Political Knowledge and the Development of Civic Dispositions and Skills

Diana Owen
Georgetown University

Paper prepared for presentation at the American Political Science Association Teaching and Learning Conference, Teaching to Empower Students, Albuquerque, New Mexico, February 7-9, 2020.
Political Knowledge and the Development of Civic Dispositions and Skills

Studies have posited that knowledge of American government and politics forms the foundation for citizens’ effective engagement in civic life (Niemi and Junn, 1998; Galston, 2001; Milner, 2010; Campbell, 2006). Citizens with higher levels of knowledge tend to have greater confidence in their ability to participate and are more politically efficacious than those with less knowledge. A strong knowledge base facilitates individuals’ development of political attitudes that are predicated on information and insight rather than emotion. Knowledge fosters comprehension of how people’s own interests fit into a complex political system. Thus, knowledge is thought to be an antecedent to civic activation (Delli Carpini and Keeter, 1996; Galson, 2004; CIRCLE, 2013).

Early studies generally found that civics and social studies classes had little impact on young people’s acquisition of civic knowledge (see Patrick, 1977; Langton and Jennings, 1968). Textbook knowledge, in particular, dissipated over time (Jennings, 1996). However, more recent research has demonstrated that civic education can convey core knowledge of democratic principles, the structure and function of government, political processes, and current issues and events (John, Halpern, and Morris, 2002; Owen, Soule, and Chalif, 2011; Owen, Owen and Riddle, 2017). Incorporating active learning elements into the curriculum, such as group projects and debates, increases civic learning even for students who already have a base of political knowledge (Hooghe and Dassonneville, 2011). Teachers who foster an open classroom environment are especially successful in imparting knowledge and instilling predispositions towards participation (Owen and Soule, 2015).

Scholars have forwarded the notion that knowledge is associated with the development of civic dispositions, skills, and orientations toward political engagement (Delli Carpini and Keeter, 1996; Galston, 2007). However, evidence of this association has been mixed. On the one hand, research has shown that civics instruction can instill predispositions towards participation (Owen and Soule, 2015). Further, increased political knowledge conveyed via civic education can increase political literacy and generate more positive views about democratic institutions (Dudley and Gitelson, 2002). However, the connection of civic knowledge to the development of civic dispositions, skills, and orientations toward political engagement is unsettled (McAllister, 2010).

Thus, this study addresses the core research question: What is the association between political knowledge and the acquisition of civic dispositions and skills for middle and high school students? Specifically, this research focuses on the relationship between political knowledge and the development of civic dispositions and skills among high-need middle and high school students, particularly those attending Title I schools with high concentrations of low income students which receive federal funding to assist in meeting educational goals. Empowering high-need students for political engagement is vital. The disparities in civic education between privileged and disadvantaged young people have long-term repercussions as they acerbate the civic empowerment gap (Levinson, 2012).
The study employs data from two civic education programs aimed at high-need middle and high school students implemented by the Center for Civic Education (https://civiced.org). The James Madison Legacy Project (JMLP) provides professional development and resources to teachers of high-need students who institute the We the People: The Citizen and the Constitution (WTP) curriculum intervention in their classrooms. The Congressional Academy is an immersive educational experience in civics, American government, and political history for secondary school teachers and their students. Survey data collected on students who participated in these two programs will test the proposition that there is a correlation between civic knowledge and civic dispositions and skills. The study also offers an opportunity to compare a classroom intervention (the JMLP) with a two-week intensive civics and history residential program (the Academy).

Civic Knowledge, Dispositions, and Skills

Civic knowledge encompasses a vast amount of information pertinent to various aspects of government and politics. 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). It also is defined as “holding correct information” related to civics and politics, such as facts about issues, candidates, and electoral processes (Hoffman, 2017). Knowledge encompasses, and in some instances is considered synonymous with, political sophistication, or the level of cognitive complexity a person evinces in relation to government and politics. Sophistication taps into people’s political expertise, and reflects the extent to which individuals have a wide and substantive knowledge of politics that is organized along constrained ideological lines (Luskin, 1990).

Decades of research confirms that the public has a relatively low level of political knowledge and sophistication. In fact, knowledge levels among the mass public have remained fairly stable over time despite the proliferation of readily accessible information (Bennett, 1988, 1989; Neuman, 1986; Smith, 1989; Delli Carpini, 2005; Galston and Lopez, 2006; Friedman and Friedman, 2013). Americans are about as informed today as they were fifty or sixty years ago (Delli Carpini, 2005). 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). The 2019 Annenberg Civics Knowledge Survey found that only 39% of Americans were able to name all three branches of government, and 37 percent could not name any of the rights guaranteed by the First Amendment to the Constitution (Annenberg Public Policy Center, 2019). 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).

Knowledge of government institutions and political processes, it is argued, provides a sound footing for civic engagement (e.g., Niemi and Junn, 1998; Galston, 2001; Milner, 2010; Campbell, 2006). An appreciation of the principles embodied in the Constitution undergirds

---

1 The James Madison Legacy Project is funded by a Supporting Effective Educator Development (SEED) grant from the U.S. Department of Education. The Presidential and Congressional Academies are supported by the Strengthening Democracy Through History and Civics grant from the U.S. Department of Education.
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). Some scholars contend that political knowledge is directly related to participation. People who possess sufficient 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). Research in Indiana found that civic education provided high school students with a political knowledge base that was associated with an increased desire to take part in politics and community affairs (Owen, 2015).

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.

Under the right circumstances, civic education has the potential to offer significant intentional exposure to political information within a structured environment that can potentially contribute to the development of civic dispositions and skills. To foster good civic character, civic education must not only impart knowledge, but should also provide opportunities for students to apply what they learn and to develop orientations integral to responsible and effective citizenship (Branson, 1998; Branson and Quigley, 1998). Civic dispositions are orientations related to democratic character formation. They are the public and private traits essential to the maintenance and improvement of constitutional democracy (Branson, 1998). The Campaign for the Civic Mission of Schools (2011) defines civic dispositions as a concern for others' rights and welfare, fairness, reasonable levels of trust, and a sense of public duty. People who evince a strong democratic temperament are willing to compromise personal interests for the greater good (Stambler, 2011). They embrace their democratic rights, responsibilities, and duties in a responsible, tolerant, and civil manner. They have the confidence to engage in civic affairs and to participate actively in political life (Torney-Purta and Lopez, 2006).

Civic skills encompass “the abilities necessary to participate as active and responsible citizens in a democracy” (Campaign for the Civic Mission of Schools, 2011: 16). The development of civic skills is essential for critical thinking that facilitates collective action. The National Assessment Governing Board of the U.S. Department of Education describes civic skills as the intersection of intellectual (or cognitive) skills and participatory civic skills that involve “the use of knowledge to think and act effectively in a reasoned manner in response to the challenges of life in a constitutional democracy” (2018: 18). Students employ intellectual
skills as they learn to apply civic knowledge to the realities they encounter as citizens (Patrick, 2002). Intellectual skills include the ability to identify, gather, describe, explain, analyze, synthesize, and evaluate information pertinent to civic life in order to take informed stands on issues. Participatory skills are required for people to engage in political life. They include the ability to listen to, process, and express diverse views on issues, to speak openly and express opinions, to work collaboratively in the community to solve problems, to advocate on behalf of a cause, to build consensus, negotiate compromise, and manage conflict, and to vote and be an active participant in political affairs (National Assessment Governing Board, 2018: 18; Patrick, 2002).

Curricula and pedagogy that encourage not only learning of core civics content but also make a connection to dispositions and skills can produce increases in intellectual and participatory skills (Deakin Crick, Coates, Taylor, and Ritchie 2005). Civic education coursework can influence students’ future levels of voting, as well as other forms of political participation (Bachner 2010, Crawford 2010, Owen 2013, Owen and Riddle 2017). Civics instruction in middle and high school can impart lasting democratic proclivities and prime citizenship orientations that develop over a lifetime (Pasek et al. 2008, Kahne and Sporte 2008). Learning basic information about government and democratic processes in adolescence provides a foundation for the further acquisition of political knowledge and greater development of civic skills in adulthood (Delli Carpini and Keeter 1996, Owen 2008), including an intention to vote (Cohen and Chaffee 2013).

Quality civic education is particularly important for marginalized populations and students from less advantaged backgrounds (Youniss, 2011). These students are more likely to have lower levels of political knowledge than those from more privileged backgrounds. Schools serving high-need students frequently are under-resourced and have large class sizes. Teachers in inner city schools have been found to employ a “pedagogy of poverty” that prioritizes teacher-centric learning, like lecture, reading aloud, and worksheets, rather than active approaches that have been found to be more effective (Haberman, 2010; Hersholt, et al., 1995). In addition, high-need students have few opportunities to learn and engage outside of the classroom. Still, civic education has been found to be most effective for increasing democratic capacity in this student population (Gainus and Martens, 2012)

**Connecting Knowledge to Dispositions and Skills**

Civic education varies vastly in content, approach, and quality. The connection of knowledge to civic dispositions and skills does not occur automatically. Teachers can make the association between knowledge and civic orientations relevant through learning approaches that actively engage students (Atherton 2000; Campbell 2005; Kim, Parks, and Beckerman 1996; Galston 2004; Hess 2009; Hess and MacAvoy 2014; Pasek et al. 2008; Owen 2013, 2016; Morgan, 2016). Pedagogies that encourage both independent and group work can facilitate 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 can develop a greater sense of their own agency as civic actors (Atherton 2000; Tolo 1998; Finkel 2003; Torney-Purta et al. 2001; Torney-Purta 2002; Torney-Purta and Amadeo 2012; Lopez et al. 2006; Owen and Riddle 2017).
This study tests the hypothesis that civic knowledge is positively correlated with civic skills and dispositions. It examines the connection that civic knowledge has to civic dispositions and skills among middle and high school students who have taken part in two very different civic education programs—We the People: The Citizen and the Constitution and the Congressional Academy for History and Civics. We the People is a classroom-based curriculum intervention. The Congressional Academy is an intensive two-week residential program for students and their teachers that integrates lectures, group activities, and field trips. A central goal of these programs is to impart knowledge of political history, especially the establishment of American democracy, the Constitution and founding documents, key Supreme Court cases, government institutions, and political processes and practices. Both programs employ active pedagogic approaches that are conducive to making the connection between knowledge, dispositions and skills. They are aimed at high-need student populations.

The James Madison Legacy Project

The James Madison Legacy Project is a nationwide initiative of the Center for Civic Education that aims to expand the availability and effectiveness of civics instruction in elementary and secondary schools by providing professional development to teachers of high-need students. The JMLP seeks to increase the number of highly effective teachers through professional development based on the We the People curriculum. The professional development program is designed to improve teachers’ civics content knowledge and develop their pedagogic skills in order to enhance students’ achievement in attaining state standards in civics and government. The Center implements the JMLP through its nationwide network of affiliated organizations. Teachers participating in the JMLP professional development program attend summer institutes where they learn about the We the People curriculum, are educated in subject-area content, and are instructed in effective pedagogies for presenting the curriculum to students. Following the JMLP professional development program, teachers implement the WTP curriculum in their classrooms. The WTP curriculum intervention has involved more than 30 million students and 75,000 teachers in the United States in all 50 states and the District of Columbia since 1987 (www.civiced.org/wtp-the-program). The WTP program is grounded 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, and their relevance to current issues and debates.

WTP takes an active learning approach to conveying core civics content knowledge. The curriculum’s culminating activity is a simulated congressional hearing where students prepare to answer questions from a panel of judges. To prepare for the hearings, students are gain competencies in following news and public affairs, researching policy issues, developing skills that foster civil discussions and debates, and learn to work collaboratively to achieve societal goals, including the importance of compromise. Students take part in a range of learning activities, such as group projects, debates, and speeches. WTP middle and high school classes have the option of participating in district and statewide competitions based on the congressional hearings. States send representatives to the National Finals in Washington, DC that are held each spring. While participating in the competitions based on the simulated hearings is voluntary, students from several JMLP classes have made it to the National Finals as either winners of their state competitions or wild card teams.
JMLP Data and Measures

The data presented here were collected by the Civic Education Research Lab (CERL) at Georgetown University on the second cohort of the JMLP. Teachers took part in the JMLP professional development summer institute and follow-up professional development in 2016 and implemented the curriculum in their classrooms during the academic year 2016-17. A pretest-posttest design was employed to measure students’ acquisition of civic knowledge, dispositions, and skills as a result of their participation in the JMLP. Students took the pretest before they began their civics class and the posttest when they had completed the course.

Civic Knowledge

The evaluation instruments test students’ knowledge of core concepts related to the U.S. Constitution, the institutions of government, and elections and voting. The items reflect those found on standard tests of civics and American government and are not specifically aligned with the We the People curriculum. Knowledge items were constructed after examining prior research, civics inventories, grade-appropriate civics tests, and state civic education rubrics. Materials related to WTP were not consulted when creating the knowledge tests. The tests consisted of both original questions and those that have been previously tested and have known reliability.

Separate grade-appropriate knowledge tests were administered to the middle and high school students. The middle school test consisted of twenty-two multiple choice and short answer questions (e.g. How many members serve in the U.S. House of Representatives?), and the high school test included twenty-seven multiple choice and short answer questions. For every question, students were given the option of answering “I don’t know.” Additive indexes were created for the middle and high school tests where one point was awarded for each correct answer. The “I don’t know” answers were coded as incorrect (scored as zero) (Luskin and Bullock, 2011). The reliability of the indexes was established by computing Cronbach’s α, and far exceeded the U.S. Department of Education’s What Works Clearinghouse threshold of .500 (Standards Handbook, Version 4.0: 78) in each case. Cronbach’s α for the middle school was .770 for the pretest and .910 for the posttest. For high school, the reliability was .874 for the pretest and .951 for the posttest. In most schools, the test served as the student assessment for the civics class. (For a detailed description of the data and sampling, see Owen, 2018).

Civic Dispositions

Identical measures tapping civic dispositions were included on the middle and high school pretests and posttests. Students were asked: 1) How interested are you in American government and politics? 2) How much attention do you pay to media about government and politics? 3) How informed are you about what is going on in government and politics? 4) How often do you follow what’s going on in government and politics through social media? 5) How important is it for you to personally help out in your community? and 6) How important do you think it is for people to turn out to vote? Each item was measured on a four-point Likert scale with a high score corresponding to a strong civic orientation. Additive civic disposition indexes were created consisting of all of the pretest and posttest items. The civic disposition indexes
ranged from a low of 1 to a high of 19. The reliability (Cronbach’s α) for the middle school index was .790 and .857 for the high school index.

**JMLP Findings**

Middle and high school students’ knowledge scores improved significantly as a result of taking a We the People course in conjunction with the James Madison Legacy Project. A paired samples t-test was performed to determine the difference in pretest and posttest knowledge scores. (See Table 1.) Middle school students’ scores improved by 58% from pretest to posttest, while high school students’ score increased by 28%.

| Table 1 | Mean Scores on Knowledge of Government and Politics | JMLP |
|---------|--------------------------------------------------|------|
| **Political Knowledge** | **Middle School** | **High School** |
| Pre | 8.03 | 13.47 |
| Post | 12.71 | 17.28 |
| \(\bar{x}\) Difference | 4.68 | 3.81 |
| Sign. t | .00 | .00 |
| n | 8,134 | 8,879 |

When asked if they pay more attention to what’s going on in government and politics since taking the class, 70% of both middle and high school students answered in the affirmative. 73% of middle school and 66% of high school students felt that they were more prepared to take part in their community as a result of taking the WTP course. JMLP students’ civic dispositions as measured by the six items tested increased modestly, on average, from the pretest to the posttest. The mean score on the civic dispositions index for middle school students was 11.93 on the pretest and 13.23 on the posttest, a mean difference of 1.30 that was statistically significant at \(p \leq .01\). For high school, the pretest index mean was 12.63 and the posttest index mean was 13.74; the mean difference of 1.11 was statistically significant at \(p \leq .01\). The improvement in the average scores on the individual civic disposition items were relatively small across the board for both middle and high school students.

Table 2 presents the frequency distributions for the posttest civic disposition measures. The overall pattern of the distributions for the measures tapping the extent to which students were interested in, attentive to, and informed about government and politics were similar for middle and high school students. The highest percentage of students indicated that they were somewhat interested, attentive, and informed. The findings for middle and high school students also were similar for the item measuring how important it is for them to personally help out in their community. Nearly 40% indicated that it was very important and around 50% felt that it was somewhat important. 64% of middle school and 70% of high school students responded that it is very important for people to turn out to vote.
Table 2
Posttest Civic Dispositions (Percentages)
JMLP

|                  | Middle School | High School |                | Middle School | High School |
|------------------|---------------|-------------|----------------|---------------|-------------|
| **Interest**     |               |             | **Attention**  |               |             |
| Very Interested  | 13%           | 16%         | A Lot          | 14%           | 18%         |
| Somewhat         | 46%           | 47%         | Some           | 44%           | 51%         |
| Not Very         | 26%           | 26%         | Not Much       | 32%           | 24%         |
| Not at all       | 15%           | 11%         | None           | 10%           | 7%          |
| n                | 8,180         | 8,857       | n              | 8,169         | 8,869       |
| **Informed**     |               |             | **Follow SM**  |               |             |
| Very Informed    | 17%           | 17%         | Frequently     | 16%           | 24%         |
| Somewhat         | 52%           | 58%         | Sometimes      | 31%           | 45%         |
| Not Very         | 24%           | 20%         | Rarely         | 38%           | 24%         |
| Not at all       | 7%            | 5%          | Never          | 15%           | 7%          |
| n                | 8,171         | 8,862       | n              | 8,168         | 8,851       |
| **Community**    |               |             | **Vote**       |               |             |
| Very Important   | 39%           | 38%         | Very Important | 64%           | 70%         |
| Somewhat         | 48%           | 50%         | Somewhat       | 27%           | 22%         |
| Not Very         | 9%            | 9%          | Not Very       | 6%            | 5%          |
| Not at all       | 4%            | 3%          | Not at all     | 3%            | 3%          |
| n                | 8,175         | 8,850       | n              | 8,175         | 8,856       |

To test the hypothesis that higher levels of knowledge are associated with greater civic orientations, analysis of variance (ANOVA) models were run for middle and high school students with the posttest knowledge indexes as the dependent variables and posttest civic dispositions as factors. Table 3 displays the mean values at each level of the factor and the mean difference between the highest and lowest scores on the knowledge measure. The evidence clearly supports the hypothesized assumption for all of the civic dispositions examined in the study. The mean difference between those who are very interested and not interested in politics was 2.92 for middle school and 5.60 for high school. A similar pattern exists for paying attention to politics in the media, with a mean difference of 2.84 for middle school and 5.31 for high school. The difference of means was somewhat larger for the importance of being informed about politics at both the middle school (3.69) and high school (6.84) levels. The difference between the highest and lowest scores for following what’s going on in government and politics was the smallest among the dispositions at 1.50 for middle school and 4.55 for high school. There were mean differences of 3.76 for middle school and 5.83 for high school on the importance for students to personally help out in their community. The biggest variations in knowledge level was between students who felt that it is very important for people to turn out to vote compared to those indicating that it is not at all important in both middle school (4.03) and
Table 3
ANOVA - Knowledge by Civic Dispositions

JMLP

| Interest       | Middle School | High School | Attention          | Middle School | High School |
|----------------|---------------|-------------|--------------------|---------------|-------------|
| Very Interest  | 13.85         | 19.43       | A Lot              | 13.81         | 15.84       |
| Somewhat       | 13.31         | 17.98       | Some               | 13.22         | 14.12       |
| Not Very       | 12.29         | 16.31       | Not Much           | 12.56         | 13.00       |
| Not at all     | 10.91         | 13.83       | None               | 9.84          | 10.53       |
| x̄ Difference  |               |             | x̄ Difference      |               |             |
| Very/Not       | 2.92          | 5.60        | A Lot/None         | 2.84          | 5.31        |
| n              | 8,132         | 8,874       | n                  | 8,132         | 8,873       |

| Informed       | Middle School | High School | Follow SM          | Middle School | High School |
|----------------|---------------|-------------|--------------------|---------------|-------------|
| Very Informed  | 13.50         | 18.66       | Frequently         | 13.51         | 18.82       |
| Somewhat       | 13.21         | 17.92       | Sometimes          | 12.92         | 17.66       |
| Not Very       | 12.09         | 15.64       | Rarely             | 12.56         | 16.18       |
| Not at all     | 9.84          | 11.82       | Never              | 12.01         | 14.27       |
| x̄ Difference  |               |             | x̄ Difference      |               |             |
| Very/Not       | 3.69          | 6.84        | A Lot/None         | 1.50          | 4.55        |
| n              | 8,129         | 8,871       | n                  | 8,127         | 8,864       |

| Community      | Middle School | High School | Vote               | Middle School | High School |
|----------------|---------------|-------------|--------------------|---------------|-------------|
| Very Important | 13.06         | 18.10       | Very Important     | 13.52         | 18.43       |
| Somewhat       | 12.99         | 17.41       | Somewhat           | 11.94         | 15.60       |
| Not Very       | 11.84         | 15.87       | Not Very           | 10.04         | 12.78       |
| Not at all     | 9.30          | 12.27       | Not at all         | 9.49          | 11.13       |
| x̄ Difference  |               |             | x̄ Difference      |               |             |
| Very/Not       | 3.76          | 5.83        | Very/Not           | 4.03          | 7.30        |
| n              | 8,128         | 8,861       | n                  | 8,127         | 8,126       |

The x̄ difference is statistically significant for all comparisons.

Correlation and OLS regression analyses were performed to examine the association between civic knowledge and dispositions further. (See Table 4.) Pearson’s R was calculated to estimate the correlation between posttest knowledge and the posttest civic disposition indicators. For the OLS regression models, the dependent variables were the posttest civic disposition measures; posttest knowledge was entered as an independent variable with pretest civic dispositions entered as control variables. In this way, it was possible to determine the effect of students’ political knowledge level on their civic dispositions following the intervention taking into account their preexisting dispositions scores.

Overall, the findings indicate that the correspondence between knowledge and dispositions was somewhat stronger for high school students than for middle school students.
The Pearson’s R coefficients for all of the individual disposition measures were higher for the high schoolers—interest in government and politics (middle school .188/high school .254), attention to politics (middle school .150/high school .169), informed about politics (middle school .183/high school .234), follow politics on social media (middle school .092/high school .203), and community involvement (middle school .106/high school .154). The highest correlation was between civic knowledge and attitudes about the importance of voting (middle school .241/high school .301). Similarly, the standardized regression coefficients for civic knowledge were larger for the high school students than for the middle school students for all of these models. The findings for the civic dispositions index were consistent with the results for the individual measures. The Pearson’s R correlation between knowledge and the civic dispositions index was lower for middle school students (.239) than for high school students (.335). The OLS regression coefficient for the index was .203 for middle school and .228 for high school. All of the coefficients were statistically significant at p≤.01.

Table 4
OLS Regression Analysis of Knowledge on Dispositions (beta coefficients)
Correlations (Pearson’s R)

JMLP

| Interest          | Middle School | High School | Attention          | Middle School | High School |
|-------------------|---------------|-------------|--------------------|---------------|-------------|
| Knowledge         | .154          | .170        | Knowledge          | .134          | .141        |
| Pre Interest      | .372          | .421        | Pre Attention      | .330          | .222        |
| R²                | .174          | .235        | R²                 | .134          | .140        |
| Pearson’s R       | .188          | .254        | Pearson’s R        | .150          | .169        |

| Informed          |               |             | Follow SM          |               |             |
|-------------------|---------------|-------------|--------------------|---------------|-------------|
| Knowledge         | .156          | .194        | Knowledge          | .084          | .149        |
| Pre Informed      | .287          | .295        | Pre Follow SM      | .335          | .380        |
| R²                | .116          | .141        | R²                 | .121          | .182        |
| Pearson’s R       | .183          | .234        | Pearson’s R        | .092          | .203        |

| Community         |               |             | Vote               |               |             |
|-------------------|---------------|-------------|--------------------|---------------|-------------|
| Knowledge         | .122          | .135        | Knowledge          | .214          | .248        |
| Pre Community     | .297          | .356        | Pre Vote           | .250          | .281        |
| R²                | .106          | .154        | R²                 | .123          | .168        |
| Pearson’s R       | .119          | .163        | Pearson’s R        | .241          | .301        |

| Index             |               |             |                    |               |             |
|-------------------|---------------|-------------|--------------------|---------------|-------------|
| Knowledge         | .203          | .228        |                    |               |             |
| Pre Index         | .419          | .587        |                    |               |             |
| R²                | .238          | .423        |                    |               |             |
Pearson’s R | .239 | .335

All coefficients are significant at p≤.01

**JMLP Key Takeaways**

The analysis of the JMLP data provides support for the proposition that civic knowledge is positively related to civic dispositions. Civic knowledge among high-need students increased significantly as a result of their exposure to the WTP curriculum through the JMLP program. The change in students’ civic dispositions was modest but positive following the course, which is consistent with taking a civics class that focuses heavily on conveying content knowledge. There was an association between higher levels of civic knowledge and increased civic dispositions. The association was stark and evident across a variety of civic orientations, including political interest, attention, keeping informed, following social media, community engagement, and perceived importance of voting. The correlation between civic knowledge and dispositions was higher at the high school level than the middle school level. This trend is reasonable, as younger students are farther away from being able to participate fully in the political process, especially by voting, than older students. Politics and government becomes more relevant to young people as they approach the age of political maturity when they can cast a ballot.

**The Congressional Academy**

The Center for Civic Education developed and implemented *Presidential and Congressional Academies* to provide an immersive educational experience in civics, American government, and political history for secondary school teachers and students. The *Congressional Academy* for students ran concurrently with the *Presidential Academy* for teachers from July 7 to 20, 2019. These Academies were the first in a five-year series scheduled for the summers of 2019-2023. The program targets high-need students and their teachers from across the United States. While preference was given to teachers and students who were able to show that they met high-need criteria, this was not a requirement for admission to the program. Participants were recruited through CCE’s extensive network of state civic education coordinators and a variety of other channels catering to educators. Teachers were encouraged to invite students to attend the *Congressional Academy* with an average of two students per teacher, although a small number of students attended without an accompanying teacher. Applications to the Academies were reviewed by a panel of civics and history educators and experts. 46 teachers attended the 2019 Presidential Academy and 104 students attended the Congressional Academy. This study examines findings for the 101 students for whom complete data were collected.

Students participating in the *Congressional Academy* came from diverse backgrounds. Some teachers selected students who wanted to learn more about subjects they enjoyed and in which they excelled. Others chose students for whom civics and history were not their strongest subjects and who they felt would benefit most from the program. Almost all of the students had taken basic courses in social studies (82) and American history (95) prior to the Academy. A smaller number had taken courses in civics (12), AP Government (20), and AP History (36). Sixteen students had participated in the *We the People program*. Most of the students were aged 16 or 17 and were rising juniors and seniors in high school. There were 66 female students, 36
male students, and 1 student who identified as non-binary. The students were racially and ethnically diverse.

Congressional Academy Data and Measures

Survey data on the Congressional Academy students were collected by the CERL research team. Before the start of the Academy on the morning of July 8, 2019, the pretest survey was administered. Students took the posttest on the afternoon of July 19, 2019, at the conclusion of the Academy. The tests were taken on paper and proctored by CERL researchers. Students were not permitted to use any form of personal technology or to consult other materials while taking the surveys. Complete pretests and posttests were obtained from 101 of the 104 students who were enrolled in the Academy and were used in this study. 80 students constituting the high-need population attended Title I schools (TIS) and 21 students did not attend Title I institutions (non-TIS).

The pre and post Academy surveys included measures of knowledge of American government, politics, and political history as well as civic dispositions and skills. The civic dispositions incorporated in the study were political interest and attention, respect for the rule of law, attitudes about taking part in political discussions, community engagement, government service, civic duty, trust in government, and trust of the media. To tap into civic skills, students were asked if they were able to perform a variety of tasks in response to a community problem, such as researching the problem, organizing others to work collaboratively for a solution, and contacting public officials. This measure reflects students’ confidence in their ability to take civic action. Identical items were asked on the pretests and posttests.

Civic Knowledge

Political knowledge was based on students’ responses to 40 multiple choice items asked on the pretest, which established a baseline, and the posttest. The questions tested core knowledge about American political history and government. Items dealt with founding principles, the U.S. Constitution, Supreme Court cases, elections and voting, among other topics. (See Appendix A for complete question wording.) The knowledge items were constructed after consulting prior research, civics inventories, grade-appropriate civics and history tests, sample Advanced Placement (AP) government and history tests, and state civic education rubrics. The items were not overly-aligned with the Congressional Academy curriculum. Each item was worth one point; the range of possible test scores was 0 to 40. The highest score by students on the pretest was 33 and was on the posttest was 35. Additive indexes of the pretest and posttest knowledge items were created (Cronbach’s α pretest was .877 and posttest was .853).

Civic Dispositions

Two items tapping the students’ interest in and attention to American government and politics were included on the pretest and posttest: 1) How interested are you in American government and politics? and 2) How much attention do you pay to media about government and politics? The responses were measured on 4-point Likert scales (scored low to high interest/attention). The items were combined in a political interest and attention index (range 1-
Cronbach’s $\alpha$ pretest was .686 and posttest was .540. A collapsed version of the index with three categories (low/moderate/high levels of interest and attention) was created for use in the ANOVA analysis.

Respect for the rule of law was examined in relation to government officials as well as the students themselves. Students were asked how much they agreed with the statement: Government officials should follow rules and laws at all times. They also were asked if it was their responsibility to obey rules and laws. The items were measured using a five-point Likert scale (strongly disagree to strongly agree). An additive rule of law index was constructed from these two items (Cronbach’s $\alpha$ pretest was .773 and posttest was .780). A collapsed version of the index consisting of three categories (low/moderate/high respect for the rule of law) was constructed.

The survey included four items measuring students’ propensity to engage in political discussions. Students were asked how strongly they agreed with the following statements: 1) I enjoy talking about politics and political issues, 2) When I hear news about an issue, I try to find out if it represents all sides, 3) I listen to people talk about politics even when I disagree with them, and 4) People should be allowed to express unpopular opinions. The items were measured using a five-point Likert scale (ranging from strongly disagree to strongly agree). An additive political discussion index was created (range 1-10; Cronbach’s $\alpha$ pretest was .662 and posttest was .733). A collapsed version of the political discussion index consisting of three categories (low/moderate/high propensity to discuss politics) was created for use in the ANOVA analysis.

Students’ attitudes about community engagement were measured by their agreement with three statements: 1) It is my responsibility to be actively involved in my community, 2) I believe I can make a difference in my community, and 3) By working with others in the community, I can make things better. These items were combined in a community engagement index (range 1-9; Cronbach’s $\alpha$ pretest was .716 and posttest was .853). The community engagement index was collapsed to form a three-category variable (low/moderate/high engagement).

Two items took into account students’ inclination to pursue a career in government service or to run for office. Students were asked how strongly they agreed with the statements: 1) I am interested in a career in government and politics and 2) I may run for office one day. An additive index of government service was computed from these two items (range 1-9; Cronbach’s $\alpha$ pretest was .786 and posttest was .879). The index was collapsed to form a three-category variable (low/moderate/high inclination for government service).

Civic duty was measured by students’ responses to a battery of five items. How much do you agree that it is your responsibility to do the following: 1) vote in elections when you are eligible, 2) serve on a jury, 3) obey rules and laws, 4) keep informed about government and politics, and 5) serve in the military (range 1-12; Cronbach’s $\alpha$ pretest was .578 and posttest was .601). The index was collapsed into three categories indicating low, moderate, and high levels of civic duty.

Two aspects of political trust were examined in the study—trust in government and trust in the media. A single item indicated trust in government: I trust government officials to do
what is right most of the time. It was measured on a five-point Likert scale where students indicated their agreement with the statement. The surveys included two indicators of trust in the media: 1) I trust the news media and 2) I trust information about government and politics that I find online. The media trust measures were used to create an additive index (range 1-9; Cronbach’s α pretest was .655 and posttest was .645). The government and media trust indexes was collapsed into three-category variables (low/moderate/high trust) for the ANOVA analysis.

Civic Skills

It is difficult to measure students’ civic skills directly, especially using survey methods. We examined students’ confidence in their civic skills, which is an important precondition of action (Campaign for the Civic Mission of Schools, 2011: 16). We used a hypothetical situation to determine if students thought that they could take a variety of civic actions to work toward solving a problem in their community. Students were asked: If you found out about a problem in your community that you wanted to do something about, how well do you think you would be able to do each of the following: 1) research the problem, 2) create a plan to address the problem, 3) get other people to care about the problem, 4) attend a meeting about the problem, 5) express your views in front of a group of people, 6) write a letter to a local news outlet, 7) organize a petition, 8) contact a government official, 9) use social media to publicize the problem, and 10) use social media to organize people to take action to solve the problem. The students could respond that they definitely could, probably could, probably could not, and definitely could not take each action. The probably could not and definitely could not categories were collapsed for the difference of means tests. An additive index of civic skills was computed (range 1-37; Cronbach’s α was .838 for the pretest and .901 for the posttest).

Congressional Academy Findings

Students gained significant content knowledge of American history and government after participating in the Congressional Academy. A paired samples t-test was performed to determine the difference in pretest and posttest knowledge scores. (See Table 5.) For all students, the average pretest score was 21.56 and the average posttest score was 25.24. The mean difference in the pretest-posttest scores was 3.55 which was statistically significant at \(p \leq .01\). Knowledge scores differed depending upon whether a student attended a Title I school or not. The mean score on the pretest was lower for Title I school students (20.66) than for students attending non-Title I schools (25.24). The average knowledge gain for TIS students (3.83) was greater than for non-TIS students (2.47). The knowledge gain for both groups was statistically significant at \(p \leq .01\).
Table 5
Mean Scores on Knowledge of American Government and Politics
Congressional Academy

|                              | Title I School | Not Title I School | All Students |
|------------------------------|---------------|-------------------|-------------|
| **Political Knowledge**      |               |                   |             |
| Pre                          | 20.58         | 25.24             | 21.56       |
| Post                         | 24.58         | 27.71             | 25.24       |
| x̄ Difference                | 4.00          | 2.47              | 3.68        |
| Sign. t                      | .00           | .00               | .00         |
| n                            | 80            | 21                | 101         |

The civic dispositions of students attending the Congressional Academy generally increased from pretest to posttest. (See Table 6.) Scores for both TIS and non-TIS students improved on measures of political interest and attention, political discussion, government service, civic duty, trust in government, and trust in media. Support for the rule of law increased for TIS students, but not for the non-TIS participants. The scores of TIS students on the community engagement measure were higher on the posttest than the pretest. (See Owen and Hartzell, 2019, for a more detailed discussion of these findings.)

Table 6
Mean Scores on Civic Dispositions
Congressional Academy

|                                | Title I School | Not Title I School | All Students |
|--------------------------------|---------------|-------------------|-------------|
| **Political Interest and Attention** |               |                   |             |
| Pre                            | 4.68          | 5.04              | 4.76        |
| Post                           | 5.10          | 5.62              | 5.21        |
| x̄ Difference                  | .42           | .57               | .45         |
| Sign. t                        | .00           | .00               | .00         |
| **Rule of Law**                |               |                   |             |
| Pre                            | 6.08          | 6.19              | 6.10        |
| Post                           | 6.23          | 6.38              | 6.26        |
| x̄ Difference                  | .71           | .19               | .16         |
| Sign. t                        | .08           | n.s.              | n.s.        |
| **Political Discussion**       |               |                   |             |
| Pre                            | 6.71          | 7.33              | 6.84        |
| Post                           | 7.30          | 8.38              | 7.53        |
| x̄ Difference                  | .59           | 1.05              | .69         |
| Sign. t                        | .00           | .01               | .00         |
| **Community Engagement**       |               |                   |             |
| Pre                            | 6.87          | 7.95              | 7.10        |
| Post                           | 7.41          | 8.19              | 7.58        |
| x̄ Difference                  | .54           | .24               | .48         |
| Sign. t                        | .00           | n.s.              | n.s.        |
| **Government Service**         |               |                   |             |
| Pre                            | 5.03          | 5.71              | 5.18        |
| Post                           | 5.48          | 6.38              | 5.66        |
| x̄ Difference                  | .45           | .67               | .49         |
| Sign. t                        | .02           | .00               | .00         |
| Civic Duty   | Pre  | Post | \( \bar{x} \) Difference | Sign. t |
|-------------|------|------|---------------------------|---------|
|             | 8.01 | 8.47 | 0.46                      | 0.01    |

| Trust Government | Pre  | Post | \( \bar{x} \) Difference | Sign. t |
|------------------|------|------|---------------------------|---------|
|                  | 2.87 | 3.05 | 0.18                      | 0.00    |

| Trust Media     | Pre  | Post | \( \bar{x} \) Difference | Sign. t |
|-----------------|------|------|---------------------------|---------|
|                 | 4.37 | 4.85 | 0.48                      | 0.05    |

In order to establish that heightened civic dispositions are associated with higher levels of knowledge, I conducted ANOVA analyses with posttest knowledge as the dependent variable and the collapsed posttest civic disposition measures as factors. Table 7 presents the mean values for high, moderate, and low scores on each of the disposition measures as well as the mean difference between the low and high score categories. The trend consistently indicates that higher average levels of civic knowledge track with high scores on the disposition measures and low mean knowledge scores are evident for low scores on civic dispositions. There are some notable differences between Title I and non-Title I schools. However, not all of the mean differences between the low and high scores are statistically significant; the number of cases is relatively small, especially for the non-Title I condition, so some rather large differences are not significant.

Students from Title I schools who exhibited high levels of political interest and attention had far higher mean knowledge scores than those with low interest. The mean difference of 8.51 was strong and statistically significant. However, the relationship was not nearly as pronounced for non-Title I school students and the mean difference scores were not significant. A similar pattern was apparent for political discussion, where the mean difference between high and low average scores for Title I schools was 5.33, which was statistically significant, and 2.25 for non-Title I school (not significant). Title I students who were most likely to state that they would be likely to take a position in government service had significantly higher levels of knowledge than those who were not inclined to hold a government service job. A similar trend was apparent for non-Title I students, although the mean difference is not statistically significant. There was a large difference in the mean knowledge scores between Title I students who scored high and low on civic duty (\( \bar{x} \) difference of 6.66) that was statistically significant. Again, the trend was similar for non-Title I students, but the size of the mean difference between those scoring high and low on civic duty was smaller and non-significant. A pattern consistent with the hypothesis that political knowledge is positively associated with civic disposition is evident for support for the rule of law, community engagement (especially for Title I students), trust in government, and trust in media, but the mean differences in knowledge were not statistically significant.
|                                       | Title I School | Non-Title I School | All Students |
|---------------------------------------|----------------|--------------------|--------------|
| **Political Interest and Attention**  |                |                    |              |
| High                                 | 26.91          | 27.56              | 27.12        |
| Moderate                              | 24.42          | 29.27              | 24.88        |
| Low                                  | 18.40          | 26.00              | 19.29        |
| $\bar{x}$ Difference Low/High         | 8.51$^a$       | 1.56               | 7.83$^a$     |
| **Rule of Law**                      |                |                    |              |
| High                                 | 25.22          | 31.00              | 25.40        |
| Moderate                              | 23.50          | 29.42              | 25.47        |
| Low                                  | 22.50          | 26.17              | 23.44        |
| $\bar{x}$ Difference Low/High         | 2.72           | 4.83               | 1.96         |
| **Political Discussion**              |                |                    |              |
| High                                 | 26.07          | 29.00              | 26.54        |
| Moderate                              | 23.38          | 27.88              | 23.92        |
| Low                                  | 20.73          | 26.75              | 21.25        |
| $\bar{x}$ Difference Low/High         | 5.33$^b$       | 2.25               | 5.29$^a$     |
| **Community Engagement**              |                |                    |              |
| High                                 | 25.48          | 27.73              | 26.02        |
| Moderate                              | 22.52          | 27.67              | 23/67        |
| Low                                  | 22.09          | --                 | 23/90        |
| $\bar{x}$ Difference Low/High         | 3.39           | --                 | 2.12         |
| **Government Service**                |                |                    |              |
| High                                 | 26.71          | 27.50              | 26.52        |
| Moderate                              | 26.00          | 27.50              | 26.22        |
| Low                                  | 21.00          | 23.12              | 21.74        |
| $\bar{x}$ Difference Low/High         | 5.71$^a$       | 4.40               | 4.92$^a$     |
| **Civic Duty**                       |                |                    |              |
| High                                 | 26.48          | 29.80              | 26.53        |
| Moderate                              | 25.89          | 27.57              | 26.22        |
| Low                                  | 19.82          | 26.67              | 21.60        |
| $\bar{x}$ Difference Low/High         | 6.66$^a$       | 3.13               | 4.93$^a$     |
| **Trust Government**                 |                |                    |              |
| High                                 | 26.39          | 29.00              | 26.76        |
| Moderate                              | 23.88          | 28.78              | 26.02        |
| Low                                  | 23.76          | 26.22              | 24.27        |
| $\bar{x}$ Difference Low/High         | 2.62           | 2.78               | 2.52         |
| **Trust Media**                      |                |                    |              |
| High                                 | 25.94          | 30.50              | 26.45        |
| Moderate                              | 24.15          | 26.80              | 24.39        |
| Low                                  | 23.44          | 27.17              | 24.85        |
| $\bar{x}$ Difference Low/High         | 2.50           | 3.33               | 1.60         |

Total n=101; Title I n=80; non-Title I n=21  
$^a$p≤.01  $^b$p≤.05  $^c$p≤.10
Correlation and OLS regression analyses were performed to examine the association between civic knowledge and dispositions for the Academy data. (See Table 8.) Pearson's R was calculated to estimate the correlation between posttest knowledge and the posttest civic disposition indicators. For the OLS regression models, the dependent variables were the posttest civic disposition measures; posttest knowledge was entered as an independent variable holding constant pretest civic dispositions. The bivariate correlation between posttest knowledge and political interest/attention was strong (.435). The association remained robust (.295) and significant in the OLS regression model that controls for pretest interest/attention. For political discussion, the bivariate correlation was relatively strong at .404, while the beta coefficient was substantially smaller (.125) and only approached statistical significance. A similar trend was apparent for civic duty, as the bivariate relationship (.250) was significant and the beta coefficient (.112) was significant at the .10 level. Government service (.356) and community engagement (.167) were significantly correlated with knowledge in the bivariate case, but the relationship did not hold up when the control for the pretest disposition was imposed. The measures of trust in government and the media were somewhat correlated with knowledge. There was almost no difference between the bivariate correlation and beta coefficient for trust in government. However, media trust was not significant in the regression equation.

Table 8
OLS Regression Analysis of Knowledge on Dispositions (beta coefficients)

| Correlations (Pearson's R) | Rule of Law | Community Engagement | Civic Duty | Trust Media |
|-----------------------------|-------------|----------------------|------------|-------------|
| **Interest and Attention**  |             |                      |            |             |
| Knowledge                   | .295a       | Knowledge            | .037       | Knowledge   |
| Pre Interest/Attention      | .473a       | Pre Rule of Law      | .821a      | Pre Civic Duty |
| Adj. R²                     | .390a       | Adj R²               | .669a      | Adj R²      |
| Pearson’s R                 | .435a       | Pearson’s R          | .046       | Pearson’s R |
| **Political Discussion**    |             |                      |            |             |
| Knowledge                   | .125c       | Knowledge            | .024       | Knowledge   |
| Pre Political Discussion    | .692a       | Pre Engagement       | .698a      | Pre Trust Media |
| Adj. R²                     | .559a       | Adj. R²              | .484a      | Adj R²      |
| Pearson’s R                 | .404a       | Pearson’s R          | .167c      | Pearson’s R |
| **Government Service**      |             |                      |            |             |
| Knowledge                   | .072        | Knowledge            | .112c      | Knowledge   |
| Pre Government Service      | .724a       | Pre Civic Duty       | .752a      | Pre Trust Media |
| Adj. R²                     | .561a       | Adj. R²              | .597a      | Adj R²      |
| Pearson’s R                 | .356a       | Pearson’s R          | .250a      | Pearson’s R |
| **Trust Government**        |             |                      |            |             |
| Knowledge                   | .162b       | Knowledge            | .094       | Knowledge   |
| Pre Trust Government        | .682a       | Pre Trust Media      | .722a      | Pre Trust Media |
| Adj. R²                     | .484a       | Adj. R²              | .534a      | Adj R²      |
| Pearson’s R                 |             | Pearson’s R          |            | Pearson’s R |
Difference of means tests revealed that Academy students’ civic skills had improved by the conclusion of the program. (See Table 9.) The average increase in civic skills scores was notably higher for the non-TIS students (2.90) than for their Title I counterparts (.97). The mean improvement in scores for all students was 1.36. All of the mean differences were statistically significant.

**Table 9**

**Mean Scores on Civic Skills**

| Civic Skills | Pre  | Post  | \( \bar{x} \) Difference | Sign. t |
|--------------|------|-------|--------------------------|--------|
| **Title I School** | 27.58 | 28.55 | .97                      | .05    |
| **Not Title I School** | 27.85 | 30.75 | **2.90**                 | .00    |
| **All Students** | 27.64 | 29.00 | **1.36**                 | .00    |

There was some evidence to suggest that enhanced civic knowledge was associated with higher civic skills levels, but the findings are somewhat weak, especially for Title I students. (See Table 10.) The mean knowledge difference between TIS students with high and low civic skills was only .76, and was not statistically significant. The difference was greater for non-TIS school was greater (3.78), but it also was not significant.

**Table 10**

**ANOVA - Knowledge by Civic Skills**

| Civic Skills | Title I School | Non-Title I School | All Students |
|--------------|----------------|--------------------|--------------|
| **High**     | 24.89          | 28.61              | 25.88        |
| **Moderate** | 24.09          | 26.53              | 24.64        |
| **Low**      | 24.13          | 24.83              | 24.25        |
| \( \bar{x} \) Difference Low/High | **.76** | **3.78** | **1.62** |

An OLS regression model was estimated with posttest civic skills as the dependent variable, posttest political knowledge as the independent variable, and pretest civic skills as the control variable. (See Table 11.) The bivariate correlation between knowledge and civic skills was .225, and was statistically significant at \( p \leq .01 \). However, the beta coefficient for civic skills in the OLS regression model is near zero, indicating that the pre-Academy civic skills mitigated the knowledge effects.
Table 11

OLS Regression Analysis of Knowledge on Civic Skills (beta coefficients)
Correlations (Pearson’s R)
Congressional Academy

| Civic Skills         |            |
|---------------------|------------|
| Knowledge           | 0.028      |
| Pre Civic Skills    | 0.702*     |
| Adjusted R²         | 0.480*     |
| Pearson’s R         | 0.225*     |

n=101  *p≤.01

Congressional Academy Key Takeaways

The Congressional Academy is a unique program in that it combines classroom-style civics content lessons with experiential elements, including intensive competency-building activities and field trips that were directly conducive to developing civic orientations. The findings reflect the emphasis on these program elements, as students not only gained significant knowledge, but also evidenced strong positive gains in civic dispositions and, to a lesser extent, skills that are atypical for ordinary civics classes. In general, high-need students had lower scores on the civic knowledge, disposition, and skills measures prior to the Academy than the non-TIS students. They acquired significant knowledge as a result of the program. TIS students’ gains in respect for the rule of law, community engagement, and civic duty exceed those of their non-TIS counterparts, whose increases were higher for political interest and attention, political discussion, government service, and media trust. Mean difference scores for trust in government were about the same for both groups.

As was the case for the JMLP, the average political knowledge scores increased along with the level of civic orientations. The trend was more evident for the TIS students than the non-TIS students for political interest and attention, political discussion, community engagement, government service, and civic duty. The knowledge/disposition connection was stronger for certain dispositions than others. The association between posttest knowledge and interest and attention, political discussion, civic duty, and trust in government remain significant after controlling for pretest dispositions. The findings for civic skills are less pronounced than for civic dispositions.

It is important to note that the pre and post Academy data were collected over a two-week period during which students had an intensive civic education experience. In order to ascertain whether the observed trends will persist in the long term, follow up surveys will be conducted at the conclusion of the 2019-2020 academic year. During this time period, Academy students will be participating in a range of activities that build upon their summer experience.
Conclusion

Quality curriculum interventions and programs can create a learning environment that connects content knowledge to the acquisition of civic dispositions and skills. Participation in the JMLP and the Congressional Academy significantly increased students’ knowledge of government and politics. The programs, especially the Academy, contributed to students’ development of civic orientations. This study has established an empirical association between knowledge and dispositions, and to a smaller degree civic skills, among high-need students who received civics training that integrated substantive information with active learning elements.

The evidence clearly established that higher levels of knowledge are associated with heightened civic orientations. The JMLP data revealed that the difference in knowledge levels between those with strong and weak civic dispositions was greater for high school students than middle school students. The Academies study showed that the connection between knowledge and civic dispositions is especially apparent for high-need students.

The analysis of civic skills was limited to the Academies study, and the findings are less robust than for civic dispositions. Skills are more difficult than dispositions to convey through civic education programs, like the JMLP and the Academy, as students do not have the opportunity to engage directly in community activities or political affairs. Action civics programs, such as the Center’s Project Citizen (https://www.civiced.org/programs/project-citizen), or service learning initiatives may be more conducive to students’ acquisition of civic skills. The items used in this study do not directly measure civic skills, but instead capture students’ confidence in taking action to solve a problem in their community.

While the study findings are compelling, some caveats are in order. It is possible to establish a correlation between political knowledge and civic dispositions and skills; however, it is more difficult to specify the causal relationship. The association between knowledge and civic orientations is complex and likely reciprocal. Causal ambiguity also surrounds the role of civic education in the service of creating the nexus between knowledge and dispositions/skills (Eveland, Hayes, Shah, and Kwak, 2005). Numerous factors can intervene in the relationship, such as news media use, discussions of public affairs outside of the classroom, and social status which positions people to have greater or less exposure to the civic realm.
References

Annenberg Public Policy Center. 2019. *Annenberg Civics Knowledge Survey*. Research Report. Philadelphia, PA: University of Pennsylvania. https://www.annenbergpublicpolicycenter.org/political-communication/civics-knowledge-survey/

Atherton, Herbert M. 2000. “We the People: Project Citizen,” in Sheila Mann and John Patrick (eds.), *Education for Civic Engagement in Democracy: Service Learning and Other Promising Practices*. Bloomington, IN: ERIC Clearinghouse for Social Science Education: 93-101.

Bachner, Jennifer. 2010. “From Classroom to Voting Booth: The Effect of High School Civic Education on Turnout.” Working Paper. Cambridge, MA: Harvard University.

Bennett, Stephen. 1988. “Know-Nothings’ Revisited: The Meaning of Political Ignorance Today,” *Social Science Quarterly*, vol. 69: 476-90.

Bennett, Stephen. 1989. “Trends in Americans’ Political Information, 1967-1987,” *American Politics Quarterly*, vol. 17: 422-35.

Branson, Margaret Stimmann. 1998. The Role of Civic Education: An Education Policy Task Force Position Paper With Policy Recommendations. Research Report. Calabasas, CA: Center for Civic Education. http://www.civiced.org/promote-rationale/position-paper-with-policyrecommendations

Branson, Margaret Stimmann, and Charles N. Quigley. 1998. “The Role of Civic Education.” Washington, D.C.: The Communitarian Network. http://www.gwu.edu/~ccps/pop_civ.html

Brody, Richard. 1994. “Secondary Education and Political Attitudes: Examining the Effects on Political Tolerance of the We the People . . . Curriculum,” Calabasas, CA: Center for Civic Education.

Campaign for the Civic Mission of Schools. 2011. *Guardian of Democracy: The Civic Mission of Schools*. Research Report. The Leonore Annenberg Institute for Civics of the Annenberg Public Policy Center at the University of Pennsylvania and the Campaign for the Civic Mission of Schools. http://www.cms-ca.org/guardianofdemocracy_report_final.pdf. Accessed January 11, 2015.

Campbell, David E. 2005. *Voice in the Classroom: How an Open Classroom Environment Facilitates Adolescents’ Civic Development*. CIRCLE Working Paper 28. College Park, MD: University of Maryland School of Public Policy.
Campbell, David E. 2006. *Why We Vote: How Schools and Communities Shape Our Civic Life*. Princeton: Princeton University Press.

CIRCLE. 2013. “High School Civic Education Linked to Voting Participation and Political Knowledge; No Effect on Partisanship or Candidate Selection,” Research Report. http://www.civicyouth.org/high-school-civic-education-linked-to-voting-participation-and-political-knowledge-no-effect-on-partisanship-or-candidate-selection/

Cohen, Alison K., and Benjamin W. Chaffée. 2012. “The Relationship Between Adolescents’ Civic Knowledge, Civic Attitude, and Civic Behavior and Their Self-Reported Future Likelihood of Voting.” *Education, Citizenship, and Social Justice*, vol. 8, no. 1: 43-57.

Crawford, Keith. 2010. “Schooling, Citizenship and the Myth of the Meritocracy,” *Citizenship, Social and Economics Education*, vol. 9, no. 1: 3-13.

Deakin Crick, Ruth, Max Coates, Monica Taylor, Susan Ritchie. 2005. *A Systematic Review of the Impact of Citizenship Education on the Provision of Schooling*. Research Report. Citizenship Education Research Strategy Group, Institute of Education, University of London.

Delli Carpini, Michael X. 2005. “An Overview of the Sate of Citizens’ Knowledge About Politics,” in Mitchell S. McKinney, Lynda Lee Kaid, Dianne G. Bystrom, and Diana B Carlin, eds. *Communicating Politics: Engaging the Public in Democratic Life*. New York: Peter Lang: 27-40.

Delli Carpini, Michael X, and Scott Keeter. 1996. *What Americans Know About Politics and Why It Matters*. New Haven: Yale University Press.

Dudley, Robert L., and Alan R. Gitelson. 2002. “Political Literacy, Civic Education, and Civic Engagement: A Return to Political Socialization?” *Applied Developmental Science*, vol. 6, no. 4: 175-182.

Ehman, Lee H. 1980. “Change in High School Students’ Political Attitudes as a Function of Social Studies Classroom Climate,” *American Educational Research Journal*, vol. 17, no. 2: 253-265.

Eveland, Jr., William P., Andrew F. Hayes, Dhavan V. Shah, and Nojin Kwak. 2005. “Understanding the Relationship Between Communication and Political Knowledge: A Model Comparison Approach Using Panel Data,” *Political Communication*, vol. 22: 423-446.

Finkel, Steven E. 2003. “Civic Education and the Mobilization of Political Participation in Developing Democracies,” *Journal of Politics*, vol. 64, no. 4. https://doi.org/10.1111/1468-2508.00160
Finkel, Stephen E., and Howard R. Ernst. 2005. “Civic Education in Post-Apartheid South Africa: Alternative Paths to the Development of Political Knowledge and Democratic Values,” Political Psychology, vol. 26: 333-364.

Friedman, Jeffrey, and Shhterna Friedman, eds. 2013. Political Knowledge. New York: Routledge.

Gainous, Jason, and Allison M. Martens. 2012. “The Effectiveness of Civic Education: Are “Good” Teachers Actually Good for “All” Students?” American Politics Research, vol. 40, no. 2: 232-266.

Galston, William A. 2001. “Political Knowledge, Political Engagement, and Civic Education,” Annual Review of Political Science, vol. 4: 217-234.

Galston, William A. 2004. “Civic Education and Political Participation,” P.S.: Political Science and Politics, April: 263-266.

Galston, William A. 2007. “Civic Knowledge, Civic Education, and Civic Engagement: A Summary of Recent Research,” International Journal of Public Administration, vol. 30, no. 6-7: 623-642.

Galston, William A., and Mark H. Lopez. 2006. “Civic Education in the United States,” in Laura B. Wilson and Sharon P. Simson, eds. Civic Engagement and the Baby Boomer Generation. New York: The Haworth Press: 3-19.

Haberman, M. 2010. “The Pedagogy of Poverty versus Good Teaching.” Phi Delta Kappan, vol. 92, no. 2: 81-87. https://doi.org/10.1177/0031721717100920223

Hersholt C. Waxman, Shwu-Yong L. Huang & Yolanda N. Padron. 1995. “Investigating the Pedagogy of Poverty in Inner-City Middle Level Schools,” Research in Middle Level Education, vol. 18, no. 2: 1-22. DOI:10.1080/10825541.1995.11670044

Hess, Diana E. 2009. Controversy in the Classroom. New York: Taylor and Francis.

Hess, Diana E., and Paula McAvoy. 2014. The Political Classroom: Evidence and Ethics in Democratic Education. New York: Routledge.

Hoffman, Lindsay. 2017. “Political Knowledge,” Oxford Bibliographies Online. https://www.oxfordbibliographies.com/view/document/obo-9780199756841/obo-9780199756841-0098.xml

Hooghe, Marc, and Ruth Dassonneville. 2011. “The Effects of Civic Education on Political Knowledge: A Two Year Panel Survey Among Belgian Adolescents,” Educational Assessment, Evaluation and Accountability, vol. 23: 321-339.
Jennings, M. Kent. 1996. “Political Knowledge Over Time and Across Generations,” *Public Opinion Quarterly*, vol. 60, no. 2: 228-252.

John, Peter, David Halpern, and Zoe Morris. 2002. “Acquiring Political Knowledge Through School Curricula and Practices: Evidence from England,” Paper prepared for presentation at the European Consortium Political Research Joint Sessions, Turin, March.

Kahne, Joseph E., and Susan E. Sporte. 2008. “Developing Citizens: The Impact of Civic Learning Opportunities on Students’ Commitment to Civic Participation,” *American Educational Research Journal*, 45 (3): 738-766.

Kim, Simon, B. Sue Parks, and Marvin Beckerman. 1996. “Effects of Participatory Learning Programs in Middle and High School Civic Education,” *School K-12*, Paper 28. Omaha, NE: University of Nebraska Omaha.

Luskin, Robert C. 1990. “Explaining Political Sophistication,” *Political Behavior*, vol. 12: 331-361.

Luskin, Robert, and John G. Bullock. 2011. “”Don’t Know” Means “Don’t Know”: DK Responses and the Public’s Level of Political Knowledge,” *The Journal of Politics*, vol. 73, no. 2: 547-557.

McAllister, Jan. 1998. “Civic Education and Political Knowledge in Australia,” *Australian Journal of Political Science*, vol. 33, no. 1: 7-23.

McDevitt, Michael, and Steven Chaffee. 2000. "Closing Gaps in Political Communication and Knowledge Effects of a School Intervention," *Communication Research*, vol. 27, no. 3: 259-292.

Meirick, Patrick C., and Daniel B. Wackman. 2004. "Kids Voting and Political Knowledge: Narrowing Gaps, Informing Votes," *Social Science Quarterly*, vol. 85, no. 5: 1161–1177.
Milner, Henry. 2010. *The Internet Generation: Engaged Citizens or Political Dropouts.* Medford, MA: Tufts University Press.

Morgan, Lori A. 2016. “Developing Civic Literacy and Efficacy: Insights Gleaned Through the Implementation of Project Citizen,” *Inquiry in Education,* vol. 8, no. 1. https://files.eric.ed.gov/fulltext/EJ1171672.pdf

Morgan, William, and Matthew Streb. 2001. “Building Citizenship: How Student Voice in Service-Learning Develops Civic Values,” *Social Science Quarterly,* vol. 82, no. 1: 154-69.

National Assessment Governing Board. 2018. *Civics Framework for the 2018 National Assessment of Educational Progress.* Washington, D.C.: U.S. Department of Education.

Neuman, W. Russell. 1986. *The Paradox of Mass Politics.* Cambridge, MA: Harvard University Press.

Niemi, Richard G., and Jane Junn. 1998. *Civic Education: New Haven:* Yale University Press.

Owen, Diana. 2008. “Political Socialization in the 21st Century: Recommendations for Researchers.” Paper prepared for presentation at the The Future of Civic Education in the 21st Century conference cosponsored by the Center for Civic Education and the Bundeszentrale fur politische Bildung, James Madison’s Montpelier, September 21-26.

Owen, Diana. 2015. *High School Students’ Acquisition of Civic Knowledge: The Impact of We the People.* Report for the Center for Civic Education, May.

Owen, Diana. 2018. *Evaluation of the James Madison Legacy Project: Cohort 2 Student Knowledge.* Research Report. Washington, D.C.: Civic Education Research Lab, Georgetown University. https://www.researchgate.net/publication/325050097_Evaluation_of_the_James_Madison_Legacy_Project_Cohort_2_Student_Knowledge_Author_Project_Officer_PRAward_Number_U367D150010_James_Madison_Legacy_Project_Professional_Development_for_Teachers_of_Civics

Owen, Diana, Suzanne Soule, and Rebecca Chalif. 2011. “Civic Education and Knowledge of Government and Politics.” Paper prepared for presentation at the Annual Meeting of the American Political Science Association, Seattle, Washington, September 1-4.

Owen, Diana. 2013. “The Influence of Civic Education on Electoral Engagement and Voting,” in Alison McCartney, Elizabeth Bennion, and Richard Simpson, eds. *From Service-Learning to Civic and Political Engagement.* Washington, D.C.: American Political Science Association: 313-332.

Owen, Diana, and Suzanne Soule. 2015. “Civic Education, Political Knowledge, and Dimensions of Political Engagement,” paper prepared for presentation at the Annual Meeting of the American Political Science Association, San Francisco, CA, September 3-6.
Owen, Diana. 2016. *Evaluation of the James Madison Legacy Project: Cohort 1 Teachers.* Report for the U.S. Department of Education, November. [http://jmlpresearch.org/research/](http://jmlpresearch.org/research/)

Owen, Diana, and G. Isaac W. Riddle. 2017. “Active Learning and the Acquisition of Political Knowledge in High School,” in Alison McCartney, Elizabeth Bennion, Elizabeth Matto, and Richard Simpson, eds. *Teaching Civic Engagement.* Washington, D.C.: American Political Science Association.

Owen, Diana, and Kathryn Hartzell. 2019. “High-Need Students’ Acquisition of Civic Dispositions and Skills.” Paper prepared for presentation at the Annual Meeting of the American Political Science Association, Washington, D.C., August 29-September 1.

Pasek, Josh, Lauren Feldman, Daniel Romer, and Kathleen Hall Jamieson. 2008. “Schools as Incubators of Democratic Participation: Building Long-Term Political Efficacy with Civic Education.” *Applied Developmental Science*, 12 (1): 26–3.

Patrick, John J. 1977. “Political Socialization and Political Education in Schools,” in Stanley Allen Renshon, ed. *Handbook of Political Socialization.* New York: Free Press.

Patrick, John J. 2002. “Defining, Delivering, and Defending a Common Education for Citizenship in a Democracy,” May. [http://eric.ed.gov/?id=ED464886](http://eric.ed.gov/?id=ED464886).

Pew Research Center for the People & the Press. 2011. “Political Knowledge Update.” Research Report. Washington, D.C., March 31. [http://pewresearch.org/pubs/1944/political-news-quiz-iq-congress-control-obesity-energy-facebook](http://pewresearch.org/pubs/1944/political-news-quiz-iq-congress-control-obesity-energy-facebook).

Smith, Eric R. A. N. 1989. *The Unchanging American Voter.* Berkeley, CA: University of California Press.

Stambler, Leah G. 2011. “What Do We Mean By Civic Engagement As It Relates to Teacher Education?” *Teacher Education and Practice*, 24 (3): 366-369.

Tolo, Kenneth W. 1998. *An Assessment of We the People . . . Project Citizen: Promoting Citizenship in Classrooms and Communities.* PRP 129. Austin, TX: University of Texas at Austin, Texas Scholar Works. [https://repositories.lib.utexas.edu/handle/2152/20824](https://repositories.lib.utexas.edu/handle/2152/20824)

Torney-Purta, Judith, Rainer Lehmann, Hans Oswald, and Wolfram Schulz. 2001. *Citizenship and Education in Twenty-Eight Countries: Civic Knowledge and Engagement at Age Fourteen.* Amsterdam: International Association for the Evaluation of Educational Achievement.

Torney-Purta, Judith. 2002. “The School’s Role in Developing Civic Engagement: A Study of Adolescents in Twenty-eight Countries,” *Applied Developmental Science*, vol. 6, no. 4: 203-212.
Torney-Purta, Judith. 2004. “Adolescents’ Political Socialization in Changing Contexts: An International Study in the Spirit of Nevitt Sanford,” *Political Psychology*, vol. 25, No. 3: https://doi.org/10.1111/j.1467-9221.2004.00380.x.

Torney-Purta, Judith, and Susan Vermeer Lopez. 2006. *Developing Citizenship Competencies from Kindergarten Through Grade 12: A Background Paper for Policymakers and Educators*. Research Report. Denver, CO: Education Commission of the States. https://files.eric.ed.gov/fulltext/ED493710.pdf

Torney-Purta, Judith, and Jo-Ann Amadeo. 2012. “The Contributions of International Large-Scale Studies in Civic Education and Engagement,” in Matthias von Davier, Eugenio Gonzalez, Irwin Kirsch, and Kentaro Yamamoto, eds. *The Role of International Large-Scale Assessments: Perspectives from Technology, Economy, and Educational Research*. Netherlands: Springer.

U.S. Department of Education. 2019. *What Works Clearinghouse, Standards Handbook*, Version 4.0. Washington, D.C.: U.S. Department of Education.

Youniss, James. 2011. “Civic Education: What Schools Can Do to Encourage Civic Identity and Action.” *Applied Developmental Science*, vol.15, no 2: 98-103.