Active Learning and the Acquisition of Political Knowledge in High School

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Abstract

This study assesses the effectiveness of high school civic education in conveying political knowledge. It addresses the question: Is political knowledge acquisition related to the type of civic education course a student takes? It compares classes using the We the People: The Citizen and Constitution (WTP) instructional program to other civics classes. This largely exploratory analysis employs student knowledge assessment data from an original study fielded in schools across the state of Indiana during the fall semester 2014. Overall, students displayed a moderate level of political knowledge at the completion of a civics class. There are significant differences in students’ political knowledge based on whether or not they took a WTP class, were instructed by a WTP teacher, were in a required or elective class, and took the course for AP credit. An open classroom environment that fosters respectful discussion has a strong positive relationship to knowledge. Lecture and current events approaches are associated with knowledge acquisition, although the relationship is not particularly strong. There is a significant negative correlation between classes that heavily employ community-based activities and knowledge. Finally, students’ use of traditional newspapers, news websites, and political websites is positively associated with knowledge gain. There is a negative relationship between social media and blog use and knowledge.
Knowledge forms the foundation for citizens’ engagement in political life (e.g., Niemi and Junn, 1998; Galston, 2001; Milner, 2010; Campbell, 2006). A strong knowledge base facilitates individuals’ development of political attitudes that are predicated on more than just emotion, and fosters comprehension of how their own interests fit into a complex political system. An appreciation of the principles embodied in the Constitution undergirds American citizenship. People possessing greater civic knowledge tend to be supportive of democratic values, such as liberty, equality, and political tolerance (Finkel and Ernst, 2005; Galston, 2004; Brody, 1994; Youniss, 2011). Further, political knowledge is directly related to participation. People who possess sufficient political knowledge of democratic government and processes tend to be more politically efficacious. They have the confidence and ability to stake a position in the marketplace of political ideas as well as to actively engage in governmental and civic affairs (Galston, 2004; DelliCarpini and Keeter, 1996; McDevitt and Chaffee, 2000; Meirick and Wackman, 2004; Campaign for the Civic Mission of Schools, 2011).

Political knowledge encompasses a vast amount of information pertinent to government and political life. Delli Carpini and Keeter define political knowledge as “the range of factual information about politics that is stored in long-term memory” (1996: 10-11). Decades of research confirms that the public has a relatively low level of political knowledge, and that knowledge levels have remained fairly stable over time (Bennett, 1988, 1989; Neuman, 1986; Smith, 1989; Delli Carpini, 2005; Galston and Lopez, 2006; Friedman and Friedman, 2013). About half of the public is somewhat knowledgeable about the basic institutions and procedures of government, although knowledge of the Constitution and Bill of Rights is less robust (Delli Carpini and Keeter, 1996; Pew Research Center, 2011). In sum, the average American citizen is poorly informed, but not uninformed (Delli Carpini, 2005). Individuals who are very informed
about one aspect of politics tend to be knowledgeable in other areas (Delli Carpini and Keeter 1996).

High school civics instruction offers the opportunity to impart core political knowledge, and establish habits for acquiring political information in the long term. Understanding the conditions under which political knowledge is most successfully acquired is essential for fostering democratic engagement. This study assesses the effectiveness of high school civic education in conveying political knowledge, and addresses the following core research question: Is political knowledge acquisition related to the type of civic education course a student takes? This research compares classes using the We the People: The Citizen and Constitution (WTP) instructional program to classes employing other, more traditional, approaches. WTP is a long-standing curriculum intervention that has involved over 28 million students and 75,000 teachers in all fifty states since 1987. We examine knowledge differences between students who take civics as an elective versus a required class. We compare knowledge levels of students who are earning AP credit and those who are not. This research also explores whether an open class climate and particular pedagogies are conducive to students’ knowledge gain. Finally, we assess the relationship between students’ use of particular types of media, such as print newspapers, television, and social media, are related to their acquisition of political information. We employ student knowledge assessment data from an original study fielded in schools across the state of Indiana during the fall semester 2014. This study represents the first examination of the data, and is largely an exploratory analysis.

**Civic Education and the Acquisition of Political Knowledge**

Researchers across a variety of fields, including political science, communication, cognitive psychology, and public relations, have identified three major antecedents of knowledge
acquisition—ability, motivation, and opportunity (Delli Carpini and Keeter, 1996; Hallahan, 2000; Barabas, et al., 2014). The high school civics classroom can be a site where ability, motivation, and opportunity are fostered. Ability and motivation are traits intrinsic to the individual. Ability refers to a person’s cognitive skills and capacity for learning. People develop different levels of proficiency in retaining and processing information. Civics teachers can recognize and tap into students’ ability in a way that stimulates political learning. Grade point average is a rough measure of students’ ability. Motivation represents people’s desire to learn, and a willingness to engage with and process information. Students’ level of interest in political and civic life as well as their capacity for engagement varies based on a multiplicity of factors, including those related to home and family life and their social networks. In school, motivation can be related to teachers’ encouragement, class climate, or the instructor’s pedagogic style. Opportunity takes into account the availability of information and the manner in which it is presented. It encompasses factors that can be largely outside the control of the individual, such as the amount of exposure to a message, the number of arguments it contains, and the presence of distractions that can hinder comprehension (Petty and Cacioppo, 1986; Chaiken, 1987; MacInnis, et al., 1991; Hallahan, 2000). Under the right circumstances, high school civics classes have the potential to offer significant intentional exposure to political information within a structured environment that is conducive to learning.

Civic education can influence the acquisition of political knowledge both directly and indirectly. The classroom is a unique setting where young people can gain knowledge, establish autonomy in their ideas, and develop confidence in their ability to be political actors (Ehman, 1980; Morgan and Streb, 2001). Civics classes can stimulate interest in political affairs, create a lasting sense of civic duty, and encourage an orientation toward political life that compels people
to be attentive to politics. Knowledge gained through civics instruction can serve as a foundation for seeking further information. Events, such as an election campaign, public policy controversy, a discussion of politics, or a media report, may invigorate recall of relevant political facts that were learned in class. Thus, civic education may be responsible for positioning people to encounter and be receptive to information about the political world long after they leave the classroom.

**Class Type**

Civic education varies greatly across, and even within, schools. Civics offerings range from dedicated social studies/American government classes to brief sections of a history class. Civics classes often are conducted using a standard lecture/textbook approach. Some schools offer civics programs that employ active pedagogies designed to impart civic dispositions and skills that encourage students to take part in the polity. Our study explores the political knowledge levels of students who have gone through the We the People program compared to students who took civics classes without a formal programmatic component. The WTP curriculum covers the foundations of American government, and is distinctive for its emphasis on constitutional principles, the Bill of Rights, and Supreme Court cases. A WTP textbook reflecting the curriculum is available in both print and ebook versions that facilitates interactive learning. Teachers attend training institutes that prepare them to instruct WTP classes. WTP students take part in a simulated congressional hearing that requires them to engage in a range of learning activities. This exercise requires that they research and develop succinct, yet complete, answers to probing questions. Some classes take part in district, state, and national WTP hearings in Washington, D.C. The finals of the national competition are held in congressional hearing rooms on Capitol Hill. Teachers instructing nonWTP classes also attended training programs to
enhance their content knowledge and teaching skills. Some employ active pedagogies in the classroom, such as student-led group work, without the focus on a simulated hearing. One goal of our study is to determine if the specialized training of WTP teachers translates into students’ enhanced knowledge of political information.

Our study includes students who took advanced placement (AP) American government classes. Some students enrolled in a We the People class for AP credit. We expect that students who take AP American government courses will score higher than other students on tests of political knowledge, especially as their curriculum is designed to pass an examination consisting largely of knowledge questions. The AP program has been administered by the College Board since 1955. The courses serve as an opportunity for high school students to gain early experience with college level course work and earn college credit upon passing the yearly examination (Shaw et al., 2013). The program was intended to be preparatory for college-bound high school students, thereby increase the graduation rates of those who took AP courses. Those who take AP courses, and pass the end-of-course exam with a score of three or higher, graduate from four year college at higher rates and in less time than those who do not participate in the AP program (McCaulley, 2007; Mattern et al., 2014). AP students also earn higher GPAs in their first semester than other students (Scott et al., 2010). Researchers continue to grapple with the source of success at four year universities for students who take AP courses. Scholars have thus far been unable to determine if the construction and execution of the AP program leads to higher college graduation rates, or whether the success is due to the selectivity bias of the cohort of intelligent, motivated, students who take these courses and the generally more experienced teachers who lead them (Dougherty, et al., 2006; Klopfenstein and Thomas, 2005). However,
not all AP classes are created equal. In the push to expand the AP program, it has become
difficult to regulate the quality of instruction.

**Civics Instructional Environment**

Learning environment can influence students’ motivation and opportunities to acquire
political knowledge. An open classroom environment fosters respectful discussion of competing
ideas. Students are encouraged to raise issues, and to formulate and express their own opinions.
The teacher and students are receptive to diverse views, even if they disagree. As Campbell
notes, “. . . a school environment which promotes thoughtful, respectful discussion of political
and social issues equips students for active citizenship by developing their proficiency in civics”
(2005: 15). An open environment should be conducive to learning and retaining information
about government and politics. Discussion can reinforce and contextualize facts about
democratic principles, institutions, and processes (Hess, 2009).

We also examine the relationship of particular approaches to civics instruction to the
acquisition of political knowledge. Instructional methods range from more traditional textbook
and lecture-based approaches to innovative methods that incorporate classroom activities. More
time spent on civic education utilizing traditional instructional approaches—textbook and
lecture-based instruction—can enhance political knowledge (Niemi and Junn, 1998; Owen,
Soule, and Chalif, 2011). Textbooks convey discrete facts about political institutions, actors, and
processes. Lectures can elaborate upon textbook material, which is often the basis for testing
and evaluation. While there is some indication that textbook facts may be forgotten soon after
the test is taken, students can better retain this information when it is presented in conjunction
with current events or a learning activity (Winerip, 2011).
Classroom-based activities can expand a young person’s capacity to gain knowledge about politics, especially when interactive student-centered methods are combined with lecture and textbook instruction. Innovative methods include discussion of current events, simulations of democratic processes and procedures, and service learning. The simulated congressional hearing employed in WTP classes encourages both independent and group work, and facilitates students’ development of research and public speaking skills. Students who take part in programs that integrate problem solving, collaborative thinking, and cross-disciplinary approaches in their curricula may develop a greater sense of their own agency as civic actors (Atherton, 2000; Tolo, 1998). Innovative methods that augment textbook learning, particularly in the hands of skilled teachers, can increase knowledge (Finkel, 2003, Torney-Purta, et al., 2001; Westheimer and Kahne, 2004; Torney-Purta and Amadeo, 2012).

The integration of current events into classroom discussions is positively related to conveying political knowledge (Niemi and Junn, 1998; Owen, Soule, and Chalif, 2011). Current events can bolster civic knowledge by providing new and timely information to students, as opposed to other classroom approaches that may present redundant material in a dry format (Galston, 2001). Instruction incorporating current events can be most effective when it involves discussion that is tailored to students’ interests and does not avoid controversial topics (Niemi and Junn, 1998). The 2005 California Survey of Civic Education reported that 61% of students in classes that continuously discussed current events were interested in politics compared to 32% in classes that did not (California Campaign for the Civic Mission of Schools, 2005). However, a current events-centric curriculum may not be sufficient to promote knowledge gain, especially of facts about institutions and processes. Discussing current events requires context and reinforcement through lectures and educational materials like textbooks, readings, videos, and
online resources. Vercellotti and Matto (2009) found that students who read political articles and discussed them at home had higher levels of internal political efficacy compared to those who discussed the articles only in class. Hess (2009) suggests that classroom discussion of controversial issues should be carefully considered in terms of public policy rather than being a quick response to the day’s headlines.

Simulations, such as role playing, elections, mock trials, and simulated congressional hearings as is utilized by WTP can be effective in increasing knowledge and fostering the development of political attitudes (Niemi and Junn, 1998; Leming, 1996; Brody, 1994; Kahne and Middaugh, 2008a; Middaugh and Kahne, 2009). Yet such simulations of civic activities are often limited to select programs, such as WTP and AP classes, or omitted due to strict curriculum guidelines (Kahne and Middaugh, 2008b; Amadeo, et al., 2002). Community-based activities, like attending meetings, service learning, and field trips, can demonstrate to students how they can participate in politics, information that becomes especially relevant later in life. Still, community-based activities do not always contributed to the acquisition of political knowledge, especially when the curriculum is not linked directly to the experience (Youniss and Yates, 1997).

**Media Use**

People who follow politics through media, especially newspapers and online news sources, have greater knowledge of government and political affairs, attain higher levels of political efficacy, and are more inclined to participate than those who avoid political communication (Delli Carpini and Keeter, 1996; Eveland and Scheufele, 2000; Kenski and Stroud, 2006; Owen, 2014). Media use can facilitate civic engagement, and provide an impetus for community building (Pasek, et al., 2006). Digital communication technology has radically
altered how people experience the political world (Dahlgren, 2009). Digital media can facilitate traditional forms of political participation, such as monitoring news and expressing opinions, and provide new portals for political engagement. They allow participants to assert greater agency in circulating and consuming information, shaping messages, setting agendas, negotiating and creating networks, mobilizing forces, and influencing leaders and electoral outcomes (Jenkins, 2009; Cohen, et al., 2012). Instead of being passive consumers of televised messages, for example, citizens can create and disseminate their own videos about issues and candidates. Yet many citizens, including young people who are open to innovation, do not make the connection between digital media use and politics, and engage political media modestly at best. In order to take full advantage of the opportunities for digital political engagement, people must develop the requisite skills and use them responsibly.

American secondary schools are confronting this complex and constantly evolving political reality as they consider their civics curricula (Mirel, 2002; Galston, 2004; Jamieson, 2013; Owen, 2013). Yet many schools have been slow to incorporate digital media meaningfully into their civics course offerings. Teacher training, resource restrictions, limited civics instructional time, and uncertain outcomes contribute to the delay (Levine, 2008; Collins and Halverson, 2009; Owen, et al., 2011). Educators are debating the efficacy and propriety of adopting instructional techniques to enhance digital learning in the classroom. Some teachers embrace digital media as tools that can bolster learning outcomes associated with civic orientations. Others are concerned that students’ already heavy interaction with technology distracts from the learning process. The issue is further confounded by the fact that using technology for civics instruction is not necessarily the same as teaching students to effectively use digital media to engage in political and community life.
Scholars have just begun to address the issue of how “digital natives”—young people who have grown up immersed in digital media—acquire political knowledge, develop civic dispositions and skills. Much of the work has focused on identifying the parameters of the issue from a theoretical perspective and offering critiques of existing practices (Bennett, et al., 2010; Milner, 2010; Cohen, et al., 2012). Empirical research, especially on the effectiveness of school-based civics instruction, is limited to a handful of studies that have just scratched the surface (Pasek, et al., 2008; Kahne, Lee, and Feezell, 2012; Owen, 2014). Here we provide a preliminary examination of the correlation between political knowledge and students’ use of traditional media, such as print newspapers, television and radio news, and news magazines, and digital media, including political websites, news websites, social media, and blogs.

**Hypotheses**

Given the exploratory nature of this analysis, we test a set of basic hypotheses using difference of means tests:

H$_1$: There is a difference in the level of civic knowledge evidenced by high school students who took a We the People class and those who took another type of civics class.

H$_2$: There is a difference in the level of civic knowledge evidenced by high school students who took civics from a We the People teacher and those who did not.

H$_3$: There is a difference in the level of civic knowledge evidenced by high school students who took civics as a required versus an elective class.

H$_4$: There is a difference in the level of civic knowledge evidenced by high school students who took civics as an advanced placement class and those who did not.

Our exploratory investigation also examines the bivariate correlations between political knowledge and class type (WTP/nonWTP; required/elective; AP/nonAP), teacher type (WTP
teacher or not), grade point average, classroom climate, specific approaches to civics instruction, and students’ media use.

**Data**

This analysis is part of an in-depth examination of high school social studies and civics teachers’ approaches to classroom instruction and their outcomes that we are currently fielding.\(^1\) The study compares students in the We the People program to those in other classes. The project addresses the core question: What pedagogies are most effective in conveying political knowledge, instilling civic dispositions, and preparing students to engage in civic life? The research employs a multi-method approach that includes a teacher survey, interviews with teachers and educational administrators, classroom ethnographies, analysis of teaching materials, and student assessments. Twenty civics/social studies/U.S. government teachers from fourteen high schools across Indiana that offer We the People are participating in the study.\(^2\) In six of the schools there is only one instructor who teaches all of the civic education classes. In the eight schools where there are two civics instructors, the teachers were matched to the extent possible based on their educational background, years of experience, and professional development. The WTP and nonWTP teachers in the study are highly comparable on these indicators. The average number of years teaching—twenty—is identical for each group, and ranges from 5 to 36 for the WTP teachers and 7 to 34 for the nonWTP teachers. 27% of the WTP teachers have bachelor’s degrees and 73% have advanced degrees (master’s/law degree). 33% of the nonWTP teachers hold bachelor’s degrees and 67% have master’s degrees. The schools are located across the state, and vary in size, location (urban/suburban/rural), and type (neighborhood/selective enrollment/technical; public/private). All of the teachers have participated in teacher training programs of some type. The WTP teachers have taken part in WTP summer institutes and other
training opportunities that convey the specialized skills required of instructors in the program. Their pedagogy involves preparing students to take part in a simulated congressional hearing.

This analysis is based on survey data assessing students’ civic knowledge as a result of taking WTP or another civics course. Pre and post tests were administered by teachers online near the beginning and at the end of the semester during class periods to assess students’ civic knowledge gain as a result of taking a civics course. The pretest was administered in September 2014 and posttest was given in December. We use questions from the posttest only in this preliminary analysis, as we have just recently obtained the data. While there are limitations to this approach, the pretest baseline knowledge for students in required WTP and nonWTP classes was not significantly different on most indicators. In addition to the knowledge items, background data on the students were collected, including demographic characteristics and their grade point average (GPA). We also ascertained whether they were taking the class as an elective or a required course and/or earning AP credit. Complete knowledge data were collected for 1,138 students during the fall semester of 2014. 87% of the students in the sample were seniors in high school, and the rest were mostly juniors. The project will continue with a new group of students in the spring semester of 2015.

Measures

Political Knowledge

Political knowledge, the dependent variable in this study, is measured by an additive index of the total of all 62 knowledge items on the posttest as well as by separate indexes representing specific dimensions of knowledge. The knowledge survey items were constructed after consulting prior research, civics inventories, grade-appropriate civics tests, and state civic education rubrics, including the Indiana rubric. We intentionally avoided using any materials
related to We the People when creating the pre and post tests. We reviewed content areas, such as constitutional principles, political institutions, economic principles, and foreign affairs, with the participating teachers at an orientation meeting held in Indianapolis prior to administering the pretest to ensure that the questions covered material that would be presented in class. The teachers who administered the survey were informed of the broad categories to be covered but were not given specific test items. Several items were added to the survey based on discussion with the teachers and were designed to comport with their curriculum goals. All knowledge items covered were in compliance with the Indiana state civics rubric. The survey items consist of both original questions and those that have been previously tested and have known reliability. The test included multiple choice and a small number open-ended questions. (See the Methodological Appendix for question wording and index reliabilities.)

Scores on the total knowledge range from 0 to 60, as no student achieved a perfect score. The items are categorized into seven dimensions of knowledge: constitutional principles, the Bill of Rights, U.S. government institutions, political parties and elections, race and politics, economic principles, and foreign policy. Each item was coded 1 for a correct answer and 0 for an incorrect answer. There is a debate in the literature about the treatment of the “don’t know” responses to political knowledge questions (see Luskin and Bullock, 2011). We combined the “don’t know” response with those indicating an incorrect answer.

Constitutional Principles

Students were surveyed about their understanding of principles, thinkers, and key events related to the inception of the U.S. Constitution. This dimension consisted of thirteen items. Participants were asked about the nature of a constitutional form of government, classical Republicanism, as well as the federalist elements of American government. Participants read and interpreted quotations from John Locke about the rule of law, and a quotation from the
Declaration of Independence outlining unalienable rights and protections against tyranny. The survey covered items on checks and balances in the Supreme Court justice nominating process and the Constitutional amendment process. Students also were asked questions about the debate at the 1787 Constitutional Convention, and the purpose of a bicameral legislature.

*Bill of Rights*

The survey gauges student’s knowledge of the Bill of Rights by asking questions about the Establishment Clause of the First Amendment, the purpose of the Bill of Rights, and the historical circumstances surrounding the ratification of the Fourteenth Amendment. Participants read a quotation taken from correspondence between Thomas Jefferson and John Jay about freedom of the press, and interpreted the importance of this right. They were asked to identify the foundations of the First Amendment freedom of the press in the trial of John Peter Zenger. Finally, students read a quotation from the majority opinion from the 1919 Supreme Court case of *Schenck v. The United States*, and were asked how the decision affected the tension of freedom of speech during wartime. The additive index representing knowledge of the Bill of Rights ranges from 0 to 6.

*Government Institutions*

Knowledge of the three branches of government was ascertained through a 15 item index. The measure consists of six items relating to the executive branch, six items pertaining to the legislative branch, and three questions about the judicial system. Participants answered questions about the constitutional authorities of the President, presidential succession, and the executive’s role in foreign policy. They were asked about checks on presidential power as outlined in the War Powers Act and the legislative requirements to overturn a presidential veto. The study includes basic questions about the number of senators in the U.S Congress and the term of office of members of the House of Representatives. Respondents were surveyed about representative
role of the House as a voice of the people. They were asked to identify the Supreme Court case of Gibbons vs. Ogden as relating to Congress’ constitutional right to regulate interstate commerce. Knowledge items cover the fate of most bills introduced in the House of Representatives, and historical uses of the filibuster by southern Senators in the 1950s and 1960s. Participants also were asked basic knowledge questions about the number of Supreme Court Justices. They were required to select the definition of judicial review as set out in Marbury v. Madison (1803), and understand the implications of the Supreme Court case of United States v. Nixon.

Political Parties and Elections

Students were tested on their understanding of the role of political parties and elections in the American system of government. This knowledge dimension was constructed of thirteen items. Students were asked about the philosophical role of political parties according to James Madison in Federalist 10, and the current role of the political party in American politics. Knowledge of parties and elections covered state voter requirements, revising the Electoral College, political party’s role in nominating presidential candidates, and the impact of third parties. Participants were asked what a political action committee (PAC) is and how they have contributed to weakening political parties. Relatedly, they were questioned about the outcome of the Supreme Court case Citizens United v. Federal Election Commission (2010). This dimension also covered characteristics of proportional representation in voting, television’s role in elections, and Muckraker investigative journalism of the early 20th century.

Race and Politics

A five item additive index taps students’ knowledge of race and politics. Respondents were surveyed on their knowledge of which Supreme Court case ended segregation in schools, the definition of affirmative action and multiculturalism, and Dr. Martin Luther King Jr.’s call
for non-violent protests from his followers. Students read a quotation about America as a melting pot from Israel Zangwill to gauge comprehension of the notion of assimilation.

Economic Principles

Students were tested on their understanding of economic systems including free-enterprise, capitalism, and mixed economies. Respondents answered questions about values inherent in the American political system, and basic responsibilities of the Federal Reserve. The index of the economic principles dimension of knowledge ranges from 0 to 5.

Foreign Policy

The foreign policy dimension of knowledge consists of five items. Respondents were questioned about the difference between international and domestic politics. They were asked to define “positive rights” from the United Nation’s Universal Declaration of Rights. The survey tested their knowledge of the significant belligerents in the Cold War, and the Truman Doctrine and Marshal Plan as U.S. attempts to control the spread of communism. Students also were asked to identify the Gulf ofTonkin Resolution by Congress as the legal basis for America’s escalation of involvement in the Vietnam War.

Class and Teacher Type

The questionnaire includes dichotomous items indicating whether or not a student had taken a We the People class or an AP course. It also ascertained whether the student had taken civics as a required or an elective class. Some of the We the People instructors in our study also taught civics classes other than WTP. We assumed that there would be overlapping content and that their basic pedagogical approach would carry over to their non-WTP classes. Thus we compare WTP and non-WTP teachers in this study.
Grade Point Average

We anticipate that students’ grade point average (GPA) will be a strong predictor of the knowledge indicators. We calculate GPA based on a four point, unweighted scale. In cases where students have earned AP credit, their GPA can be higher than 4.0.

Classroom Climate

Classroom climate indicates the amount of freedom students feel to express themselves during instructional periods. We constructed an index consisting of a battery of seven items scored in the direction of an open classroom. These items have been adapted from prior works, especially the IEA Civic Education Study (see Torney-Purta, et al., 2001; Campbell, 2005). The climate indicator measures 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 climate index ranges from 0 to 35.

Instructional Methods

The survey includes five items that account for the basic type of civics instruction the respondent received. Students were asked to what extent their instruction was based on lecture, textbook, or current events-based learning. The study also includes a battery of questions about whether or not classroom and community-related activities were part of respondents’ civics training. 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.
**Media Use**

Students were asked how useful particular media outlets are in helping them to learn about news, current events, and politics. The outlets include print newspapers, television news, radio news, news magazines, political websites, news websites, social media, and blogs. The items are measured on a five point scale ranging from not at all useful (1) to very useful (5). We also wanted to see how well prepared students felt they were to engage in political and civic affairs. Students responded to a five point scale running indicating that they were not at all prepared (1) to very prepared (5).

**Findings**

Students, much like the wider American population, are not highly knowledgeable about politics, nor are they uninformed. The range, average scores, and standard deviation of the knowledge indexes for the entire student sample are presented in Table 1. The distribution of scores on the total knowledge index is approximately normal. No student earned a perfect score, as the high total is 60. A small number of students got fewer than ten items correct. Students, on average, got slightly more than half (≈33) of the 62 knowledge items right. There is a great deal of variation in students’ scores on the total knowledge indicator, which has a standard deviation of 11.76. Students are most knowledgeable about government institutions, answering an average of nine of the fifteen questions correctly. The average score on the constitutional principles, Bill of Rights, race and politics, and foreign policy indexes is near the midpoint of the scale. Students scored worst on the parties/elections and foreign policy items. As is the case for total knowledge, there is substantial variation in scores for each of the knowledge dimensions.
Table 1
Range and Mean Scores for Knowledge Indexes

<table>
<thead>
<tr>
<th>Index Range</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Knowledge</td>
<td>0-62</td>
<td>32.61</td>
</tr>
<tr>
<td>Constitutional Principles</td>
<td>0-13</td>
<td>6.58</td>
</tr>
<tr>
<td>Bill of Rights</td>
<td>0-6</td>
<td>3.39</td>
</tr>
<tr>
<td>Government Institutions</td>
<td>0-15</td>
<td>9.36</td>
</tr>
<tr>
<td>Political Parties and Elections</td>
<td>0-13</td>
<td>5.97</td>
</tr>
<tr>
<td>Race and Politics</td>
<td>0-5</td>
<td>2.84</td>
</tr>
<tr>
<td>Economic Principles</td>
<td>0-5</td>
<td>2.15</td>
</tr>
<tr>
<td>Foreign Policy</td>
<td>0-5</td>
<td>2.32</td>
</tr>
</tbody>
</table>

n=1138

A goal of this study is to compare the knowledge of students who have taken We the People classes to those who have gone through other types of civics/social studies/American government classes. A total of 405 WTP and 733 students in other types of civics classes are in the study. Table 2 shows the mean scores for the knowledge indexes for the WTP and nonWTP classes. WTP students answered an average of five more questions correctly than nonWTP students. The average score on each of the seven dimensions of knowledge is also higher for WTP students. All of the mean differences between WTP and nonWTP students’ knowledge scores are statistically significant at p≤.01. This finding supports the first hypothesis that the knowledge levels of WTP and nonWTP students will be significantly different.
Table 2
Mean Scores for Knowledge Indexes by WTP/NonWTP Class

<table>
<thead>
<tr>
<th></th>
<th>WTP Class</th>
<th>NonWTP Class</th>
<th>Sign. t</th>
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</thead>
<tbody>
<tr>
<td>Total Knowledge</td>
<td>35.81</td>
<td>30.84</td>
<td>.00</td>
</tr>
<tr>
<td>Constitutional Principles</td>
<td>7.46</td>
<td>6.10</td>
<td>.00</td>
</tr>
<tr>
<td>Bill of Rights</td>
<td>3.83</td>
<td>3.15</td>
<td>.00</td>
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<td>Government Institutions</td>
<td>9.98</td>
<td>9.02</td>
<td>.00</td>
</tr>
<tr>
<td>Political Parties and Elections</td>
<td>6.35</td>
<td>5.76</td>
<td>.00</td>
</tr>
<tr>
<td>Race and Politics</td>
<td>3.13</td>
<td>2.68</td>
<td>.00</td>
</tr>
<tr>
<td>Economic Principles</td>
<td>2.44</td>
<td>1.99</td>
<td>.00</td>
</tr>
<tr>
<td>Foreign Policy</td>
<td>2.61</td>
<td>2.16</td>
<td>.00</td>
</tr>
<tr>
<td>n=1138</td>
<td>405</td>
<td>733</td>
<td></td>
</tr>
</tbody>
</table>

Some explanations for these basic differences in knowledge level between the WTP and nonWTP students were revealed upon further analysis of the student data. Teacher training and skills are established factors that contribute to enhanced student learning. In particular, programs that integrate knowledge and practice are especially effective (Ingvarson, 2005; Torney-Purta, 2002; Campbell, 2005). All of the teachers in the study have taken part in at least one training program related to U.S. government and social studies. The We the People teachers participated in WTP summer institutes and other training opportunities that conveyed the content material and specialized skills required of instructors in the program. WTP teachers are encouraged to use active learning strategies, such as student led group work, as they prepare their classes for the culminating activity of the simulated congressional hearing. Five of the WTP teachers in the study also taught nonWTP classes. We assumed that aspects of the content and pedagogy they employ when teaching their WTP classes would carry over to their other civics courses.

Table 3 provides a breakdown of the mean knowledge scores for WTP and nonWTP teachers. Students in classes taught by WTP teachers, which includes both WTP and nonWTP civics classes, scored notably higher on the total knowledge index than students taught by
nonWTP instructors. Students in WTP teacher-led classes correctly answered 36 questions compared to 27 questions for students in classes taught by nonWTP teachers. Students in classes taught by WTP teachers scored higher on all of the dimensions of knowledge in the study. The mean differences for all comparisons are significant at \( p \leq .01 \).

<table>
<thead>
<tr>
<th></th>
<th>WTP Teacher</th>
<th>NonWTP Teacher</th>
<th>Sign. t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Knowledge</td>
<td>35.96</td>
<td>27.40</td>
<td>.00</td>
</tr>
<tr>
<td>Constitutional Principles</td>
<td>7.31</td>
<td>5.36</td>
<td>.00</td>
</tr>
<tr>
<td>Bill of Rights</td>
<td>3.77</td>
<td>2.75</td>
<td>.00</td>
</tr>
<tr>
<td>Government Institutions</td>
<td>10.06</td>
<td>8.19</td>
<td>.00</td>
</tr>
<tr>
<td>Political Parties and Elections</td>
<td>6.46</td>
<td>5.14</td>
<td>.00</td>
</tr>
<tr>
<td>Race and Politics</td>
<td>3.12</td>
<td>2.38</td>
<td>.00</td>
</tr>
<tr>
<td>Economic Principles</td>
<td>2.44</td>
<td>1.66</td>
<td>.00</td>
</tr>
<tr>
<td>Foreign Policy</td>
<td>2.57</td>
<td>1.90</td>
<td>.00</td>
</tr>
<tr>
<td>n=1138</td>
<td>715</td>
<td>423</td>
<td></td>
</tr>
</tbody>
</table>

We further explored the relationship between students’ knowledge and whether or not they were instructed by a WTP teacher by taking into account whether they had taken a WTP class or not. Table 4 indicates that students who had taken a class with a WTP teacher outscored those who were instructed by nonWTP teachers regardless of the type of class. The mean differences are statistically significant at \( p \leq .01 \) for all comparisons between classes taught by WTP teachers and other instructors. On average, students in the WTP teacher-led classes got 36 questions correct compared to 27 for the classes of teachers without WTP training—a 9 item difference. Students in the WTP program scored slightly higher than students taking other civics classes with WTP teachers on the total knowledge and constitutional principles indexes. These are the only statistically significant differences between the WTP and nonWTP classes taught by
WTP teachers. These findings lend support for the second hypothesis that posits a difference in the knowledge levels of students learning civics from WTP versus nonWTP teachers.

Table 4
Mean Scores for Knowledge Indexes by WTP/NonWTP Teachers and WTP/Non WTP Classes

<table>
<thead>
<tr>
<th></th>
<th>WTP Teacher/ WTP Class</th>
<th>WTP Teacher/ NonWTP Class</th>
<th>NonWTP Teacher/ NonWTP Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Knowledge</td>
<td>35.84</td>
<td>35.49</td>
<td>27.41</td>
</tr>
<tr>
<td>Constitutional Principles</td>
<td>7.48</td>
<td>7.08</td>
<td>5.37</td>
</tr>
<tr>
<td>Bill of Rights</td>
<td>3.83</td>
<td>3.69</td>
<td>2.75</td>
</tr>
<tr>
<td>Government Institutions</td>
<td>9.99</td>
<td>10.15</td>
<td>8.19</td>
</tr>
<tr>
<td>Political Parties and Elections</td>
<td>6.35</td>
<td>6.61</td>
<td>5.14</td>
</tr>
<tr>
<td>Race and Politics</td>
<td>3.14</td>
<td>3.10</td>
<td>2.38</td>
</tr>
<tr>
<td>Economic Principles</td>
<td>2.44</td>
<td>2.43</td>
<td>1.66</td>
</tr>
<tr>
<td>Foreign Policy</td>
<td>2.61</td>
<td>2.51</td>
<td>1.90</td>
</tr>
<tr>
<td>n=1133</td>
<td>403</td>
<td>310</td>
<td>420</td>
</tr>
</tbody>
</table>

Significant differences for all mean comparisons of WTP Teacher classes and NonWTP Teacher classes at p≤.01. Significant differences for mean comparisons of WTP Teacher/WTP Class and WTP Teacher/NonWTP Class for total knowledge and constitutional principles at p≤.01.

The vast majority of students in the study were enrolled in required civics classes (949) as opposed to an elective course (189). Most of the students taking an elective civics course were WTP students and AP students, including those taking WTP for AP credit. As expected, students who opt into a civics course, especially those who qualify for the AP program, performed better on the knowledge test than students who took the class as a requirement. (See Table 5.) This finding lends support to the third hypothesis that there will be a difference in knowledge based on taking civics as an elective or required class. There is a likely self-selection bias associated with those who take civics as an elective. Students taking a civics elective have a ten question advantage in total knowledge compared to those who took a required class. The
notable difference in knowledge scores in favor of those taking an elective class is evident for every dimension of knowledge. The mean differences are statistically significant at p≤.01.

Table 5
Mean Scores for Knowledge Indexes for Required and Elective Civics Classes

<table>
<thead>
<tr>
<th></th>
<th>Required</th>
<th>Elective</th>
<th>Sign. t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Knowledge</td>
<td>31.00</td>
<td>40.67</td>
<td>.00</td>
</tr>
<tr>
<td>Constitutional Principles</td>
<td>6.14</td>
<td>8.80</td>
<td>.00</td>
</tr>
<tr>
<td>Bill of Rights</td>
<td>3.22</td>
<td>4.24</td>
<td>.00</td>
</tr>
<tr>
<td>Government Institutions</td>
<td>9.05</td>
<td>10.95</td>
<td>.00</td>
</tr>
<tr>
<td>Political Parties and Elections</td>
<td>5.71</td>
<td>7.27</td>
<td>.00</td>
</tr>
<tr>
<td>Race and Politics</td>
<td>2.69</td>
<td>3.62</td>
<td>.00</td>
</tr>
<tr>
<td>Economic Principles</td>
<td>2.01</td>
<td>2.87</td>
<td>.00</td>
</tr>
<tr>
<td>Foreign Policy</td>
<td>2.19</td>
<td>2.98</td>
<td>.00</td>
</tr>
</tbody>
</table>

n=1138

We compared the knowledge scores of WTP and nonWTP students based on whether their civics class was required or elective. As Table 6 indicates, students taking WTP as an elective outscored students in all other classes on each of the knowledge indicators. The size of these differences is notable and statistically significant at p≤.01 for each index. There is a large and significant mean difference of 12 items on the total knowledge index favoring the WTP students in an elective class compared to those in a nonWTP elective class. It should be noted that the nonWTP elective group consists of one class taught by an instructor with an advanced degree and more than ten years of teaching experience. The differences in the average scores on the knowledge indicators for the WTP and nonWTP students taking a required class are small and nonsignificant.
Table 6
Mean Scores for Knowledge Indexes by WTP/NonWTP Classes and Required/Elective Classes

<table>
<thead>
<tr>
<th></th>
<th>WTP Required</th>
<th>NonWTP Required</th>
<th>WTP Elective</th>
<th>NonWTP Elective</th>
<th>Sign. t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Knowledge</td>
<td>31.41</td>
<td>30.86</td>
<td>42.11</td>
<td>30.26</td>
<td>a,b,c</td>
</tr>
<tr>
<td>Constitutional Principles</td>
<td>6.32</td>
<td>6.08</td>
<td>9.12</td>
<td>6.52</td>
<td>a,b,c</td>
</tr>
<tr>
<td>Bill of Rights</td>
<td>3.44</td>
<td>3.15</td>
<td>4.39</td>
<td>3.17</td>
<td>a,c</td>
</tr>
<tr>
<td>Government Institutions</td>
<td>9.01</td>
<td>9.06</td>
<td>11.37</td>
<td>7.87</td>
<td>a,c</td>
</tr>
<tr>
<td>Political Parties/Elections</td>
<td>5.58</td>
<td>5.76</td>
<td>7.45</td>
<td>5.96</td>
<td>a,c</td>
</tr>
<tr>
<td>Race and Politics</td>
<td>2.70</td>
<td>2.69</td>
<td>3.77</td>
<td>2.61</td>
<td>a,c</td>
</tr>
<tr>
<td>Economic Principles</td>
<td>2.05</td>
<td>1.99</td>
<td>3.01</td>
<td>1.87</td>
<td>a,c</td>
</tr>
<tr>
<td>Foreign Policy</td>
<td>2.28</td>
<td>2.15</td>
<td>3.08</td>
<td>2.26</td>
<td>a,b,c</td>
</tr>
<tr>
<td>n=1138</td>
<td>239</td>
<td>710</td>
<td>166</td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>

Significant differences at $p \leq .01$

a) WTP Elective/NonWTP Elective  
b) WTP Required/WTP Elective  
c) NonWTP Required/WTP Elective

We anticipated that students taking civics for AP credit will perform better on knowledge tests; this hypothesis is confirmed in our analysis. (See Table 7.) On average, students in an AP course answered approximately 5 more questions in the total knowledge index correctly than those who were not seeking advanced placement. The mean scores were higher for AP students in every category of knowledge. The differences were most pronounced for constitutional principles, government institutions, and political parties and elections. All of the mean comparisons are statistically significant at $p \leq .01$. 
Table 7
Mean Scores for Knowledge Indexes for AP and nonAP Classes

<table>
<thead>
<tr>
<th></th>
<th>AP</th>
<th>nonAP</th>
<th>Sign. t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Knowledge</td>
<td>36.54</td>
<td>30.94</td>
<td>.00</td>
</tr>
<tr>
<td>Constitutional Principles</td>
<td>7.33</td>
<td>6.27</td>
<td>.00</td>
</tr>
<tr>
<td>Bill of Rights</td>
<td>3.82</td>
<td>3.21</td>
<td>.00</td>
</tr>
<tr>
<td>Government Institutions</td>
<td>10.30</td>
<td>8.97</td>
<td>.00</td>
</tr>
<tr>
<td>Political Parties and Elections</td>
<td>6.82</td>
<td>5.61</td>
<td>.00</td>
</tr>
<tr>
<td>Race and Politics</td>
<td>3.15</td>
<td>2.72</td>
<td>.00</td>
</tr>
<tr>
<td>Economic Principles</td>
<td>2.49</td>
<td>2.01</td>
<td>.00</td>
</tr>
<tr>
<td>Foreign Policy</td>
<td>2.63</td>
<td>2.19</td>
<td>.00</td>
</tr>
<tr>
<td>n=1138</td>
<td>339</td>
<td>799</td>
<td></td>
</tr>
</tbody>
</table>

Table 8 compares the mean knowledge scores for WTP and nonWTP students based on whether they took AP civics or not. The most apparent finding is that nonWTP who were not in the AP program scored substantially lower on the total knowledge index than students in any of the other categories. There is a 10 item gap between the nonWTP/nonAP students and the WTP only and AP only students, and a 7 item difference for the WTP/AP students. The nonWTP/nonAP group had the lowest scores on each of the knowledge dimensions. The mean differences between this group and all others are statistically significant at $p \leq .01$. The scores for the WTP only and the AP only group are similar on all of the indicators with the exception of political parties and elections, where the AP students did slightly better. The WTP/AP students scored slightly lower than the WPT only and AP only students on all of the indicators except economic principles, where their average score was higher, and foreign policy, where there was virtually no difference.
Table 8
Mean Scores for Knowledge Indexes by
WTP/NonWTP Classes and AP/NonAP Classes

<table>
<thead>
<tr>
<th></th>
<th>WTP and AP</th>
<th>WTP Only</th>
<th>AP Only</th>
<th>Not AP or WTP</th>
<th>Sign. t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Knowledge</td>
<td>35.69</td>
<td>38.81</td>
<td>38.88</td>
<td>28.72</td>
<td>a,b,c,e</td>
</tr>
<tr>
<td>Constitutional Principles</td>
<td>7.07</td>
<td>7.89</td>
<td>7.64</td>
<td>5.68</td>
<td>a,b,c,d</td>
</tr>
<tr>
<td>Bill of Rights</td>
<td>3.79</td>
<td>4.05</td>
<td>4.00</td>
<td>2.91</td>
<td>a,b,c,d</td>
</tr>
<tr>
<td>Government Institutions</td>
<td>9.87</td>
<td>10.73</td>
<td>10.81</td>
<td>8.55</td>
<td>a,b,c,e</td>
</tr>
<tr>
<td>Political Parties/Elections</td>
<td>6.38</td>
<td>6.40</td>
<td>7.47</td>
<td>5.31</td>
<td>a,b,c,e,f</td>
</tr>
<tr>
<td>Race and Politics</td>
<td>3.04</td>
<td>3.21</td>
<td>3.27</td>
<td>2.52</td>
<td>a,b,c</td>
</tr>
<tr>
<td>Economic Principles</td>
<td>3.00</td>
<td>2.64</td>
<td>2.84</td>
<td>1.76</td>
<td>a,b,c,d,e</td>
</tr>
<tr>
<td>Foreign Policy</td>
<td>2.65</td>
<td>2.69</td>
<td>2.71</td>
<td>1.99</td>
<td>a,b,c</td>
</tr>
<tr>
<td>n=1138</td>
<td>239</td>
<td>166</td>
<td>162</td>
<td>571</td>
<td></td>
</tr>
</tbody>
</table>

Significant differences at \( p \leq 0.01 

a) WTP and AP/Not AP or WTP
b) WTP Only/Not AP or WTP
c) AP Only/Not AP or WTP
d) WTP and AP/WTP Only
e) WTP and AP/NonAP Only
f) WTP Only/NonAP Only

Our analysis shows some preliminary support for the four hypotheses we propose. There are significant differences in students’ political knowledge based on whether or not they took a WTP class, were instructed by a WTP teacher, were in a required or elective class, and took the course for AP credit. We the People students achieved higher levels of political knowledge than students who took other civics classes. They scored significantly higher, on average, than other students on knowledge of U.S. constitutional principles, the Bill of Rights, U.S. government institutions, political parties and elections, race and politics, economic principles, and U.S. foreign policy. It appears as though We the People teacher training influences the knowledge outcomes for students in both WTP and nonWTP classes. Students in classes taught by WTP teachers scored higher those taking civics with nonWTP teachers on all of the knowledge...
indicators. Further, students who take civics as an elective course have significantly higher levels of knowledge than those who take a required civics class. Similarly, students taking civics for AP credit achieved higher knowledge scores than students who were not in AP classes.

We next examined the correlation between political knowledge and class type, WTP/nonWTP teacher, grade point average, class climate, instructional approach, and media use. (See Table 9.) As one might expect, grade point average is the strongest correlate of all of the indexes of political knowledge. The correlation between GPA and overall knowledge is a robust \( .518 \) (\( p \leq .01 \)). The correspondence between GPA and knowledge is higher for dimensions that deal with the principles, foundations, and institutions of government than for race and politics, economic principles, and foreign policy. As the foregoing analysis of the mean differences in knowledge scores indicates, taking a WTP, having a WTP teacher as the instructor, taking civics as an elective, and taking an AP class are all positively associated with political knowledge. The second strongest set of correlations is evident for taking civics with a WTP teacher. The correlation coefficient for total knowledge is \( .341 \) (\( p \leq .01 \)). The relationship is statistically significant for all of the knowledge dimensions, and is especially strong for constitutional principles and Bill of Rights. Taking civics as an elective class has a moderately strong relationship to total knowledge, with a coefficient of \( .307 \) (\( p \leq .01 \)), and is significantly correlated with the other knowledge indicators. The association between total knowledge and WTP (\( .201; p \leq .01 \)) and AP (\( .188; p \leq .01 \)) classes is similar. However, WTP students have a stronger grasp of knowledge of constitutional principles and the Bill of Rights than nonWTP students, which is in keeping with the program’s focus on this content. The correlation between taking an AP class and knowledge of government institutions and political parties/elections is higher than for taking a WTP class.
Table 9
Correlations (Pearson’s R) Between Knowledge Indexes and Class Type, Teacher Type, GPA, Instructional Approach, and Media Use Variables

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Constitutional Principles</th>
<th>Bill of Rights</th>
<th>Government Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTP Class</td>
<td>.202*</td>
<td>.232*</td>
<td>.205*</td>
<td>.137*</td>
</tr>
<tr>
<td>AP Class</td>
<td>.218*</td>
<td>.172*</td>
<td>.177*</td>
<td>.181*</td>
</tr>
<tr>
<td>Elective Class</td>
<td>.307*</td>
<td>.350*</td>
<td>.239*</td>
<td>.211*</td>
</tr>
<tr>
<td>WTP Teacher</td>
<td>.341*</td>
<td>.333*</td>
<td>.311*</td>
<td>.269*</td>
</tr>
<tr>
<td>GPA</td>
<td>.518*</td>
<td>.445*</td>
<td>.411*</td>
<td>.478*</td>
</tr>
<tr>
<td>Class Climate</td>
<td>.364*</td>
<td>.322*</td>
<td>.301*</td>
<td>.307*</td>
</tr>
<tr>
<td>Lecture</td>
<td>.104*</td>
<td>.081*</td>
<td>.065**</td>
<td>.100*</td>
</tr>
<tr>
<td>Textbook</td>
<td>-.028</td>
<td>.017</td>
<td>.016</td>
<td>-.054</td>
</tr>
<tr>
<td>Current Events</td>
<td>.085*</td>
<td>.057*</td>
<td>.067**</td>
<td>.095*</td>
</tr>
<tr>
<td>Class Activities</td>
<td>.007</td>
<td>.008</td>
<td>.017</td>
<td>.015</td>
</tr>
<tr>
<td>Community Activities</td>
<td>-.074*</td>
<td>-.046**</td>
<td>-.003</td>
<td>-.082*</td>
</tr>
<tr>
<td>Print Newspaper</td>
<td>.114*</td>
<td>.109*</td>
<td>.103*</td>
<td>.100*</td>
</tr>
<tr>
<td>Television News</td>
<td>.002</td>
<td>.012</td>
<td>-.034</td>
<td>.034</td>
</tr>
<tr>
<td>Radio News</td>
<td>-.006</td>
<td>.016</td>
<td>-.020</td>
<td>-.002</td>
</tr>
<tr>
<td>News Magazine</td>
<td>.002</td>
<td>.021</td>
<td>.004</td>
<td>.001</td>
</tr>
<tr>
<td>Political Websites</td>
<td>.120*</td>
<td>.118*</td>
<td>.103*</td>
<td>.108*</td>
</tr>
<tr>
<td>News Websites</td>
<td>.196*</td>
<td>.180*</td>
<td>.125*</td>
<td>.167*</td>
</tr>
<tr>
<td>Social Media</td>
<td>-.136*</td>
<td>-.103*</td>
<td>-.128*</td>
<td>-.102*</td>
</tr>
<tr>
<td>Blogs</td>
<td>-.110*</td>
<td>-.087*</td>
<td>-.057**</td>
<td>-.091*</td>
</tr>
<tr>
<td>Prepared to use social media</td>
<td>.182*</td>
<td>.171*</td>
<td>.115*</td>
<td>.164*</td>
</tr>
</tbody>
</table>

n=1138  *p≤.01; **p≤.05
Table 9 (cont.)
Correlations (Pearson’s R) Between Knowledge Indexes and Class Type, Teacher Type, GPA, Instructional Approach, and Media Use Variables

<table>
<thead>
<tr>
<th></th>
<th>Parties and Elections</th>
<th>Race and Politics</th>
<th>Economic Principles</th>
<th>Foreign Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTP Class</td>
<td>.107*</td>
<td>.161*</td>
<td>.145*</td>
<td>.167*</td>
</tr>
<tr>
<td>AP Class</td>
<td>.211*</td>
<td>.148*</td>
<td>.149*</td>
<td>.157*</td>
</tr>
<tr>
<td>Elective Class</td>
<td>.222*</td>
<td>.260*</td>
<td>.216*</td>
<td>.229*</td>
</tr>
<tr>
<td>WTP Teacher</td>
<td>.244*</td>
<td>.269*</td>
<td>.253*</td>
<td>.249*</td>
</tr>
<tr>
<td>GPA</td>
<td>.416*</td>
<td>.367*</td>
<td>.368*</td>
<td>.347*</td>
</tr>
<tr>
<td>Class Climate</td>
<td>.291*</td>
<td>.264*</td>
<td>.282*</td>
<td>.245*</td>
</tr>
<tr>
<td>Lecture</td>
<td>.090*</td>
<td>.079*</td>
<td>.072**</td>
<td>.079*</td>
</tr>
<tr>
<td>Textbook</td>
<td>-.030</td>
<td>-.044</td>
<td>-.003</td>
<td>-.033</td>
</tr>
<tr>
<td>Current Events</td>
<td>.063**</td>
<td>.048</td>
<td>.073**</td>
<td>.067**</td>
</tr>
<tr>
<td>Class Activities</td>
<td>-.002</td>
<td>.018</td>
<td>-.006</td>
<td>.008</td>
</tr>
<tr>
<td>Community Activities</td>
<td>-.080*</td>
<td>-.082*</td>
<td>-.037</td>
<td>-.055</td>
</tr>
<tr>
<td>Print Newspaper</td>
<td>.077*</td>
<td>.081*</td>
<td>.076**</td>
<td>.085*</td>
</tr>
<tr>
<td>Television News</td>
<td>.003</td>
<td>-.020</td>
<td>-.041</td>
<td>.001</td>
</tr>
<tr>
<td>Radio News</td>
<td>-.030</td>
<td>-.003</td>
<td>-.011</td>
<td>.002</td>
</tr>
<tr>
<td>News Magazine</td>
<td>-.011</td>
<td>.000</td>
<td>-.029</td>
<td>-.008</td>
</tr>
<tr>
<td>Political Websites</td>
<td>.080*</td>
<td>.105*</td>
<td>.063**</td>
<td>.095*</td>
</tr>
<tr>
<td>News Websites</td>
<td>.171*</td>
<td>.142*</td>
<td>.134*</td>
<td>.143*</td>
</tr>
<tr>
<td>Social Media</td>
<td>-.122*</td>
<td>-.114*</td>
<td>-.119*</td>
<td>-.080*</td>
</tr>
<tr>
<td>Blogs</td>
<td>-.127*</td>
<td>-.052**</td>
<td>-.100*</td>
<td>-.058**</td>
</tr>
<tr>
<td>Prepared to use social media</td>
<td>.152*</td>
<td>.146*</td>
<td>.121*</td>
<td>.128*</td>
</tr>
</tbody>
</table>

n=1138   *p≤.01; **p≤.05

There is a strong relationship between classroom environment and students’ knowledge levels. Classes in which students were encouraged to express themselves and felt that their opinions were respected by the teacher and their colleagues were more conducive to the acquisition of knowledge. An open class climate was highly correlated with overall political knowledge (.364; p≤.01). Class climate also was positively related to all of the dimensions of political knowledge. The association between class climate and knowledge was stronger than for any of the instructional approach measures that we included in this analysis.
Classes with a prominent lecture component contribute favorably to the acquisition of political knowledge. The incorporation of current events into the curriculum also is positively associated with knowledge gain. The correlations, however, are not especially strong. The coefficient for lecture and total knowledge is .104 (p≤.01) and for current events is .085 (p≤.01). The relationship between lecture and all of the knowledge dimensions was statistically significant. The correlation with current events was significant for every knowledge dimension except political parties and elections. The finding of a connection between lecture and current events approaches and political knowledge acquisition corroborates prior research results (Niemi and Junn, 1998; Owen, Soule, and Chalif, 2011).

There is a negative relationship between classes that incorporate community activities and political knowledge. A focus on community activities is more likely to promote learning about public policy issues than the type of knowledge represented in this study. These types of activities often emphasize community concerns and current practices as opposed to knowledge of governmental principles and institutions. There is no relationship between knowledge and the textbook or classroom activities measures.

Finally, we examine the connection between students’ use of particular types of media for learning about news, current events, and politics and their levels of political knowledge. As Table 10 depicts, a higher percentage of students finds television news (47%) to be extremely useful for getting information than any other medium. The continued reliance on television news is reflected in studies of the general public (Pew Research Journalism Project, 2014). Television news is followed by news websites (41%), social media (40%), and political websites (29%). Radio news (22%) ranks higher among students than print newspapers (18%), news magazines (16%), and blogs (15%).
Table 10
Percentage of Students Who Find Medium “Extremely Useful”
for Getting Information about News, Current Events, and Politics

<table>
<thead>
<tr>
<th>Medium</th>
<th>“Extremely Useful”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print Newspapers</td>
<td>18%</td>
</tr>
<tr>
<td>Television News</td>
<td>47%</td>
</tr>
<tr>
<td>Radio News</td>
<td>22%</td>
</tr>
<tr>
<td>News Magazines</td>
<td>16%</td>
</tr>
<tr>
<td>Political Websites</td>
<td>29%</td>
</tr>
<tr>
<td>News Websites</td>
<td>41%</td>
</tr>
<tr>
<td>Social Media</td>
<td>40%</td>
</tr>
<tr>
<td>Blogs</td>
<td>15%</td>
</tr>
</tbody>
</table>

n=1138

As Table 9 reveals, the only significant association between political knowledge and traditional media exists for print newspapers, which are not especially popular among students. The correlation between newspapers and total knowledge is .114 (p≤.01), and the coefficients are statistically significant for all of the knowledge dimensions. The relationship is strongest for constitutional principles, Bill of Rights, and government institutions. There is no connection between students’ use of television news, radio news, or news magazines and knowledge.

The findings for digital media depicted in Table 9 are intriguing. News websites and political websites are positively related to political knowledge, while blogs and social media have a negative association. News websites have the highest correlations with the knowledge measures of all the platforms in the study. The correlation with total knowledge is .196 (p≤.01) compared to .120 (p≤.01) for political websites. The associations for both news and political websites and all of the dimensions of knowledge are statistically significant. The use of news websites is more highly correlated with political knowledge than reading print newspapers. The difference, while apparent for constitutional principles, Bill of Rights, and government
institutions, is especially noteworthy for knowledge of parties and elections, race and politics, economic principles, and foreign policy.

The use of blogs and social media for news and political information is negatively related to all the indicators of political knowledge. Although there is some evidence to suggest that these forms of media can convey substantive information, they are not consistent providers of the type of content that is covered in civics classes. The vast majority of students felt that they were prepared to use social media to engage in political and civic life. 28% of the study participants felt they were “very prepared,” while 47% responded that they were “somewhat prepared.” The correlation between feeling prepared to use social media for politics and knowledge is positive and statistically significant for all of the knowledge measures. It may be the case that young people who feel prepared to use social media tools to engage in civic life are able to connect with material that is relevant to politics and government, and thus social media use can enhance their political knowledge. On the other hand, students who perceive that social media is extremely helpful in gaining political information but do use social media to connect to civic life may not have the direction or specific skills to seek out meaningful, quality material. This is clearly an area that requires further investigation.

Conclusion

This study is a first step in the analysis of a new data set we are developing that examines students’ levels of political knowledge as well as their civic dispositions, civic skills, and related media use. Our preliminary findings taken together begin to paint a cohesive narrative. Students in programs employing an innovative curriculum taught by well-trained teachers will exhibit higher levels of knowledge than their peers, especially if they have opted into an elective civics class. We the People students perform better on tests of civic knowledge, especially in specific
areas e.g. knowledge of the Constitution, than nonWTP students. The data strongly indicate that students of teachers who have been through WTP training have higher knowledge levels regardless of whether they are taking WTP class or not. Further, students who choose to be in a civics class will far out-perform students who take civics because it is required. This stands to reason that a self-selecting group will have a higher level of motivation to perform than those who are in the class because it is a graduation requirement. The level and creativity of instruction in elective classes likely exceeds that of required civics classes. Students in AP classes also score higher on civic knowledge than their colleagues taking civics for standard credit. AP students are primed to perform well on exams testing their knowledge of government and politics, and so their superior scores on the indicators in this study are to be expected.

Our results also reveal that an open class climate is important for stimulating political learning. As prior research demonstrates, classes that involve lecture and current events material are successful in conveying core knowledge of democratic principles, government institutions, and political processes. Students use of certain types of political media, especially print newspapers, news websites, and political websites, is related to higher levels of knowledge. However, there is a negative correlation between knowledge and use of social media and blogs for news and information seeking.

This basic analysis sets the stage for the next steps in this project that will dig deeper into the data. Whereas this study relies solely on the posttest knowledge measures, we will examine the gain in students’ knowledge between the pretest and the posttest. A preliminary analysis indicates that there was a significant increase in students’ knowledge over the course of the semester for the entire sample. We also plan further analysis of the aspects of teacher training and pedagogy that support knowledge gain. We have data from a teacher survey and classroom
ethnographies that we can consult. The analysis of students’ media use has raised some interesting issues that call for further investigation. In particular we can delve more fully into the finding that students who feel prepared to use social media to engage in politics have higher knowledge scores than those who don’t, but students who believe that social media is a very useful tool for acquiring political information have lower scores.

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NOTES

1 This research is funded by a grant from the Center for Civic Education and is supported by the Indiana Bar Foundation. Diana Owen is the principal investigator.

2 We collected data on the teachers’ background, professional development, and level of experience as well as their approach to civics instruction, the curriculum interventions they employ in the classroom, and their student learning goals. Teachers were asked about the materials they use, the resources they have available to them, the challenges they face when teaching civics, and how they are adapting their civics classes to address the changing political and civic environment, especially the emerging role of digital media for engagement.

3 The fall semester in Indiana began in August, and we were not able to administer the pretest until the beginning of September after classes had started. We expect that this may diminish the magnitude of knowledge gain from the pretest to the posttest. The spring semester 2015 data collection took place during the first week of classes to alleviate this problem.

4 We intend to analyze knowledge acquisition using the pre and post test data; this was not possible for this paper, as data collection was completed very recently.

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Methodological Appendix

Political Knowledge

Total Knowledge

Cronbach’s alpha=.857
--62 knowledge items (aggregate of items below)

Dimensions of Political Knowledge

Constitutional Principles:

Cronbach’s alpha=.673
--John Locke states: "Absolute arbitrary power, or governing without settled laws, can neither of them be consistent with the ends of society and government."
Which of the following statements is most consistent with the Locke quotation above?
--Which of the following did critics of the Articles of Confederation consider the document’s greatest flaw?
--"We hold these truths to be self-evident: That all men are created equal; that they are endowed by their creator with certain unalienable rights; that among these are life, liberty, and the pursuit of happiness; . . ." This quotation is evidence that some of the basic ideas in the Declaration of Independence were…
--A constitutional government ALWAYS includes
Which characteristic serves as a long-term protection against tyranny and is a foundation of liberty in the United States?

The proposal at the Constitutional Convention that membership in the House of Representatives would be based on proportional representation and that Senate membership would be based on equal representation is called—

At the Constitutional Convention of 1787, a bicameral legislature was proposed as a solution to the disagreement over—

The Constitution requires that the President's nominations to the Supreme Court be approved by the Senate. This is an example of—

What is the last step in amending the U.S. Constitution?

In the United States, what occurs when state and national laws are in conflict?

Federalism: A way of organizing a nation so that two or more levels of government have authority over the same land and people. Which fact about American government reflects the above definition of federalism?

The federal system encourages the growth of organized interest groups by—

Which of the following is characteristic of classical republicanism?

Bill of Rights:

The primary purpose of the Bill of Rights was to…

The establishment clause in the First Amendment says that…

Thomas Jefferson wrote the following to John Jay in a letter in 1786: "... our liberty, which cannot be guarded but by freedom of the press ..." Why should freedom of the press be guarded?

The Fourteenth Amendment to the U.S. Constitution states: “All persons born or naturalized in the United States ... are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.” Under what historical circumstances was the Fourteenth Amendment passed?

In the Supreme Court case of Schenck v. The United States (1919), Schenck was prosecuted for having violated the Espionage Act of 1917 by publishing and distributing leaflets that opposed the military draft and United States entry into the First World. The court ruled in favor of the United States. Below is an excerpt from the majority opinion.

"We admit that in ... ordinary times the defendants ... would have been within their constitutional rights. But the character of every act depends upon the circumstances in which it is done. The most stringent protection of free speech would not protect a man in falsely shouting fire in a theater and causing a panic. ... The question in every case is whether the words used are used in such circumstances and are of such a nature as to create a clear and present danger that they will bring about the evils that Congress has a right to prevent.”

The decision reflects the tension between...

The case of John Peter Zenger demonstrates...

Government Institutions:

Cronbach’s alpha=.757
--What is one responsibility that modern Presidents have that is NOT described in the U.S. Constitution?
--Which of the following is a power of the President
--After the Vice President, who is next in line for the U.S. presidency?
--The War Powers Act was an attempt by Congress to check the power of the President because
--To override a presidential veto, how much of a majority is required in the U.S. Senate and House of Representatives?
--In the area of United States foreign policy, Congress shares power with the
--The authors of the United States Constitution believed that the voice of the people should be heard frequently. Which part of the Government was instituted to respond most directly to the will of the people?
--How many Senators are in the U.S. Congress?
--How long is the term for members of the House of Representatives?
--What happens to most of the bills introduced in the House of Representatives?
--Filibusters were used by United States Senators from the South in the 1950s and 1960s to…
--The major point in the Supreme Court case of Gibbons v. Ogden
--How many justices serve on the U.S. Supreme Court?
--In Marbury v. Madison (1803), the Supreme Court established judicial review which is
--What lessons did future U.S. leaders learn from the 1974 U.S. Supreme Court case United States v. Nixon?

Political Parties and Elections:
Cronbach’s alpha=.638
--Which of the following statements represents James Madison’s views about political parties as expressed in Federalist 10
--In order to register to vote, some states require that citizens…
--To revise the Electoral College system for selecting the President, changes must be made to…
--United States citizens choose the Republican and Democratic presidential candidates by…
--Which of the following statements is NOT true about American presidential elections?
--The major role of political parties in the United States is to…
--Traditionally third parties have had the greatest impact on American politics by…
--A political action committee (PAC) is…
--In the case of Citizens United v. Federal Election Commission (2010), the U.S. Supreme Court ruled in a split 5-4 decision that…
--Which of the following is NOT a characteristic of a system of proportional representation in voting?
--Investigative journalists of the early 20th century who exposed social and political corruption were known as…
--Which of the following is a direct result of television’s role in elections?
--Reduced power of political parties is a result of…

Race and Politics:
Cronbach’s alpha=.442
--Which U.S. Supreme Court case ordered an end to segregated schools “with all deliberate speed”?
--In The Melting Pot (1908), Israel Zangwill states, “America is . . . the great Melting Pot! Here you stand, good folk, think I, when I see them at Ellis Island, here you stand in your fifty groups, with your fifty languages and histories, and your fifty blood hatreds and rivalries. But you won't be long like that, brothers . . . Into the Crucible with you all! God is making the American.”
Which of the following phenomena does the passage celebrate?
--What is the term associated with an appreciation of the unique cultural heritage of ethnic and racial groups?
--When necessary to achieve justice, Martin Luther King, Jr., urged his followers to
--Affirmative action refers to efforts enforced by government to

**Economic Principles**
Cronbach’s alpha=.587
--Which statement identifies a characteristic of a free-enterprise economic system?
--Which of the following beliefs and values are NOT associated with American political culture
--Which of the following is NOT a characteristic of a capitalistic economic system?
--In a mixed economy…
--The Federal Reserve System was created by Congress in 1913 to maintain sound banking conditions. Which of the following is true about the Federal Reserve System?

**Foreign Policy/ Globalization Issues:**
Cronbach’s alpha=.432
--What is one important difference between international politics and domestic politics?
-- The concept of "positive rights" in United Nations' Universal Declaration of Rights requires that…
--The legal basis for the escalation of United States involvement in the Vietnam War was the
--The term "Cold War" refers to the…
--The Truman Doctrine and the Marshall Plan represented attempts by the United States to deal with the

**Classroom Climate**
Cronbach’s alpha=.887
--How well prepared are you to use social media to engage in political and civic affairs?
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