

**Fostering Civic Engagement and Student Agency Through Technology Enriched  
Civic Engagement Projects in the Middle School Classroom**

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**Abstract**

Developing middle grades students' abilities to be civically engaged and approach their world through a lens of civic-mindedness is an essential component of democratic citizens taking informed action. Leveraging an agency-centered, technology enabled approach, the authors of this article explore the influence authentic civic engagement projects have on the civic perspectives of young students. Eighty-three seventh-grade students participated in this mixed-method study. The researchers utilized observational data, informal interviews, surveys, field notes, and document analysis; key assertions and findings are presented. Limitations and future research, including the necessity of developing students with a sense of civic-mindedness and the influence of technology, are discussed.

*Keywords:* civic engagement, civic education, civic-mindedness, middle school, technology

*“There is an old saying that the course of civilization is a race between catastrophe and education. In a democracy such as ours, we must make sure that education wins the race.”*

-John F. Kennedy, 1960/2021

The importance of both an active and informed electorate to the prosperity of a democratic society has been espoused by educational scholars, political scientists, and

policy advocates alike for decades (Carnegie Corporation, 2003; Carpini & Keeter, 1996; Center for Civic Education, 1994; Engle & Ochoa, 1988; Mineta, 2008). Given the precarious political landscape within the United States – an attempted insurrection at the Capitol, unfounded claims of election fraud, and the massive spreading of false information online – a renewed focus on civic education and civic engagement has been brought to the foreground. Of particular importance, though, is how the events of the past several years will impact the civic-mindedness and participation levels of the nation’s youngest members.

With this in mind, understanding the place and space civics holds in the K-12 classroom is essential. The National Council for the Social Studies (2001) has cited the preparation of “students to be engaged and effective citizens” (para. 1) as a primary goal of public education. Further, the authors of the National Council for the Social Studies College, Career, and Civic Life Framework (NCSS, 2013) argue that “engagement in civic life requires knowledge and experience; children learn to be citizens by working individually and together as citizens. An essential element of social studies education, therefore, is experiential - practicing the arts and habits of civic life” (p. 6). Not only do students need to learn about civics-related content, but they must also engage and experience civics in authentic forms. The National Council for the Social Studies (2001) also notes the following:

every student must participate in citizenship education activities each year. These activities should expand civic knowledge, develop participation skills, and support the belief that, in a democracy, the actions of each person make a difference. Throughout the curriculum and at every grade level, students should have opportunities to apply their civic knowledge, skills, and values as they work to solve real problems in their school, the community, our nation, and the world (para. 2).

Thus, from an instructional perspective, the responsibility of preparing an informed and active citizenry lies with schools, and more specifically, educators within the social studies classroom.

Instruction in the classroom must go beyond the development of civic knowledge; it must also promote the skills and dispositions associated with what being civically-

mindful and engaged entails. As the activities that support civic engagement are varied and broad (e.g., voting, informing oneself about civic issues, volunteering, or running for public office), it is crucial for social studies educators to understand, possess, and embody the diverse characteristics of an active and informed citizen. Educators need to effectively and thoroughly disseminate the importance of these traits and foster them within their classrooms. This study explores how lessons focused on civic engagement and supported by emerging technologies impact middle school students' civic-mindedness.

### **Civic Education and Emerging Technologies**

The National Center for Educational Statistics' National Assessment of Educational Progress (2014, 2020) has found that student knowledge of basic civic education-related content held by American public-school students is below the expected proficiency levels. With a continued focus on mathematics, language arts, and sciences, the amount of instructional time spent on social studies has diminished; impacting the opportunity to develop civic knowledge, skills, and dispositions within the classroom (Leming et al., 2006; McGuire, 2007; Torney-Purta, 2002; Torney-Purta & Vermeer, 2006). This is particularly concerning as the influence of innovative and consistent civic education experiences have been found to encourage civic participation, develop social relatedness, impart a sense of political efficacy, foster moral understandings, and contribute to the development of long-lasting participation and a sense of civic duty (Dalton, 2015; Lawless & Fox, 2015; Owen, 2011; Przeworski, 1995; Rebell, 2018).

Civic education - which comprises various conceptualizations, inclusive of civic skills, civic knowledge, and civic-mindedness - is essential for students to become participatory members of the community they serve. The Center for Civic Education (1994) argues the rationale for civics education, citing the necessity of "informed, responsible participation in political life by competent citizens committed to the fundamental values and principles of American constitutional democracy" (para. 2). What students do and learn in a classroom contributes to developing their civic abilities in the future (Gutmann, 1987; Levine, 2014; Levinson, 2007, 2011). Thus, the necessity and need for better civic education in schools becomes evident.

An element of concern is the impact of technology in the instruction of civics within schools. While several political scientists and prominent scholars have voiced concerns over the influence of digital media and emerging technologies on civic participation and understanding (Middaugh, 2018; Wineburg et al., 2016), there has been quite a bit of evidence that these tools can also foster active and engaged citizens (Desouza & Bhagwatwar, 2014; Kahne, 2007; Wilson & Chakraborty, 2019; Xenos & Foot, 2008). For example, multiple online communities exist that foster youth cohorts that are civically active, and the expansion of social media has generated even greater access (Equity in Civic Education Project, 2020; Raynes-Goldie & Walker, 2008; Xenos & Foot, 2008). While making information increasingly accessible, in addition to redefining community boundaries, the use of technological applications such as Facebook®, Twitter®, blogs, or other mediums also allows for the widespread dissemination of activity and information (and misinformation) related to individual issues.

While apprehensions over social isolation, the distracting nature of technology, and cyberbalkanization are legitimate concerns that need to be considered in the implementation of emerging technologies into civics education, it is also critical to examine the potential benefits of engaging and emerging technological applications as tools to foster civic-mindedness and engagement. There is no question that the Internet, mobile devices, and emerging technologies play a prominent role in the lives of today's youth. However, that role lies predominantly in the personal use, rather than as a tool to support civic activities, potentially having a direct influence on the increasing decline in the levels of civic activity by adolescents (Kahne, 2007; Kahne, Middaugh, & Evans, 2008; Levin & Arafah, 2002; Macedo et al., 2005). Additionally, the increased personal use of various technologies has influenced the views of citizenship for "digital natives," aligning views of citizenship with their own search for self-actualization. Consequently, effective pedagogical activities that support the development of civic-mindedness and civic engagement are those that afford students opportunities to actively participate in civic activities and social reasoning (Bennett et al., 2010; Wineburg et al., 2016). In addition, the complex nature of navigating disinformation and promoting digital literacy

becomes compounded when tackling civics-related themes and issues in the classroom (Wineburg et al., 2016).

The methods by which the Internet is often used in instructional settings in social studies classrooms typically focus on the web's information-access capabilities (Gray et al., 2010; Whitworth & Berson, 2003), having students retrieve information from a website or repository. This simple "go and find" searching is further encouraged by the increasing importance of standards and standardized testing at all public education levels, requiring students to "have knowledge" but not necessarily critically use this knowledge (Friedman, 2006; Railey & Brennan, 2016). While the negative implications of standardized testing and the relating issues have become clear in recent years, emerging technologies possess great potential for fostering complex, higher-order thinking instructional environments that support civic education. Bers (2008) contends, "virtual communities, simulations, or interactive games specifically designed with civic education goals might offer a space for young people to become civically engaged—at least in the online world" (p. 141). Organizations, like iCivics.org (2018), have leveraged the power of digitized gaming and emerging technologies to support teachers' instruction of civics and bridge gaps within access to engaging materials for students across the United States.

Many of the technologies mentioned have significant potential to improve civic engagement and digital literacy by providing more varied and accessible participatory activities within the classroom. However, these technologies need to be explored regarding implementation and impact. This research study explored how innovative pedagogical strategies and emerging technologies can be utilized to encourage civic-mindedness and engagement in middle school students in a manner consistent with the goals outlined by NCSS (2001, 2013), that is to increase the knowledge, skills, and dispositions necessary for students to become active and informed members of the American democratic system.

### **Methods**

In an effort to examine the effectiveness of emerging technology-supported civics pedagogical strategies, the researchers focus on the ways in which seventh-grade students' participation in an emerging technology-supported civic engagement project influenced their levels of civic-mindedness. During the period of study, student

participants researched, planned, and developed civic engagement projects relating to a self-selected topic. Prior to students selecting projects, some of the instructional activities included reviewing case studies, reading stories, watching videos, and providing resources from engaged citizens. These activities were intended to provide students with a greater sense of what it means to be civically-minded while utilizing pedagogical applications and emerging educationally-focused technologies. This process allowed the researchers to focus on the following research questions:

1. In what ways does involvement in a civic engagement project foster civic-mindedness?
2. In what ways can emerging educationally-focused technologies be integrated into the design and implementation of a civic engagement project?

This activist-oriented and participatory project followed a technology-assisted model that involved students in the process of investigating, planning, and developing civically-focused projects rooted in a community (e.g., school-based, home-based, digitally-based) and grounded by a self-selected topic (e.g., pollution, animal abuse, recycling).

### **Site and Participants**

The researchers purposely selected a seventh-grade classroom at Beroun Middle School, an urban middle school located in a major metropolitan area of over two million people in the Southeastern Region of the United States. Researchers selected Beroun Middle School due to the reputation of its social studies teachers and the diversity of the school, coupled with a commitment to excellence as a Pre-IB and Pre-Engineering Magnet school within the school's district. Researchers selected the teacher at Beroun Middle School due to his willingness to adopt the civic engagement model as an instructional intervention, the teacher's emphasis on disciplined inquiry-based learning approaches, and the availability of technological resources.

Students enrolled in the course, as well as their parents/guardians, were presented with necessary information relating to the study and were provided with informed consent documents prior to the start of the study. Students were not eligible to be included in the study without signed and returned informed consent. In presenting data here, all identifiable information was removed, and pseudonyms were leveraged to protect student privacy.

Throughout the study, the school was on mixed-block scheduling, where two days a week there were block periods of 80+ minutes per class. In total, this study was conducted with five classes of students: two standard course sections and three pre-I.B. course sections.

The school district, which Beroun Middle School is situated, serves over 65,000 students from grades K-12. Of the total student population, 75% of students are white, 16% are black or African American, 5% are Asian or Pacific Islander, 4% are multi-racial, and less than 1% identified themselves as American Indian. 23% of students identified themselves as Hispanic.

Beroun Middle School serves approximately 1,200 students from sixth through eighth grades. According to available school data, 63% of students receive free or reduced lunch; 71% of students are white; 20% are black or African American; 4% are Asian or Pacific Islander; 4% are multi-racial, and 1% are American Indian. Of the total school enrollment, 29% of students identified themselves as Hispanic; 2.27% were identified as ELL; 19.98% were identified as ESE; and 3.37% were on a 504 Plan. Of the five classes chosen for the study, a total of 83 seventh graders participated in the study. The following are the percentages for racial identifiers for this group: 51% are white; 12% are black or African American; 31% are Hispanic; 4% are Asian or Pacific Islander; 1% are multi-racial; and 1% are American Indian.

Although the researchers did work collaboratively with the classroom teacher, they were not included in data collection process, since teacher efficacy or pedagogy were not being explored in this study; rather, the students' capacities for civic-mindedness, as they utilized various emerging technologies, was the focus of the study. Due to the time period in which the study took place, multiple variables could not be avoided. The scheduling of state End-of-Course Examinations in multiple subject areas required several students to miss all or portions of their social studies class meetings. Additionally, the civic engagement project occurred alongside the instruction of the standard civics curriculum. Therefore, the time spent on students' specific civic engagement projects was limited to only the amount of time allotted in six class periods, or approximately six hours.

## **Data Collection**

Throughout the study, multiple methods of data collection were employed. These included observational data, informal interviews, surveys, field notes, researchers' logs, and document analysis. The utilization of multiple, varied data sources was employed in an effort to compensate for the fallibility of any single method (Marshall & Rossman, 2009; Patton, 2002) and to strengthen the reliability of the findings and internal validity (Merriam, 1998).

### ***Observations***

Students were observed during in-class time, and observations focused solely on activities and participation related to the completion of the civic engagement project, which lasted approximately six hours over the span of six class periods. Spradley's (1980) Matrix of Participant Observation was utilized as the observational instrument so that researchers could systematically identify the ways in which the student-participants developed and employed plans for their civic engagement projects. The researchers were also interested in learning more about the methods in which participants utilized various emerging technological applications and how the implementation of these tools influenced the planning, design, development, and dissemination of the project ideas and products. Observations focused on the following nine factors (Spradley, 1980):

1. Space: What is (are) the physical place or places involved?
2. Objects: What are the physical things that are present?
3. Activities: What is the set of related acts the actors do?
4. Time: What is the sequencing that takes place over time?
5. Actors: Who are the people involved?
6. Goals: What are the things people are trying to accomplish?
7. Feelings: What are the emotions felt and expressed by actors?
8. Acts: What are the single actions that people do?
9. Events: What are the sets of related activities people carry out?

### ***Informal Interviews***

In addition to participant observations, this study utilized a semi-structured informal interview format, allowing researchers to naturally engage with participants and learn about their concerns and thoughts (Reason, 2005). The researchers were interested



in gaining better insight into the participants' "interior experiences." With this approach, we could better "learn what people perceived and how they interpreted their perceptions," as well as "how events affected their thoughts and feelings" (Weiss, 1994, p. 1). Each of the researchers conducted informal interviews with participants during scheduled classroom meeting time in an effort to learn more about the participants' civic understandings prior to, during, and at the conclusion of the project. Interviews lasted from approximately five to ten minutes, dependent upon the level of understanding and the progress of the project itself. Informal interview data were captured in the field notes. Spradley's (1980) Matrix was implemented to help researchers focus the questions and approach utilized during the informal interviews.

### ***Surveys***

The survey used in this study was designed to focus on student perceptions of several issues related to the integration of technology into the classroom, instructional issues related to civics and social studies education, and the convergence of emerging technologies, civics education, and innovative pedagogical approaches. The survey included 12 items, and a 5-point Likert scale was used, ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). The survey was published to a professional online survey hosting company, and at the conclusion of the civic engagement project, a Uniform Resource Locator was provided to all participants for them to complete the survey at their leisure. Our final survey sample for analysis consisted of 61 respondents.

### ***Field Notes and Researchers' Log***

The researchers collected and compiled field notes as a tool to better document the observational time and informal interview sessions. This afforded the researchers the ability to conduct a more comprehensive analysis of the data collected and present a more accurate and thorough portrayal of the setting and the participants involved. The researchers' logs (Patton, 2002) included personal reflections, connections, new questions, and realizations made during the data collection period, which were found to be beneficial during the data analysis process.

### ***Student Products***

Electronic and non-electronic project-related documents were analyzed. Data included a variety of formats, such as paper-based documents, social media applications

(e.g., Twitter, Facebook, wikis), digital artifacts such as videos, weblinks (i.e., supportive resources), and multimedia presentations. Analyzing student products allowed the researchers to better understand what the teacher and students thought about the methods of becoming more civically engaged and the level to which participants were civically-minded by the completion of their civic engagement project or scheduled class time.

### **Data Analysis**

The researchers independently and jointly analyzed, coded, and categorized all of the data collected throughout the civic engagement project. Analytic induction (Bogdan & Biklen, 2007; Erikson, 1986; Patton, 2002) and content analysis (Patton, 2002) were employed to analyze and interpret the data. Cooperatively, this allowed the researchers to follow a flexible and recursive process, which allowed for themes to be developed and modified as the analysis process was conducted. As data were analyzed to construct, support, and/or dismiss coding themes, researchers made specific efforts to minimize the intrusion of researcher bias during this process and to understand the intended meanings and conveyances (Strauss & Corbin, 1998).

The researchers utilized the early observations and informal interviews to develop initial salient themes. A process of open coding (Creswell, 1994) helped to identify categories, themes, and patterns in the data. Various data sets were examined throughout the study so that emerging themes could be added and existing ones modified and eliminated. Efforts were made to preserve internal convergence, as well as external divergence, in order to be sure that themes remained internally consistent while being mutually exclusive (Marshall & Rossman, 2009). Tesch's (1990) systematic process of analyzing data was employed, which allowed for an orderly process for examining all textual data and identifying topics, clustering together of similar topics, abbreviating topics as codes, developing categories, looking for overlaps and interrelationship of topics, assembling data in each category, performing a preliminary analysis of findings, and recoding data if needed.

All of the completed projects were analyzed utilizing a unique coding system developed by the researchers to gauge student understanding and development of civic-mindedness. The researchers utilized the criteria for civic competence, as defined by National Council for the Social Studies (1994), as their basis for evaluating the students'

projects and ideas of civic-mindedness. NCSS (1994) asserts that civic competence requires the “abilities to use knowledge about one’s community, nation, and world; apply inquiry processes; and employ skills of data collection and analysis, collaboration, decision-making, and problem-solving” (para. 4).

The researchers sought to find “key linkages” (Erickson, 1986, p. 147) between the data. These linkages connected themes, allowed for the construction of assertions, and increased the validity of the assertions. Evidentiary warrant for the assertions was established by conducting additional reviews of the data corpus. Efforts were focused on finding, confirming, and disconfirming evidence so that validity claims could be maximized (Milman & Heinecke, 1999); inaccurate or misguided assertions were eliminated, as the elimination of rival explanations strengthens the validity of the findings (LeCompte & Goetz, 1982).

### **Findings**

Ultimately, the data collected throughout the study aided in the creation of four empirical assertions to be discussed and substantiated in the next section:

1. Involvement in a civic engagement project fostered civic-mindedness.
2. Development of Agency.
3. Emerging educationally-focused technologies assisted in the design and implementation of the civic engagement project.
4. A project-based approach was perceived as a more effective and enjoyable way to learn than using traditional methods.

### **Involvement in a Civic Engagement Project Fostered Civic-Mindedness**

When examining the convergence of pedagogy, emerging technology, and civic education, respondents possessed overwhelmingly positive perceptions. This is illustrated by 86.7% of respondents either agreeing or strongly agreeing that “creating our projects helped me learn more about how people become civically engaged,” 80.3% either agreed or strongly agreed that “creating our projects made me wonder about how else I might become civically engaged,” and 90.2% either agreed or strongly agreed that they “would like to create more civics and history assignments using computer technology.”

The researchers utilized NCSS’ criteria to determine the presence of civic-mindedness and civic competence, which is defined as the “abilities to use knowledge

about one's community, nation, and world; apply inquiry processes; and employ skills of data collection and analysis, collaboration, decision-making, and problem solving" (NCSS, 1994, para. 4). The researchers analyzed the final 24 student products to determine if these criteria were present (Table 1).

**Table 1**

*Presence of Civic-Mindedness and Civic Competence*

	NCSS Criteria				
<b>Class Level</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
Pre-IB (N=24)	24	20	14	18	20
Standard (N=16)	15	11	7	14	11
<b>Total (N=40)</b>	<b>39</b>	<b>31</b>	<b>21</b>	<b>32</b>	<b>31</b>

- A. Requires the ability to use knowledge about one's community, nation, and world
- B. Apply inquiry processes
- C. Employ skills of data collection and analysis
- D. Collaboration,
- E. Problem solving

Only a few of the students really had some conception of what it meant to be civically-minded or to have civic competence before the beginning of the project. The majority of the comments focused on superficial ways in which people or organizations can help others rather than any focus on the elements outlined by NCSS. Before starting the civic engagement project, many of these comments were associated with donations (clothes, gifts, money, etc.) and collecting box tops for education. These comments exemplified their belief that these are ways for citizens to be civically-minded and engaged. After the completion of the project, the majority of students focused on how to conduct research around current issues and take action, resolving problems found within the school, community, and nation, authentic projects with civic engagement related goals, and ways in which they possess agency and can enact change in both a personal and group capacity.

An overall change in mindset was evident in many of the students through this process. This transformation can be seen in Kyrie's comments from before the project

began and with those made after completing the project. Before the project began, Kyrie focused his thoughts around the possibility of meeting his favorite athletes:

I would like to be with NBA cares group. I would like this because you could meet awesome basketball players...I could meet my favorite athletes. This was my favorite reason because I want to be a Pro NBA player. I would die to meet the Chicago Bulls or the entire Miami Heat.

We were able to witness the transformation throughout the process through multiple data sets; however, Kyrie additionally made this clear in comments stated after the completion of the civic engagement project:

NBA cares is a group to help kids stay out of trouble, with help from real NBA Players. They do things like help build houses, paint houses, visit cancer kids that love sports, and even help kids improve at basketball in summer camps. Some of the money for games, fundraisers, and such go to hospitals or charities.

Kyrie further discussed ways in which he could support efforts like NBA Cares and noted ways this could be done at a smaller scale within one's community.

When Donovan discussed how one might be civically engaged and how he has personally been civically engaged prior to the project, he responded with "One time I was civically engaged was...well...right now. "How?" you might ask. Well, I'm not breaking the law by vandalizing the school (Am I?)." The researchers were able witness the altering of his mindset through the conversations, observations of the research he conducted, and the completion of the civic engagement project. After the project, he commented that:

Being civically-minded is to do something that will make your community be a happier place to be at...such as planting food for your community to come and eat or making posters to stop bullying. Volunteering is a good way to be civically-minded. One time, I volunteered at a church to remake the garden, and I felt good when I was done.

Prior to the project, Angel was asked about civic engagement or what civically-minded people do, and her response was, "I do not know what it means. I am really confused...I think everyone is civically-minded." After the completion of the project, she had a different perspective, as she stated, "civically-minded is being active in your

community or at least participating in activities. Smart people are civically-minded. When you help out, you're civically engaged.”

It was quite interesting to witness the transformation of all of the students, but Macy epitomized this and even took a moment to reflect upon her growth at the conclusion of the project. In the beginning, Macy said that “when I think of being civically-minded, I think of following the law and the amendments.” When discussing these terms with her after she had finished her civic engagement project, Macy reflected and noted the following:

When I thought of being civically-minded, I used to think it was only about following the law, but now, I realize it's more than just following laws. It also means to help out your community. It doesn't matter what you support, as long as it makes your community a better place.

Nathan was another example of a student who had a dramatic change in the perception of what it means to be civically engaged. In a pre-project discussion with Nathan, he said that this might mean that if when he was doing community service and found \$20 on the ground that he would give it to a “community person”. After the completion of his project, Nathan said that:

Well, after doing the project, being civically engaged is harder than I thought, because we had to do a lot of research...it was hard work. I had to research everything...so in conclusion, I think that being civically-minded is making your community better.

The students' transformation in thinking about civic engagement in more superficial ways and lack of specific ways in which to become engaged to authentic methods and approaches to agency and change and a mindset change is also evidenced through an examination of the topics chosen for the civic engagement project itself:

- Animal Abuse/Protection/Adoption (9)
- Bullying (7)
- Recycling/Environmental (7)
- Community Sports Leagues (2)
- Increasing Community Creativity (2)
- Support the Troops (2)

- Child Abuse
- Homelessness
- School Improvement
- Computer Access
- Color Blindness Awareness
- Medical Reform
- Civil Rights
- Improve Music Education
- Banking Reform
- Invasive Species
- Clothing Drive

We determined that student involvement in a civic engagement project of this nature does foster civic-mindedness.

### **Collaboration, Decision-Making, and Problem-Solving**

It was found that students had increased levels of collaboration, decision-making, and problem-solving as a result of conducting and completing the civic engagement project. In the pre-narrative, Chuckie noted that NBA players, like Michael Jordan, are civically-minded and are good citizens. His rationale was due to the fact that Michael Jordan has basketball camps, fundraisers for young basketball players, has his own brand of shoes, and loves to sign autographs in public. He also donates money, clothes, and goes to places that give things to kids who cannot afford them. Chuckie argued that this was an individual endeavor, and this is how things are effectively accomplished. After the project, Chuckie discussed how he and his group wanted to solve a problem and worked together to find a solution. He saw the group members as problem solvers, as being civically-minded, and that the group was necessary to the successful completion and implementation of the civic-engagement project.

For some of the students, the realization of the benefits of collaborative decision-making and problem-solving was evident early in the process. For example, Dylan saw that as the group came together and started discussing goals and steps to be taken, that these skills would be essential and that much more could be accomplished collectively

versus individual efforts in isolation. Dylan stated the following when he was given an opportunity to discuss the project with the researchers:

Here at school, me and some friends are doing a group assignment. This project is focused on being civically-minded. For the assignment, my friends and I plan to start planting flowers, trees, and vegetables around the school. To do this, we would, of course, need donations, but most importantly volunteers. Together, we would bring some life back into this dull school.

As the project unfolded, many of the students saw how collaboration, especially in regards to decision-making and problem-solving, was greatly beneficial in reaching the intended goals. Around the midpoint of the civic-engagement project, Jordyn thought critically about the project and the process and told us the following:

We argued a couple of times, but then thought what we wanted to change about Beroun. BAM! The girls and I been doing great so far! It's going to be a bumpy road ahead, but I know together we can conquer it!

For some, the realization of the benefits of collaboration, decision-making, and problem-solving did not fully materialize until the project was completed. Tayshaun noted, at the conclusion of the project, that as a result of the opportunity to work as a group, they were able to work together for a common goal and that “we all got together and thought of an idea to become civically engaged, and we came together...we got it done.” Natalie (NJ) reinforced this through her statement that “this task was what you would call civically-minded because me and my friends accomplish huge tasks together that will benefit Beroun for years to come. It is a sensational feeling knowing I helped. I made a difference.” Natalie went on to note that because of this experience she and her friends know that they can make a difference and that they can set even more ambitious goals in the future. She concluded by empathically stating, “Now, I know me and my friends can do anything, but now it's time to step it up a notch.”

### **Development of Agency**

Although the students made great strides in their conception of civic-mindedness and civic engagement, the researchers wanted to see if the students saw their own capacity to become agents themselves rather than just being aware of good citizenship attributes. At the onset of the civic engagement project, Sadie did not possess a full



conception of what it meant to be civically engaged or ways in which she or other people she knows can be agents for change. She stated:

I don't know anyone, group, or have an experience that means to be civically-minded. To me, being civically-minded means to participate in the community activities, obeying the laws, helping others, and doing things for the community.

I'm not civically-minded, nor my sisters, or my parents.

At the conclusion of the project, Sadie was able to correctly conceptualize what civic engagement and civic-mindedness mean and was able to see herself as an agent of change.

I've learned a lot from the past three weeks, but I feel as if there's more to it, not just helping out the community. Civically-minded means to improve your community's lifestyle. Trying to stop bullying, raise money for cancer, give free vegetables are all acts of being civically-minded.

Sadie took it a step farther by challenging us and others to become engaged and change agents, as she followed up her thoughts with a detailed description of her group's project, and made the following statement and posed this question to the researchers and the general public, "This is how we get civically engaged. How will you?"

Reyna talked about her aunt in the pre-project essay and mentioned how she votes and puts signs all over her yard. In the post-project response, she wrote about bullying and how she has become involved:

That's why I chose to be civically engaged and make a video about bullying statistics. When I made the video, I decided to make it due to the fact that people needed to be aware of bullying and what it does to people... Now of course when I began this project I knew I wouldn't completely eliminate bullying, but I did know that I would be able to teach people new things and have them questioning themselves. And that will benefit my community, even if it's only a little bit."

One of the students, Donte, demonstrated, throughout the project, the ability for students to grow and gain a belief of and conviction towards agentic action, even if in his mind his actions only had the power to impact one or a few people. At the end of the project, he stated:

Believe it or not, I've actually done something useful over the past few weeks...since I first wrote on the topic of civic engagement. Instead of sitting around watching Judge Judy and People's Court reruns, I did something firsthand. I made a video. Of course, I didn't make the video by myself. It was a partner project, but I still did something that was civically engaging, and that's all that matters. The video was about bullying, and its purpose was to spread awareness. Now, I know that you're probably thinking that we don't need a shallow, cliché, poorly-made video that give you a stereotypical, generic view on bullying... however, if one person sees that video, just one, and something in them changes, then I feel as if I've done my job.

Also, at the conclusion of the civic engagement project, Jael deeply reflected upon the task, the project, and what was accomplished. She discussed a dramatic shift in mindset that was witnessed in many of the students throughout the project and a realization that was touched upon by many in writing samples, in conversations, and during debriefing at the conclusion of the project. Jael noted:

It means a lot to be civically-minded. It isn't something you should just joke around about. Being civically-minded is to DO something great not just sit around and talk about it. It takes a toddler to talk about it, but it takes a mature and responsible person to actually do it. During this unit, I've learned that not only should we strive to think of great things than can make an impact, but we should actually stand up and accomplish those things. I've come a long way since the start of the unit...Right now I can faithfully and whole heartedly say that I am more civically-minded than ever. I've learned that when it comes to making a difference it's put up or shut up. This experience has been amazing. It has taken me on a trip within myself and showed the greatest and brightest I can be. I understand that being civically-minded is a choice. A decision that we can make to show ourselves and others that what we do really does matter.

Students were grappling with understanding how to use their voice and creating pathways for informed action, as outlined in the C3 Framework (NCSS, 2013). This development displayed how students were beginning to identify themselves as persons in the community with a sense of democratic agency.

### **Emerging Educationally-Focused Technologies Assisted in the Design and Implementation of the Civic Engagement Project**

In analyzing the survey responses, results overwhelmingly supported the application of innovative pedagogical approaches for civic education and the integration of emerging technology into civic engagement activities. For example, 98.4% (N=61) either agreed or strongly agreed with the survey item, “You enjoy learning about history and civics more by using a computer than using a textbook alone.” Additionally, 95.1% either agreed or strongly agreed that “creating your own project by using a computer is more interesting than reading about civic engagement in a textbook and answering textbook questions or completing worksheets,” and 95% of respondents either agreed or strongly agreed that they “liked creating a project using the computer.” However, there were some concerns with the utilization of social technologies and publishing project activities and events via the web, as only 70.5% agreed or strongly agreed that they “would like to share my project by posting it to the Internet.”

### **A Project-Based Approach was Perceived as a More Effective and Enjoyable Way to Learn than Using Traditional Methods**

Utilizing less traditional instructional methods that employ pedagogical strategies, such as project-based learning, were positively perceived by participants. This was illustrated by 86.9%, 98.4%, and 96.7%, respectively, either agreed or strongly agreed that “creating your own project is an interesting way to learn about how you can be civically engaged,” “creating your own project is a fun or creative way to share your ideas,” and “creating your own project is a more fun or creative way to share your ideas than answering textbook questions or completing worksheets.”

### **Summary**

The research conducted, and data collected throughout the study allowed the researchers to put forward four empirical assertions:

- Involvement in a civic engagement project fostered civic-mindedness.
- This project helped to develop student agency.
- Emerging educationally-focused technologies assisted in the design and implementation of the civic engagement project.

- A project-based approach was perceived by students as a more effective and enjoyable way to learn than using traditional methods.

### **Implications and Limitations**

We believe that a civic engagement project of the nature described and process utilized has been demonstrated that civic-mindedness, agency, and disposition toward taking action can be fostered in the classroom. It can also be stated that emerging educationally-focused technologies can assist in the design and implementation of a civic engagement project and that project-based approaches are a more effective and enjoyable way to learn in comparison to using traditional methods. Our research model expands existing literature of pedagogical practices in civic education and the integration of emerging technology as tools in teaching and learning in the context of facilitating civic awareness and engagement.

The results from this study can be extended and validated using a variety of methods. These include: 1) the inclusion of a larger sample, 2) the addition of a qualitative coding of student products, rather than a quantitative coding criterion like the one used with the student products in this study (present/not present), and 3) an expanded survey to include more specific pedagogical approaches and utilizations of emerging technological applications. As for a larger sample, we do believe that the participants within the study represent the demographics of schools throughout this and adjoining districts, as well as what would be present in other similar metropolitan U.S. schools. However, it should be stated that a larger population for a similar study may be appropriate so that researchers could better include a broader sample of students with varying demographic information (e.g., school setting, technology access, student level). As we only assessed the presence/non-presence of the NCSS factors (requires the ability to use knowledge about one's community, nation and world; apply inquiry process; employ skills of data collection and analysis; collaboration; and problem solving), researchers could create a qualitative coding scheme and more fully evaluate projects. An expanded survey would be useful as the survey items used in this study were fairly broad. Researchers of future studies could delve more deeply into specific pedagogies and specific technological applications in an effort to get a more comprehensive snapshot of student perceptions.

After performing this study with a small sampling of students, the results lend themselves to expanded research. Teacher pedagogy needs to be developed to help students build their own ideas of civic engagement. Although many student projects yielded an increased awareness of community needs and issues, many lacked the essential action step necessary to become civically engaged. As a result, additional investigation that explores how such projects and extensions outside the classroom impact student perception of civic engagement is necessary.

### **Conclusion**

The importance of an active and informed citizenry, one that holds the public sphere in high regards and maintains a level of civic-mindedness, is vital to the prosperity of a democracy (Carnegie Corporation, 2003; Carpini & Keeter, 1996; Center for Civic Education, 1994; Engle & Ochoa, 1988; Mineta, 2008; NCSS, 2013). This study points to the importance for educators to actively and authentically engage students in innovative pedagogical strategies through the use of emerging technologies. These approaches can encourage civic-mindedness and engagement and increase the knowledge, skills, and dispositions necessary for students to become active and informed members of the American electorate.

Specifically, the purpose of this study was to examine the effectiveness of emerging technology-supported civics pedagogical strategies and the ways in which seventh-grade students' involvement in an emerging technology-enabled civic engagement project influenced their levels of civic-mindedness. In examining the findings, it was clear that student involvement in this civic engagement project fostered civic-mindedness and fostered agentic beliefs and agency itself. It was also found that various emerging educationally-focused technologies assisted in the design and implementation of the civic engagement project. Lastly, it was shown that a project-based approach was perceived as a more effective and enjoyable way to learn than using traditional methods for this group of seventh-grade students.

The findings presented in this paper indicate that civic engagement projects of this nature hold promise as tools for preparing young students to become engaged members of the communities where they live. Indeed, civic engagement projects in the classroom are not a common practice, but they should be. There are various organizations, teachers,

and schools across the nation that are continually developing what works best for students, and it is also a practice that we believe is worth continued investigation. The use of civic engagement projects supported by emerging technologies in civics or social studies classrooms has vast potential to improve teaching and learning and, more importantly, cultivate the development of participatory and engaged citizens.

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