reported using 6 of these techniques. The methods ranged from basic information seeking to more sophisticated uses of digital media for creating and posting content. The number of teachers using a technique declines with the level of sophistication. As Table 3 demonstrates, the use of online news sites, holding online issue discussions, using government websites, and teaching students to be critical consumers of online news were almost universally employed. More than half of the teachers incorporated the use of campaign and political party websites and the sharing ideas and classwork via digital platforms

into the curriculum. A third had students contact government officials using digital tools. Students in only a small number of classes created and posted digital content.

Table 3
Teachers' Use of Digital Media for Civics Instruction

	% Do In Class
Access online news sites	92%
Hold online discussions of issues	92%
Use government websites	88%
Teach students to be critical consumers of online news	88%
Use campaign and political party websites	63%
Students share ideas/classwork via digital platform	58%
Students contact government officials using digital tools	33%
Students create social media posts	21%
Students create and post video content	8%

To get a sense of the extent to which teacher and student reports of the classroom environment coincide, we examine the correlation between teacher digital score, which is based on teacher self-reports, and the measures of classroom climate and instructional methods derived from the student survey. We expect that teachers who employ methods conducive to digital engagement would be inclined to foster an open class climate and to incorporate active learning methods into their teaching. As Table 4 indicates, the strongest correlations related to teacher digital score exist for class climate (.143) and class activities (.145), and both are statistically significant. The weakest relationships exist for classes that students perceive are heavily lecture and textbook based which tend to be less active. The correlations between teacher digital score and student reports of classes highlighting community activities and current events are in the middle of the range

Table 4
Correlations (Pearson’s R) Between Teacher Digital Score,
Classroom Climate, and Instructional Methods

Teachers Digital Score and:	Pearson’s R
Classroom Climate	.143 ^a
Lecture	.065 ^b
Textbook	-.066 ^b
Current Events	.098 ^a
Class Activities	.145 ^a
Community Activities	.082 ^a

n=1014 ^ap≤.01 ^bp≤.05

Pedagogy and Political Engagement

We anticipate that students whose civic education involves instructional methods incorporating digital media will feel confident using digital media to engage in politics and participate using the digital skills they have acquired. We also expect that active pedagogies more generally will contribute to students developing a propensity for digital political engagement. Further, we posit that an open class climate will be associated with students’ developing an inclination to engage in politics via digital means. The bivariate level findings support our hypotheses.

We calculated bivariate correlation coefficients (Pearson’s R) for the relationship between the pedagogy items and the measures of political confidence (see Table 5) and political engagement (see Table 6). The correlations between the digital media confidence items and all of the pedagogy measures are weaker than for confidence in community problem solving and participation in politics. The findings for digital media engagement are less distinctive when compared to the other political engagement measures.

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The more a teacher incorporates digital media use into the curriculum, the more likely her students are to develop participatory inclinations. Teacher's digital score is positively correlated with all three of the confidence measures. However, the relationship is weakest for digital media confidence (.103) as opposed to participating in politics (.147) and community problem solving (.151). Teacher digital score is significantly related to the proclivity to engage in digital politics (.091). The strongest associations exist between teacher digital score and activism (.132) and contacting (.128). All of the relationships between teacher digital score and the confidence and engagement measures are statistically significant at $p \leq .01$.

Students' proclivity to engage in politics via digital media is strongly influenced by classroom climate. An open class climate promotes political confidence as well as engagement. The coefficients for class climate and each of the confidence and engagement measures are large and statistically significant. While classroom climate has the strongest association with confidence in digital media engagement (.365), the coefficient is considerably lower than for community problem solving (.463) and political participation (.463).

Civics instruction that involves discussion of current events, class activities, and community activities is positively related to all of the political confidence indicators, supporting the notion that active learning is conducive to developing participatory inclinations. Digital media confidence is bolstered by discussion of current events (.223), class activities (.142), and community activities (.119). A civics class that is heavily lecture-focused has no relationship to digital media confidence. However, lecture is positively correlated with community problem solving and participation in politics. There is no correspondence between confidence and instruction that relies predominantly on textbook learning. Current events, class activities, and community activities also encourage political engagement with the exception of community

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activities and voting. Positive, statistically significant relationships exist between digital engagement and all of the instructional methods except lecture--textbook (.100), current events (.162), class activities (.112), and community activities (.159). Lecture-centric instruction is statistically significant only for voting and community engagement.

Table 5
Correlations (Pearson's R) between Political Confidence AND Teacher Digital Score, Class Climate, and Instructional Method

	Digital Media	Community Problem	Participate in Politics
Teacher Digital Score	.103 ^a	.151 ^a	.147 ^a
Class Climate	.365 ^a	.463 ^a	.463 ^a
Instructional Method			
Lecture	.048	.107 ^a	.123 ^a
Textbook	.027	.046	.043
Current Events	.223 ^a	.260 ^a	.258 ^a
Class Activities	.142 ^a	.253 ^a	.182 ^a
Community Activities	.119 ^a	.209 ^a	.173 ^a

n=1102 ^ap<.01 ^bp<.05

Table 6
Correlations (Pearson's R) between Political Engagement AND Teacher Digital Score, Class Climate, and Instructional Method

	Digital Engagement	Contacting	Campaign Engagement	Voting	Community Engagement	Activism
Teacher Digital Score	.091 ^a	.128 ^a	.078 ^a	.119 ^a	.117 ^a	.132 ^a
Class Climate	.449 ^a	.444 ^a	.467 ^a	.483 ^a	.426 ^a	.421 ^a
Instructional Method						
Lecture	.017	-.012	-.026	.095 ^a	.081 ^a	.002
Textbook	.100 ^a	.073 ^b	.142 ^a	.042	.076 ^a	.096 ^a
Current Events	.162 ^a	.143 ^a	.177 ^a	.116 ^a	.168 ^a	.119 ^a
Classroom Activities	.112 ^a	.134 ^a	.140 ^a	.078 ^a	.104 ^a	.132 ^a
Community Activities	.159 ^a	.237 ^a	.242 ^a	.018	.081 ^a	.191 ^a

n=1012 ^ap<.01 ^bp<.05

Class Type and Political Engagement

Civics classes differ radically based on the curriculum, school requirements, and the teacher. Students who take part in civics programs, like *We the People*, are exposed to active learning approaches that impart civic orientations and skills. Civics programs go beyond traditional classroom offerings by providing structured opportunities to experience real aspects of politics and civic life. Programs promote the acquisition of civic knowledge and skills through active learning features, such as internships, public policy activation, field trips, meetings with political and civic leaders, debates, mock trials, hearings, simulated elections, and role playing. Some programs incorporate service learning where students volunteer in the community, take part in civic affairs, and address societal problems often in conjunction with their coursework. WTP teachers are likely to employ active learning techniques whether they are teaching a WTP class or not.

AP classes are designed to impart substantial knowledge to students who are high achievers. Students prepare for a standardized test at the conclusion of the course. Some AP classes involve active learning methods, such as AP classes that use the WTP curriculum which are represented in our study. Since political knowledge is a precursor to political engagement (Delli Carpini and Keeter, 1996), we expect that AP students may feel more confident to participate than others. In addition, students who take civics as an elective may be more motivated to take part in political life than those who take civics as a required course.

We examine the bivariate relationships between class type and the political confidence and engagement measures. We expect that students whose teachers who regularly teach a curriculum that involves active learning elements will be more inclined toward political engagement. We anticipate that students taking a class that involves active learning, such as

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WTP, an accelerated class, like AP, or an elective class that they enroll in by choice will be more likely to develop political confidence and participatory inclinations as a result of their civics experience. The hypothesis that an active learning environment fosters political engagement is supported by the bivariate correlation (Pearson's R) analysis.

As Table 7 depicts, students who took civics with a WTP teacher exhibited the highest levels of all three types of political confidence. The association between taking a WTP teacher and confidence was strongest for participation in politics (.383) followed by community problem solving (.300). The relationship was notably smaller for digital media engagement (.215). The correlation between WTP class and confidence in digital media engagement (.207) is similar in strength. The coefficients are smaller for elective class (.190) and AP class (.153). The bivariate associations between community problem solving and participation in politics are substantially smaller for WTP, AP, and elective class than for WTP teacher. All of the relationships are statistically significant at $p \leq .01$.

Table 7
Correlations (Pearson's R) Between Class Type and Political Confidence Measures

	Digital Media	Community Problem	Participate in Politics
WTP Teacher	.215 ^a	.300 ^a	.383 ^a
WTP Class	.207 ^a	.188 ^a	.250 ^a
AP Class	.153 ^a	.193 ^a	.199 ^a
Elective Class	.190 ^a	.198 ^a	.228 ^a

As Table 8 indicates, the relationships between the four class types and the five political engagement indicators are all positive and statistically significant. Students of WTP teachers and those who take a WTP, AP, or elective civics class are the most inclined toward engagement in politics. In general, the correlations are lower for class type and community engagement and

higher for contacting and campaign engagement. WTP teacher (.218) is the strongest correlate of digital engagement followed by AP class (.208), WTP class (.195), and elective class (.180). The association between WTP teacher and campaign engagement, voting, and activism is greater than for the other class types, although in some cases only slightly so. Taking civics as an elective has the highest correlation with contacting and community engagement.

Table 8
Correlations (Pearson’s R) Between Class Type and Political Engagement Measures

	Digital Engagement	Contacting	Campaign Engagement	Voting	Community Engagement	Activism
WTP Teacher	.218 ^a	.239 ^a	.241 ^a	.229 ^a	.171 ^a	.211 ^a
WTP Class	.195 ^a	.237 ^a	.223 ^a	.184 ^a	.178 ^a	.209 ^a
AP Class	.208 ^a	.217 ^a	.219 ^a	.184 ^a	.165 ^a	.181 ^a
Elective Class	.180 ^a	.241 ^a	.235 ^a	.221 ^a	.180 ^a	.206 ^a

Multivariate Analysis

We ran a series of OLS regression analyses with the three measures of students’ confidence in their ability to engage politically and the six indicators of political engagement as the dependent variables. We included teacher digital score, class climate, elective/require class, and WTP teacher as our independent variables of interest. GPA, grade level, and gender were entered as control variables.¹

The results for the analyses with political confidence as the dependent variables appear in Table 9. The model explains more of the variance in the measures related to traditional political engagement—community problem solving and participating in politics—than engaging via digital media. Surprisingly, teachers’ digital score, which measures the extent to which teachers’ pedagogy included instructional methods conducive to digital engagement, is not significantly

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related to students confidence in their ability to use digital media to engage in politics in the multivariate model. However, there is a modest positive relationship between teacher digital score and community problem solving and political participation. This finding may be attributed to the fact that the teacher digital score includes items related to the use of digital media for collaborative community work and political participation. Class climate is overwhelmingly the best predictor in each of the equations. The relationship is stronger for working on a community problem (beta=.370) and participating in politics (beta=.398) than it is for engaging in digital politics (beta=.304). Having taken a class with a *We the People* teacher is positively related to all three of the political confidence measures.² The relationship is especially pronounced for confidence in solving a community problem and participation in politics, but is substantially smaller for digital media use. Students who took an elective civics class are slightly more inclined to have confidence in their ability to engage politically than those who completed a required course. GPA is weakly related to confidence in digital media engagement, but is not significant in the other models.³ Seniors are slightly more confident in their ability to engage via digital media than students in lower grades. The relationship between grade level and confidence in community problem solving and political participation is nonsignificant. There is a minor confidence gap favoring female students for political participation that approaches statistical significance, but no evidence of gender differences for the other two dependent measures.

Table 9
 OLS Regression Analyses of Teacher Digital Score, Civics Class Characteristics (with WTP Teacher), GPA, Grade Level, and Gender on Student Political Confidence Measures

	Digital Media	Community Problem	Participate in Politics
Teacher Digital Score	.033	.051 ^c	.074 ^a
Class Climate	.304 ^a	.370 ^a	.398 ^a
Elective Class	.081 ^a	.052 ^c	.042
WTP Teacher	.062 ^b	.219 ^a	.107 ^a
GPA	.046	-.035	.002
Grade Level	.068 ^b	-.031	-.020
Gender	-.030	.023	-.052 ^c
R ²	.155 ^a	.263 ^a	.229 ^a
n=1012			

Beta coefficients are reported. Significance: ^ap≤.01 ^bp≤.05 ^cp≤.10

The regression analyses of the five political engagement measures echo the findings for political confidence in that class climate is by far the best predictor in each model. As depicted in Table 10, an open class climate is strongly associated with digital engagement (.425) as well as with voting (.435), campaign involvement (.431), community engagement (.398), activism (.396), and contacting (.389). There is no relationship between teacher digital score and digital engagement. Teacher digital score is a weak, but significant, predictor of contacting (.066), community engagement (.061), and activism (.067). It has no relationship to campaign engagement or voting despite the fact that digital engagement is especially pronounced in elections. Students who took classes from a WTP teacher are significantly more inclined to anticipate using digital media to engage politically, contact a public official, take part in a campaign, vote, engage in their community, and become involved in activist activities. There are weak relationships between taking an elective class and digital engagement, contacting, and campaign engagement. A higher GPA is associated with a greater propensity toward voting

(.191) and community engagement (.094). GPA is not significantly related to the other engagement measures. A significant negative relationship between grade and campaign engagement and activism indicates that juniors and sophomores are more inclined to anticipate becoming politically involved than seniors. Students in lower grades who opt to take civics may be especially interested in government and politics and motivated to engage from the outset. Male students are more likely to contact public officials, while females are more inclined to become involved in their community. Gender is not significantly related to digital engagement, campaign engagement, voting, or activism.

Table 10
 OLS Regression Analysis of Teacher Digital Score, Civics Class Characteristics (with WTP Teacher), GPA, Grade Level, and Gender on Political Engagement Measures

	Digital Engagement	Contacting	Campaign Engagement	Voting	Community Engagement	Activism
Teacher Digital Score	.016	.066 ^b	-.001	.043	.061 ^b	.067 ^b
Class Climate	.425 ^a	.389 ^a	.431 ^a	.435 ^a	.398 ^a	.396 ^a
Elective Class	.050 ^c	.070 ^b	.069 ^b	.031	.049	.034
WTP Teacher	.056 ^c	.096 ^a	.103 ^a	.076 ^a	.075 ^a	.070 ^a
GPA	.001	-.002	-.042	.191 ^a	.094 ^a	.025
Grade	.000	-.054 ^c	-.075 ^a	.015	.018	-.068 ^b
Gender	-.036	.086 ^a	.036	.004	-.142 ^a	.016
R ²						
n=1,012	.217 ^a	.224 ^a	.238 ^a	.275 ^a	.222 ^a	.202 ^a

Beta coefficients are reported. Significance: ^ap≤.01 ^bp≤.05 ^cp≤.10

We ran these models substituting AP class for WTP teacher as these variables are collinear. The findings are similar, as AP students feel more politically confident and are more likely to anticipate that they will engage in politics than students who took a standard civics class. WTP teacher is a somewhat stronger predictor of political confidence, while AP class is more robustly related to political engagement. (Tables 11 and 12 depicting the results of the OLS regression analyses with AP class instead of WTP teacher appear in Appendix B.)

Discussion and Conclusion

Civic education contributes to citizens' acquisition of the confidence and inclination to engage in political life. At present, civics instruction is more conducive to students' developing orientations toward traditional forms of political participation than digital media engagement. There is evidence, however, that this situation may be changing as the requirements of citizenship shift toward an engaged polity, and schools assume the responsibility for training digital citizens. Civics teachers and students in our study used digital technology in the classroom, especially to access information about government and politics. More limited were applications of technology required of heightened forms of political engagement, such as having students create and post content online.

Our research demonstrates that an open classroom climate is by far the most essential condition for making engaged citizens. Students who feel comfortable discussing politics in a respectful and encouraging classroom environment are substantially more confident in their ability to engage in politics and more inclined to participate. The analysis here suggests that class climate is more relevant for developing confidence in community problem solving and participation in politics in general than in digital political participation. This finding makes sense, as curriculum elements specifically related to digital political engagement are not as well-developed as those pertaining to community and political engagement in a traditional sense.

Students are already enmeshed in the digital realm, and an open classroom climate fosters discussion and provokes interest that students naturally carry into their interactions online. From our research, class climate appears to be more effective in encouraging online participation than explicit instruction in digital technologies. This is in keeping with an actualizing form of

citizenship that is more resistant to traditional lecture models of instruction which transfer knowledge in one direction and prefers open discussion and two-way flows of information.

We also find support for the hypothesis that active learning pedagogies are related to students' political confidence and propensity to engage. Although the findings are not as robust as for classroom climate, active methods are intrinsic to an open class climate. Active instructional methods, such as discussion of current events, mock elections, simulated hearings, and moot court, are beneficial to students' political development. Taking a class with a WTP teacher, a WTP class, an AP class, or an elective class corresponds to greater participant orientations. In our study, WTP and AP teachers, among whom there is some overlap, were inclined to use active methods and to foster an open classroom climate. Overall, the relationship between active learning and students' proclivity toward digital engagement was not as strong as for other types of participation in the multivariate models.

Support for our hypothesis that teachers' instructional use of digital technology contributes to students' development of participatory orientations is evident, but somewhat limited. The bivariate analysis indicates that teacher digital score is positively related to all of the confidence and engagement measures. Among the confidence indicators, however, the correlation for teacher digital score is weakest for digital media use. The relationship becomes nonsignificant in the digital media confidence regression model, although it remains statistically relevant for participation in politics. The bivariate correlations between teacher's use of digital media and all of the political engagement measures also are statistically significant. As is the case for digital media confidence, the relationship disappears in the multivariate analysis for digital media engagement. It remains a significant, but weak, predictor of contacting, community engagement, and activism. These results may be explained in part by the wording of

items included in the teacher digital score that specifically reference using digital tools to contact government officials.

The findings regarding teachers' use of digital technology for instruction are suggestive, and beg further research with refined measures. The teacher digital score employed in this research may not accurately capture the amount and quality of digital instruction. To supplement the teacher and student self-reports about their classroom environment, classroom ethnographies were conducted for all but one of the teachers who was geographically difficult to reach.⁴ The ethnography revealed that many of the teachers were relying on standard instructional techniques that involved lecture and highly structured student participation. While some teachers had students use technology to look up information, few engaged digital media in a manner that would encourage media literacy or facilitate political engagement. The teacher whose pedagogy was indicative of best practices for digital media literacy and engagement scored toward the low end of the teacher digital index, having answered in the affirmative to four of the nine items comprising the score.

The requirements of digital citizenship warrant a rethinking of the civics curriculum so that it maintains its focus on the fundamentals of civic life while adjusting to political developments. The civics classroom necessarily lags behind political reality, as schools must first identify shifts in citizenship orientations before devising instructional strategies to meet emerging needs responsively. Integrating digital technology for political engagement in the civics curriculum is necessarily in its infancy. Empirical studies to determine what works in the evolving civics classroom have not kept pace with the impressive body of theoretical work on civic education and digital media use (see Bennett, 2008, 2010; Levine, 2008; Dahlgren, 2009; Jenkins, 2009). This study offers evidence that the high school civics classroom is adapting to

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meet the needs of a new generation of digital citizens, and highlights the need for additional research.

NOTES

- ¹ We included dummy variables for race in all of the OLS regression equations, and decided to eliminate race from the analysis due to a lack of significant findings.
- ² There is a degree of multicollinearity between WTP teacher and classroom climate that masks some of the explanatory power of WTP teacher in the OLS regression model. WTP teachers tend to have an open class climate.
- ³ There is no evidence of multicollinearity between GPA, elective class, and AP class.
- ⁴ The ethnographies were conducted by Dr. Robert Leming of the Indiana Bar Foundation in the fall semester of 2014. Dr. Owen and Dr. Leming developed a rubric for evaluating the classroom environment that takes into account class climate and active learning. Dr. Leming supplemented the rubric with extensive observational notes and sketches of the classroom arrangement.

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APPENDIX A

Question Wording and Index Reliabilities

Political Confidence

Digital Media Engagement

Since taking this class, how well prepared are you to use social media to engage in political and civic affairs?

Community Problem Solving

Since taking this class, how much better prepared are you to handle a problem in your community? Would you say you are a lot more prepared, somewhat more prepared, a little better prepared, or no better prepared than before you took this class?

Participation in Politics

Since taking this class, how much more inclined do you feel to take part in politics than before you took the class? Would you say that you feel a lot more inclined, somewhat more inclined, slightly more inclined, or not at all inclined to take part in politics?

Political Engagement

Digital Engagement

--Cronbach's α =.905

--4 items

--range 1-17

Use digital media to express your opinion on an issue

Use social media to engage in a political campaign

Use social media to share your views with others

Express your views about politics on a website, blog, or chatroom

Contacting

--Cronbach's α =.880

--2 items

--range 1-9

Contact or visit someone in government who represents your community

Contact a newspaper, radio, or TV talk show to express your opinion on an issue

Campaign Engagement

--Cronbach's α =.907

--5 items

--range 1-21

Wear a campaign button to support a candidate

Work on a candidate's political campaign

Volunteer for a political party

Try to talk to people and explain why they should vote for or against one of the parties or candidates during an election

EDUCATING DIGITAL CITIZENS

Work as a canvasser for a political or social group or candidate

Voting

--Cronbach's α =.903

--2 items

--range 1-9

Vote in presidential elections on a regular basis

Vote in local elections on a regular basis

Community Engagement

--Cronbach's α =.860

--3 items

--range 1-13

Do volunteer work to help needy people

Get involved with issues like health and safety that affect your community

Work with a group to solve a problem in the community where you live

Activism

--Cronbach's α =.878

--6 items

--range 1-25

Sign an email or written petition

Work with others to change unjust laws

Participate in a boycott against a company

Refuse to buy clothes made in a sweatshop

Participate in political activities such as protests, marches, or demonstrations

Participate in a poetry slam, youth forum, live music performance, or other event where young people express their political views

Teacher Digital Score

--Cronbach's α =.802

--9 items

--range 3-9

Do you do any of the following in your class (check all that apply)

Access online news site

Teach students to be critical consumers of online news

Instruct students in the use of government websites and other e-government resources

Hold online discussions where student consider issues from a variety of perspectives

Have students contact government officials using digital tools

Use campaign websites, such as political party and candidate sites

Have students share their thoughts, ideas, and other classwork, via digital platform

Have students create social media posts, such as posts to Facebook, Twitter, and other platforms

Have student create and post video content online

Classroom Climate

EDUCATING DIGITAL CITIZENS

--Cronbach's $\alpha=.902$

--7 items

--range 1-29

Students have a voice in what happens

Students can disagree with the teacher if they are respectful

Students can disagree with each other if they are respectful

Students are encouraged to express opinions

I talk to my classmates about politics

I am interested in my classmates' opinions about politics

My classmates encourage me to express my opinions about politics even if they are different from their views

APPENDIX B

Table 11
 OLS Regression Analyses of Teacher Digital Score, Civics Class Characteristics
 (with AP Class), GPA, Grade Level, and Gender on Student Political Confidence Measures

	Digital Media	Community Problem	Participate in Politics
Teacher Digital Score	.044	.081 ^a	.085 ^a
Class Climate	.306 ^a	.405 ^a	.407 ^a
Elective Class	.098 ^a	.096 ^a	.066 ^b
AP Class	.068 ^b	.094 ^a	.082 ^a
GPA	.054 ^c	.008	.019
Grade Level	.061 ^b	-.024	-.018
Gender	-.027	.034	-.048 ^c
R ²	.156 ^a	.234 ^a	.227 ^a
n=1012			

beta coefficients significance: ^ap≤.01 ^bp≤.05 ^cp≤.10

Table 12
 OLS Regression Analysis of Teacher Digital Score, Civics Class Characteristics (with AP Class),
 GPA, Grade Level, and Gender on Political Engagement Measures

	Digital Engagement	Contacting	Campaign Engagement	Voting	Community Engagement	Activism
Teacher Digital Score	.024	.073 ^a	.005	.040	.055 ^b	.069 ^b
Class Climate	.415 ^a	.375 ^a	.419 ^a	.415 ^a	.370 ^a	.385 ^a
Elective Class	.066 ^b	.115 ^a	.122 ^a	.073 ^a	.072 ^a	.079 ^a
AP Teacher	.108 ^a	.143 ^a	.133 ^a	.054 ^c	.071 ^b	.090 ^a
GPA	.004	.001	-.039	.177 ^a	.094 ^a	.026
Grade	-.012	-.063 ^b	-.077 ^a	.003	.005	-.080 ^a
Gender	-.035	.088 ^a	.037	.001	-.146 ^a	.016
R ²	.225 ^a	.239 ^a	.250 ^a	.277 ^a	.224 ^a	.209 ^a
n=1,012						

Beta coefficients are reported. Significance: ^ap≤.01 ^bp≤.05 ^cp≤.10