

Three Social Studies Teachers' Design and Use of Inquiry Modules

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The researchers used activity theory to examine how teachers planned and implemented inquiries in social studies classrooms given the recent publication of the *College, Career, and Civic Life (C3) Framework for Social Studies State Standards*. This phenomenology used semistructured interviews, relevant documents, and observations as data for the research questions (a) “How do participants design inquiry modules?” and (b) “How do participants teach these inquiries in K–12 classrooms?” Results indicated that designing and implementing social studies inquiries were challenging and worthwhile for the teachers; participants found accessing and using various sources to be a fruitful yet challenging inquiry tool, and appreciated the use of a template to aid in their design process, even while it perhaps limited taking informed action. Participants noted that support was necessary for their successful use of inquiry. This study provides insight into how social studies teachers bring inquiry into their social studies classrooms and points to ways in which teachers can be better supported in this endeavor.

The publication of the *College, Career, and Civic Life (C3) Framework for Social Studies State Standards* (National Council for the Social Studies [NCSS], 2013) represented a “watershed moment for social studies” (Herczog, 2013, p. 316). For the C3 Framework to be a positive force for social studies education, classroom teachers must learn about, understand, and use it—particularly the curricular guidance of the inquiry arc.

In this paper, we discuss the results of a phenomenological study that followed one elementary and two secondary social studies teachers through their interactions with the C3 Framework. Specifically, we answered the research questions (a) “How do participants design inquiry modules?” and (b) “How do participants teach these inquiries in K–12 classrooms?” These questions were designed to explore the issues and opportunities that emerge as social studies teachers begin to learn about and implement the C3 Framework. The publication of the C3 Framework cannot represent a watershed moment unless teachers implement the inquiry arc with K-12 students.

Review of the Literature

The NCSS has put forth the overriding goal of social studies as “the promotion of civic competence,” through the study of social-studies-specific disciplines so students might be “active and engaged participants in public life” (NCSS, 2010, p. 3). For this goal to be achieved, citizens must be able to “apply inquiry processes” (p. 3).

Inquiry in the Social Studies Classroom

The call for using inquiry in social studies instruction has been ongoing for over a century. John Dewey (1910) believed that students learn through investigation and coming to their own conclusions based on their investigations. The New Social Studies movement of the 1960s developed curriculum that included a focus on inquiry over the accumulation of facts (Haas, 1977). The Harvard Project also encouraged inquiry use and provided materials to support such pedagogy (Oliver & Shaver, 1966).

Although social studies literature has addressed inquiry in different manners over the past century, for the purpose of this study the inquiry process involves students “asking meaningful questions, finding information, drawing conclusions, and reflecting on possible solutions” (Levstik & Barton, 2001, p. 13). Utilizing inquiry in this fashion, students come into contact with various pieces of evidence, consider multiple perspectives, and develop their own conclusions.

Despite the continuing advocacy for inquiry in social studies literature, for a variety of reasons the typical social studies classroom has continually been structured in a teacher-centered format (Goodlad, 1984; Saye, Kohlmeier, Brush, Mitchell, & Farmer, 2009). Goodlad (1984) described fact-based teacher-centered social studies classrooms in practice, and nearly 30 years later in a study of social studies teaching across the country, Saye and the Social Studies Inquiry Research Collaborative (SSIRC; 2013) found that “most study classrooms did not experience high levels of authentic pedagogy” (p. 101).

“Authentic pedagogy asks students to construct knowledge using disciplined inquiry to produce work that has value and impact beyond school,” posited Saye and the SSIRC (2014, p. 33). This inquiry is rooted in “authentic intellectual work,” described by King, Newmann, and Carmichael (2009), which “involves original application of knowledge and skills, rather than just routine use of facts and procedures” (p. 44). Several examples can be found in the literature.

Grant and Gradwell’s (2010) description of teachers’ experiences using big ideas to design instruction provided various ways for classroom teachers to teach social studies more ambitiously through the use of inquiry. Teachers described using big ideas to support writing-intensive units, group and individual presentations, simulations, and technology.

Further, Gerwin and Visone (2006) described a compelling distinction between the way two social studies teachers taught an elective course and a non-elective course. Each teacher taught at least one elective social studies course and one required course, which was connected to a statewide high-stakes test. In the elective course, both teachers were more likely to use inquiry teaching methods that challenged students to think critically about the content; however, both teachers focused on more “rote learning” in their required course(s) (p. 260).

While the teachers in Grant and Gradwell's (2010) study and those in Gerwin and Visone's (2006) study were in New York State, they responded differently to the high-stakes testing environment. However, all of these teachers provided examples of ways to use nontraditional teaching methods, which indicates that in certain contexts some teachers used research-based pedagogy rooted in inquiry.

Saye and Brush (2006) have described multiple ways in which social studies teachers implement problem-based inquiry (PBI), as well as the continuing impediments to such ways of teaching. In particular, they developed an inquiry-based unit using technology to address “known teacher obstacles to PBI” (p. 187). While they purposefully developed hard scaffolds using technology, they found that the teachers did not use the scaffolds to support high levels of student-led inquiry as they expected. As Barton and Levstik (2004) also suggested, Saye and Brush (2006) attributed much of teachers' decision-making within PBI to their existing epistemological beliefs and their primary purpose in teaching social studies. Teachers' philosophies and motivations must be supportive of student-led inquiry in order for such challenging instruction to be implemented in the classroom.

While most studies of inquiry in the social studies classroom focus on secondary education, some have focused on inquiry in elementary social studies. However, such studies tend to restrict the agency of the elementary teacher in designing and implementing the inquiries. For instance, Alleman and Brophy (2003) studied merely how a primary teacher implemented curriculum that was designed by the researchers.

Nokes (2014) implemented inquiry-based lessons himself in a fifth-grade classroom using a mixture of existing document-based lessons and those he designed himself. While Nokes' lessons were effective in helping students develop disciplinary and inquiry-based skills, the classroom teachers implemented traditional instruction with the researcher implementing the inquiry-based instruction. These studies, and others, have shown that inquiry is an effective method in elementary social studies classrooms; however, more research needs to be done regarding elementary teachers who design and implement inquiry lessons on their own.

Not Enough Inquiry in the Social Studies Classroom

The arguments for why more social studies teachers do not teach with inquiry include teachers' beliefs and purposes not aligning with inquiry (Barton & Levstik, 2004), contextual constraints (Cornbleth, 2002), and a lack of examples and support (Saye & the SSIRC, 2014). Key contextual constraints include limited instructional time (Cornbleth, 2002; Heafner, Lipscomb, & Fitchett, 2014) and high-stakes accountability policies (Grant, 2003; Heafner et al., 2014).

The limitations of instructional time are particularly challenging for elementary social studies teachers (Brophy, Alleman, & Knighton, 2009; Fitchett & Heafner, 2010), though the limitations are felt at the secondary level as well. Elementary social studies teachers also face challenges with limited content knowledge and pedagogical knowledge coming

out of their teacher preparation programs (Bolick, Adams, & Willox, 2010; Hawkman, Castro, Bennett, & Barrow, 2015; Passe, 2006), which further complicates efforts to engage in inquiry-based lessons in elementary grades.

Cuban (1993) described the persistence of teacher-centered practices, particularly in secondary schools, as largely due to systemic factors outside of teachers' control, such as the organization and purpose of schools. Cuban described teachers who endeavored to teach in more student-centered ways despite the systemic constraints but maintained that larger-scale change would not happen without systemic change.

Guskey's (1986) teacher change model argued that teachers must change their classroom practices *before* their beliefs will change. If teachers see that shifting their practice—such as using inquiry modules—positively affects student learning, they will buy into the utility of inquiry in the classroom. Educators hope that the publication of the C3 Framework will carry instructional implications that finally increase the quality of classroom inquiries in social studies (Grant, Swan, & Lee, 2012; Swan, Lee, & Grant, 2014).

Shifting Teachers' Instruction

For any reform to reach the classroom, it must first go through the “curricular–instructional gatekeepers”: teachers (Thornton, 2005, p. 11). Teachers need support in their professional learning efforts in order to enact change in the classroom (Ball & Cohen, 1999; Elmore, 2002; Guskey & Huberman, 1995). Yet, professional development alone has typically been insufficient in encouraging instructional shifts.

Particularly in social studies, professional development for teachers is inadequate—consisting of mostly one-shot workshops that are disconnected from teachers' daily practice (Adler, 1991; Grant, 2003; van Hover, 2008). As Guskey (1986) suggested, perhaps teachers need to implement suggested changes in their classroom before they can be convinced of their effectiveness and adopt the new practices in the future. This study followed Guskey's model in order to support teachers in the use of inquiry in the social studies classroom, in hope that teachers would continue using inquiry.

The publication of the C3 Framework (NCSS, 2013) presented an opportune moment to revisit the status of social studies inquiry in the classroom. In addition to college and career readiness emphasized through the Common Core State Standards (National Governors Association Center for Best Practices & Chief Council of State School Officers, 2010), the C3 Framework focuses on preparation of students for civic life. It is organized in four dimensions, forming a unique *inquiry arc* consisting of (a) developing questions and planning inquiries, (b) applying disciplinary concepts and tools, (c) evaluating sources and using evidence, and (d) communicating conclusions and taking informed action.

The inquiry arc can potentially provide a structure to make the wealth of source materials that are available for social studies teachers more useful for students and teachers, but teachers will likely need training and support in order to implement the shifts (Swan et al., 2014; Swan & Griffin, 2013) necessary to put the inquiry arc into action. One promising tool to support teachers is the Inquiry Design Model (IDM), which provides a pedagogical structure to facilitate the design and implementation of inquiry in the social studies classroom (Grant, Lee, & Swan, 2014).

Inquiry Tools

In order for teachers to make instructional shifts, they need a variety of supports. Scaffolding (Brush & Saye, 2002), the IDM (Grant et al., 2014), and accessible primary and secondary sources are all important tools to help teachers plan and implement social studies inquiries. Brush and Saye (2002) distinguished between hard and soft scaffolds with which teachers can support students to learn at a higher level than they could independently. They defined hard scaffolds as “static supports that can be anticipated and planned in advance based on typical student difficulties with a task” and soft scaffolds as “dynamic, situation-specific aid provided by a teacher or peer to help with the learning process” (p. 2).

A hard scaffold might be a graphic organizer that a teacher provides to help students organize information; a soft scaffold might be guiding questions or prompts that teachers ask of students when students seem to need additional help, such as, “Have you thought about X?” The IDM (Figure 1) is an example of a hard scaffold provided to support *teachers* in their inquiry planning, rather than supporting students in the implementation of an inquiry.

| Inquiry Design Model (IDM) Blueprint | | |
|--------------------------------------|----------------------------|----------------------------|
| Compelling Question | | |
| Standards and Practices | | |
| Staging the Question | | |
| Supporting Question 1 | Supporting Question 2 | Supporting Question 3 |
| | | |
| Formative Performance Task | Formative Performance Task | Formative Performance Task |
| | | |
| Featured Sources | Featured Sources | Featured Sources |
| | | |
| Summative Performance Task | Argument | |
| | Extension | |
| Taking Informed Action | | |

Figure 1. *Inquiry Design Model (Grant et al., 2014).*

As Figure 1 shows, an inquiry can be built around a single compelling question, which is broken down into several supporting questions. The teachers identify primary and secondary sources to correspond with each supporting question and design formative performance tasks for students to complete as they work through the selected sources for each supporting question. Teachers design a summative performance task that requires students to build an argument to answer the compelling question and ideally leads to students taking informed action related to the content of the inquiry. Accessible sources are critical for the utility of the IDM.

The Internet's inclusion in schools and society over the past two decades has resulted in unprecedented access to digitized disciplinary sources that were previously unavailable to teachers (Cohen & Rosenszweig, 2006; VanFossen & Shiveley, 2000). As such, it was touted as a "truly revolutionary development" for the field of social studies (Braun & Risinger, 1999, p. 7).

Though the Internet and its vast collection of digitized sources has been a mainstay of social studies classrooms for over a decade, access in and of itself had not necessarily altered instruction on a large scale, according to the most recent data collected (Friedman, 2008; VanFossen & Waterson, 2008). Among the reasons for the limited changes, at least a decade ago, were a lack of instructional time and incongruence with traditional testing (Friedman, 2006; Friedman & Heafner, 2007). While sweeping changes and the "revolution" predicted by social studies scholars in the late 20th century have not taken place, access to digitized sources is a critical component to the implementation of the C3 Framework, as it allows teachers to develop compelling and supporting questions with the tacit assumption that they and their students have access to the requisite disciplinary sources.

Theoretical Framework

The C3 Framework, source materials, and inquiry structures such as the IDM represent some of the tools social studies teachers can use as they plan and implement inquiry-based instruction. We used Wertsch's (1998) adaptation of activity theory as the theoretical frame because of its focus on tool use—both material and intellectual—and mediated action. Tools are socially constructed in order to do specific work in the world and individuals develop skills in order to use appropriate tools; Wertsch (1998) explained,

The development of such skills requires acting with, and reacting to, the material properties of cultural tools. Without such materiality, there would be nothing to act with or react to, and the emergence of socioculturally situated skills could not occur. (p. 31)

Wertsch's (1998) concept of mediated action draws attention to the affordances and constraints of tool use. In our study, we considered the tools participants used as they designed and implemented social studies inquiries; however, we do not claim to analyze all of the tools with which teachers interacted as they worked. By limiting our analysis of tools to those specific for inquiry work, we attempted to isolate those tools that were most important for inquiry-based teaching and learning.

Context

This study took place in a southern U.S. state in which social studies education has been in flux; teachers have become accustomed to changes in the way social studies is taught as well as assessed. Beginning in the 2012-2013 academic year, due to an act of the state

legislature, secondary United States history, which had previously included people and events from 1789–present, was divided into two courses. Though neither course's standards specified a date in which people or events are, or are not, included, the first course includes people, terms, and events from prior to the American Revolutionary War and overlaps with the second course in that the American Civil War and Reconstruction are included in both courses.

Nearly simultaneous to the development of two United States history courses, the state Department of Education unveiled a revision to its standardized testing procedures that added short-answer items, whereas before there were only multiple-choice items. These examinations are also now used to evaluate teacher effectiveness following a value-added model in regard to student learning growth. Under this model, teachers are evaluated partly based on their students' performance on standardized tests.

The following year (2013-2014) witnessed the introduction of the C3 Framework, as it was published on Constitution Day in September 2013, and the state Department of Education began broadcasting webinars about it during late 2013. In early 2014, the keynote speaker at a state social studies conference was a writer of the C3 Framework.

A previous study showed that many social studies teachers had not yet become familiar with the framework. In May 2014, every middle and high school social studies teacher in the school district in which the current study took place ($N = 161$) was sent an online survey about their instructional practices given the expectations of the C3 Framework. Though there was a relatively low (28%) response rate, this initial survey did yield useful data. Importantly, teachers' understandings of inquiry were aligned with the basic concepts of inquiry as described in the C3 Framework. Teachers' reported practices were not as closely aligned with ideas in the C3 Framework, however, suggesting a disconnect between belief and practice regarding inquiry (Thacker, Lee, & Friedman, 2016).

The disconnect was particularly prominent in regard to Dimension 4 of the C3 Framework, titled Communicating Conclusions and Taking Informed Action. Dimension 4 practices were not part of most respondents' pedagogy (Thacker et al., 2016). Survey findings informed the design of the current study in that participants were given specific professional development regarding ways to implement all four dimensions of the C3 Framework.

Research Design

This exploratory qualitative study uses a phenomenological approach (Yin, 2011) to describe an inquiry-based instruction project in a large urban school district in the southern United States. The study explores the lived experiences of individual social studies teachers in a single district. The three study participants were part of a group of eight teachers who applied for and were selected by the school district to design, implement, and share inquiry-based instructional units. As such, they were already engaged in learning about, planning, and implementing inquiry-based instruction. While each was interested in inquiry methods, which certainly influenced their response to the invitation to apply for the district initiative, none had participated in previous training on the use of inquiry in social studies specifically. As such, this study examines participants' experiences with inquiry, in general, and the IDM, in particular, on their (a) development of inquiry-based instructional modules and (b) implementation of inquiry instruction in their classrooms.

Participants

All participants in a district project focused on social studies inquiry were invited to participate in the present research study; the three teachers analyzed herein agreed to participate. These three teachers ranged in experience from two to 35 years and taught at a variety of schools. Table 1 describes the participants in terms of their teaching experience, school context, and the inquiries they designed and implemented that are reported on in this study.

In addition to the district project, Ms. Williams, Ms. Easterling, and Mr. Thompson described having sought information on teaching with inquiry on their own but lacked formal training in inquiry as such. Ms. Williams subscribed to a growth mindset, both for herself and for her fifth-graders, and said that she read as many education-related journals and blogs as she could. Ms. Easterling heard about the C3 Framework prior to her participation in the inquiry project and had perused the NCSS website to understand the changes afoot. Similarly, Mr. Thompson described himself as a teacher who “wants to be current.”

While each of the participants described teaching in student-centered ways, none had planned and implemented a sustained inquiry before. Ms. Williams often used questions to hook students in a lesson, but not with as much intentionality as she did in the district project. Ms. Easterling began every class with an “essential question” and returned to it throughout the class. Mr. Thompson’s and Ms. Easterling’s students were accustomed to grappling with larger questions and became familiar with working in small groups, collaboratively examining documents, drawing conclusions, and forming arguments in their classes.

Data include multiple, semistructured interviews with each participant, structured observations of teachers’ implementation of inquiry instruction, participant observations of instructional planning, and relevant documents, such as drafts of inquiry modules.

To analyze the data, we began by coding all of the data as we gathered them, transcribing and coding the interviews in quick succession. Observations were conducted using Spradley’s (1980) observation matrix. We kept research journals to code observation notes and collected relevant documents over the course of the project. From the coded data, we identified broader themes using a constant comparison method to identify findings (McMillan & Schumacher, 2010). In order to ensure interrater reliability, we initially analyzed all data independently. Then, we met to consider the themes that emerged and the data that supported them.

Table 1
Participants

| Teacher | School/Grade/Subject Taught | Inquiry Topic and Examples of Sources Used |
|--|---|--|
| <p>Ms. Williams</p> <p>Second year teaching fifth-grade.</p> | <p>Washington Elementary School</p> <p>Suburban elementary school; student population of over 75% White, 15% African American, and small percentages of students who identify as biracial or Asian.</p> <p>Fifth-grade US history</p> | <p>Democracy during the Civil War</p> <ul style="list-style-type: none"> • U.S. Constitution • Lincoln’s “A House Divided” speech |
| <p>Ms. Easterling</p> <p>35 years teaching secondary social studies.</p> | <p>Richland High School</p> <p>Suburban school; about 60% of students are White, with about 15% identifying as African American, 15% identifying as Hispanic, and small percentages identifying as biracial or Asian.</p> <p>Tenth-grade Seminar and Regular Civics/Economics</p> | <p>Interest rates and the Federal Reserve</p> <ul style="list-style-type: none"> • Secondary sources explaining how the Federal Reserve works • Recession/Recovery political cartoon <p>Checks and Balances</p> <ul style="list-style-type: none"> • U.S. Constitution • Federalist Papers • Summary of <i>Marbury v. Madison</i> |
| <p>Mr. Thompson</p> <p>Third year teaching secondary social studies.</p> | <p>Delano High School</p> <p>Urban high school; almost equal populations (about 40% each) of White and African American students, about 15% Hispanic students, and smaller percentages identifying as biracial or Asian.</p> <p>Ninth-grade Honors World History</p> | <p>Truman and the atomic bomb</p> <ul style="list-style-type: none"> • Potsdam Declaration • U.S. military predictions of casualties |

District Curriculum Project

The curriculum project was organized by the local school district. The curriculum coordinator determined that the focus of the project would be on the development of inquiry-based instruction in hope of encouraging more inquiry methods in K–12 social

studies classrooms. He believed that inquiry is a highly effective teaching strategy for social studies and beneficial for all students in the population, not only the most advanced students. Through collaboration with us, the coordinator decided that the C3 Framework and the inquiry arc would be an important part of the project and invited us to join with him in working with teachers.

The district advertised the curriculum project and invited all interested teachers to apply. Teacher participants began their work with the C3 Framework in an all-day in-service workshop, which we led in November 2014. The teachers were given release time. During the workshop, participants learned about C3 as a whole group, learned where to locate resources, and began to outline inquiries they could use in their classrooms. During teacher-work time, participants worked largely independently with support from the researchers and the district administrators. After the 1-day workshop, participants continued to work on their own time with ongoing virtual support from us and administrators and at least one in-person meeting to discuss the design of the inquiries.

As part of being selected to participate in the district project, each teacher agreed to develop three inquiry modules (for which they were paid) and implement at least one during the 2014-2015 school year. Since teachers designed inquiries knowing they would be expected to implement them, and in hope that other teachers would implement them as well, they took such factors as standardized testing, curriculum mandates, and limited instructional time into account. Each teacher submitted numerous drafts of inquiry modules to us and district administrators throughout the subsequent months.

Because of the numerous revisions from a disciplinary and pedagogical perspective, each inquiry met the needs of the teachers and their contexts, as well as their perception of the needs of others in the district. In August 2015, the teachers shared their work with other teachers in the district and participated in final interviews.

Findings

We have organized the findings in three themes: (a) necessity of support, (b) challenges of designing inquiry-based instruction, and (c) the worthwhile struggle of implementing inquiry in the classroom. These findings underscore the notion that inquiry-based social studies instruction *can* take place, but that it is not necessarily an easy task and, therefore, may require support from a variety of stakeholders to ensure its success.

The Necessity of Support

The school district within which this study took place, and in particular, the curriculum coordinator, provided necessary support for teachers as they prepared for, designed, and implemented inquiry modules. In addition to paying teachers for their professional expertise, the district provided a substitute teacher for one day, during which we gave teachers an overview of the C3 Framework and the IDM. On the day of the initial training session, teachers had time to begin planning their inquiry modules. We, along with district social studies leaders, worked with teachers to help them get started, find websites to access sources, and refine compelling and supporting questions.

All three participants noted that the initial training session, particularly the supported work time, was “super duper helpful” (Ms. Williams, personal communication, June 17, 2015). Indeed, after several hours of individual work time, Mr. Thompson had all three of his inquiries outlined, including draft versions of compelling and supporting questions.

During their initial work at the in-service training, each participant first identified topics for their inquiry modules. Ms. Williams determined that she would focus all three modules on the Civil War, looking at different aspects and content emphases through the large instructional unit. Ms. Easterling wanted to space her inquiries evenly throughout the school year, deciding to focus on checks and balances, freedom of speech, and the Federal Reserve and interest rates. Mr. Thompson had a similar outlook to Ms. Easterling, focusing his three inquiries on the Pax Romana, the Crusades, and President Truman's actions at the conclusion of World War II.

After determining their topics, the teachers began to formulate compelling and supporting questions, following the guidance given by the C3 Framework and the IDM. Inspired by the structure of the IDM, teachers mapped out three supporting questions for each compelling question and tried to identify three to five sources to accompany each supporting question, as well as designing formative performance tasks for each supporting question. Teachers planned varied summative performance tasks through which students would construct an argument based on their work in the inquiry with the compelling question in mind.

As teachers designed inquiries throughout the fall and winter of the 2014–2015 school year, the district's social studies leaders and we provided virtual and in-person support, giving feedback on in-progress inquiries through email and by visiting teachers in their classrooms as they worked. Based on the ways teachers were comfortable designing instruction, some included a graphic overview, similar to the table at the outset of the IDM (Figure 1), while others used a narrative approach.

In the initial training, the IDM was shared with teachers as a way of explaining the aspects of the C3 Framework that would be helpful in inquiry design, but they were not encouraged to follow that design for their own inquiries. No matter what format teachers used—outline, narrative, or IDM—all teachers designed inquiry using the aspects of IDM emphasized in the training as ways to implement inquiry using the C3 Framework (i.e., compelling and supporting questions, formative and summative performance tasks, and key sources).

In December, teachers came back together in a face-to-face meeting to share their draft inquiries. All teachers presented their draft inquiries to the group, which also served to highlight the variety of formats participants used in their design work. One purpose of the meeting was to provide feedback to one another on their inquiries; participants found the variety of formats to be challenging. Questions included, "Wait, what was your compelling question again?" and "Can you scroll back up to the first supporting question?"

As participants sought to understand and provide feedback to others' inquiries, the group appreciated the structure of teachers who most closely followed the IDM. Whereas narrative and outline inquiries spanned multiple pages, the tabular IDM allowed teachers to see a snapshot of the entire inquiry on a single screen. In addition, teachers knew that part of their task would be to share their inquiries and their experiences with other teachers throughout the district. To that end, they wanted to present a united front and produce inquiries that would be most readily understood—and hence, potentially implemented—by other teachers.

At the teachers' request, the district social studies manager agreed to create a shared template for all participants to use for their finished inquiries. Teachers specifically requested that a table or graphic (much like the IDM) be used as a cover page to help summarize the inquiry. Part of the feedback offered by the social studies administrators focused on state curriculum standards, so he included a row to highlight alignment to standards in the table (Figure 2).

| | | |
|------------------------------------|-------------------------------|--------------------------------|
| | State Standards: | |
| | Grade Level | |
| | Summative Performance Task | |
| Compelling Question: | | |
| Background Knowledge: | | |
| Supporting <u>Question I</u> | Supporting Question II | Supporting Question III |
| Historical Sources | Historical Sources | Historical Sources |
| Formative Performance Task I | Formative Performance Task II | Formative Performance Task III |
| Summative Performance Task: | | |

Figure 2. District Inquiry Design Template adapted from Grant et al. (2014) and modified from original for confidentiality.

By the end of spring 2015 participants each successfully completed three inquiries as requested by the school district and implemented at least one of the inquiries they designed. Overall, the teachers were pleased with the level of support and responsiveness from the district. That is not to say, however, that the teachers did not have suggestions for improvement. Teachers agreed that ongoing support would be necessary to encourage others to create and implement inquiry modules. Ms. Easterling and Ms. Williams struggled with determining the best format to use for the inquiries. While they liked the IDM format, they worried about the accessibility for others. In a group interview at the conclusion of a required work session, Ms. Williams said,

Teachers will want lesson plans, or at least an outline, for each day. They won't want to translate modules into daily instruction. Teachers would rather have more to pull from and go from there; they'll always make it their own, so you don't have to worry about them feeling like you're telling them what to do.

Ms. Easterling agreed, asking, "How do I get a product a teacher could use and in a format that's easy for a teacher to get?" In particular, she noted that many schools limit the amount of copies teachers can make, so the templates need to be easy to copy but cannot be too lengthy.

Challenges of Designing Inquiries

While participants found the process of designing inquiry modules to be rewarding and meaningful, they also said it was challenging and frustrating at times. The most frequently cited challenge was that of finding appropriate sources to use in an inquiry; teachers also found content knowledge—both their own and that of their students—to be a challenge during the planning process.

Finding Sources. Locating and determining appropriate primary and secondary sources to include in an inquiry module was challenging for all participants. The challenge was particularly difficult for Ms. Williams. An elementary teacher, Ms. Williams had the additional challenge of finding sources that were written at or near a fifth-grade reading level. Many sources can be difficult for even the most advanced high school students, so the task of finding and modifying sources for elementary students is cumbersome.

Teachers were given some guidance in their initial training about websites that may have been helpful in their planning, such as the Library of Congress and the National Archives, but in a conversation after a classroom observation, Ms. Williams said, “There’s just so much out there! How do I find the *right* documents?” The challenge was not simply *finding* sources but choosing the best sources that would be accessible to students and suitable to the content of the inquiry.

Accessible sources. Ms. Williams believed it was important to use authentic text from primary source documents, even though she expected that unmodified documents would be difficult for her fifth-grade students to read and understand. She considered “translating” source documents into updated language that students would more easily understand but decided that her students need to “read it the way it was written.” Even if using unmodified sources meant that she would have to provide more supports, such as graphic organizers, Ms. Williams still believed using the original sources was the right choice. To make the original sources more accessible, Ms. Williams carefully selected excerpts from the documents rather than providing the full text.

While Ms. Williams struggled with the issue of finding accessible sources more than Mr. Thompson and Ms. Easterling did, all three found it difficult. In a discussion subsequent to an observation, Ms. Easterling said that finding sources—primary or secondary—to support her inquiry on the Federal Reserve “was just torturous!” Unlike other inquiry topics, such as freedom of speech, her inquiry module on interest rates and the Fed was challenging to design, partially because she did not already have an arsenal of sources she had used in past instruction. Some topics, such as the founding of the U.S. government and world wars, already have collections of relevant sources available through credible Internet repositories like the Library of Congress and Teaching American History. Ms. Easterling’s choice of the Federal Reserve was challenging because, while relevant documents were available, they were not prepackaged.

Suitable sources. All three participants found selecting the best sources that aligned with the inquiry to be difficult. Ms. Easterling selected at least five primary or secondary sources for each supporting question in the Federal Reserve inquiry for a high school economics unit. Like Ms. Williams, she had trouble choosing which sources were most relevant for the supporting question and ended up with more sources than she would have liked. Because teachers were designing their own inquiries, they had freedom to choose their supporting questions and choose the direction of the inquiry. Which sources they selected was an important step in the design process that had a large effect on the overall content and direction of the inquiry.

After teaching a lesson on the conclusion of World War II, Mr. Thompson noted that while he had “absolutely no trouble” locating relevant sources to Truman’s decision to drop the atomic bombs, he acknowledged difficulty in selecting sources that were not “completely biased one way or another.” He recognized the importance of source selection in potentially leading the inquiry in a particular direction and was careful to select sources that provided multiple perspectives on the issues.

Content Knowledge. Limitations of teachers’ own content knowledge and considerations of students’ background knowledge also created challenges as they designed inquiry modules. In a follow-up interview Ms. Williams said that when she began planning her first inquiry module, she “just sat there! I didn’t really know enough about the [American] Civil War to even start on this.”

While Ms. Williams had taught a unit on the Civil War previously, she did not possess the depth of content knowledge necessary to design an inquiry. She started by brainstorming what she already knew and listing important content to include, but she knew she “had to find out more.” Just as the completed inquiry would require her students to think about social studies content more deeply, she realized, “I need a higher level of understanding to write these inquiry modules.” In her quest to deepen her content knowledge, she explored a variety of online resources, some of which she included in the inquiry as resources to support background knowledge for students and other teachers, such as the website <http://www.civilwar.org> and BrainPOP videos (<http://www.brainpop.com>).

Just as a teacher’s content knowledge is an essential component of the inquiry design process, understanding students’ prior knowledge is also important. Ms. Williams was concerned that her students’ lack of familiarity with the content might create barriers to their engagement in the inquiry modules. She designed her inquiry modules with students’ background knowledge—or lack thereof—in mind, including resources teachers could use to introduce content to students prior to beginning the inquiry. In another follow-up interview, Ms. Easterling similarly included various scaffolding resources as she designed her inquiries, knowing that she would need to use more such supports with her general students and fewer with her advanced students. For each supporting question, Ms. Easterling included a handout to guide students as they worked through the sources; these included questions for each source and graphic organizers on which students would record information across sources.

Implementation: A Worthwhile Struggle

Despite challenges associated with their initial development of their inquiry lessons, participants each believed that their work paid off in terms of effective instruction. The participants found that students were engaged in the inquiry process in the manner in which they had intended. From classroom observations and interviews about classroom implementation, several themes emerged: instructional time, the need for scaffolding, and student engagement. An examination of the inquiry documents and classroom observations suggested that supporting students to take informed action was challenging.

Instructional Time. By far, teachers’ most common concern as they planned for and implemented their inquiry lessons was the amount of time that it would take. All three participants grappled with how to balance the integrity of the inquiry and allowing students enough time to engage meaningfully with sources, the incessant ticking of the clock reminding them they had a limited amount of time.

Mr. Thompson's 90-minute honors world history class exemplified this difficult balance. After introducing the compelling question ("Was it OK to drop the atomic bombs?"), he planned for students to read documents pertaining to the supporting questions ("Did America have other choices?" "Was the Potsdam Declaration and the response clear enough?" "Was the destruction of Japan too great?") in small groups for 45 minutes, followed by a 30-minute discussion of the documents and then a 10-minute review of the compelling question. The first supporting question contained four sources, the second three sources, and the third five, for a total of 12 sources in 45 minutes. While some sources were no longer than a sentence, others were up to one and a half single-spaced pages in length, and all but one were text based.

Shortly after class began, students began to work with the goal of analyzing all 12 sources in 45 minutes. As Mr. Thompson monitored students' progress, it became apparent that the groups would not complete each of the questions for each of the sources in the time intended, so he instructed the class that they should be prepared to discuss the first two supporting questions and their sources as a way to break up the overwhelming task. Mr. Thompson then led a whole-class discussion that attempted to answer the first two supporting questions and the specific answers to the questions he provided on the graphic organizers for individual documents. To open discussion he asked, "Did America have other options?" and student discussion ensued that was rooted in evidence from the documents.

Student responses indicated that they had, indeed, analyzed the sources carefully and were able to use evidence from the sources in their discussion. For example, a student noted that the third point of the Potsdam Declaration used an italicized "*will*" in the text and discussed the implications of that emphasis. After 10 minutes, Mr. Thompson asked students to work on the remaining supporting question of whether the destruction of Japan was too great. With 7 minutes left in class, time clearly was not going to be sufficient for a long discussion on whether it was OK for the United States to drop the atomic bomb. Instead, Mr. Thompson prepared the students for the next day, which would consist of an in-depth, full class discussion on the compelling question.

Making an impromptu decision at the end of class, he brought up the Abu Ghraib torture scandal in which the United States had been involved in 2004 to help students make connections to the content. Prior to class ending, Mr. Thompson acknowledged the length of the sources as well as the effort the students put forth, saying "I know...the sources were really long...I appreciate all of your work on this."

In a follow-up interview, Mr. Thompson noted the dilemma of too little instructional time. He said that he had to stop after two supporting questions "to give them a breather," because "that...was more primary sources than I ever gave them." Upon reflection, he noted that if he were going to teach this lesson again, he "would cut the [nearly one and a half single-spaced page] Truman speech."

Similarly, Ms. Easterling felt rushed each time she implemented an inquiry lesson. One of the lessons we observed focused on the compelling question, "Do checks and balances work?" In that lesson, Ms. Easterling made instructional decisions specifically to make the most efficient use of time to complete the inquiry in one 90-minute class period. For example, she chose to only use the sources most necessary to answer each supporting question, enabling her to filter out some of the less relevant sources that made it into the inquiry. As the clock trudged on and students were just beginning work on the third supporting question, Ms. Easterling said, "In the interest of me getting nervous about time, you don't even need to write anything down for source B [quotes from founding fathers] or C [Federalist No. 70]....We're not going to write anything, but I want you to remember it."

Several minutes later, when students had finished looking at the sources, she refocused them on the supporting question:

Now that you've read those sources, answer: Could there be a dictatorship? And in your head, hold tight to your reasons. That's not the best way to do this, but given the time, that's what we're gonna have to do.

By making instructional decisions to decrease the time students needed to work through each supporting question, Ms. Easterling saved enough time to hurriedly complete the summative performance task in which students prepared for and performed a courtroom role-playing activity. Students volunteered to fulfill the roles of judges, jury members, and lawyers arguing both sides—that there are, or are not, enough checks and balances to avoid a dictatorship. While there was not a spare second in the 90-minute block, they were able to get through the entire inquiry in one class period.

As an elementary teacher, Ms. Williams often felt the pressure of decreased instructional time given to social studies. In an inquiry toward the end of the 2014-2015 school year, it took two 30-minute social studies lessons and part of a third for Ms. Williams and her students to work through the introduction (compelling question: “Is democracy always a fair form of government?”) and first supporting question (“How were slaves and free African Americans excluded from membership in the democratic society in the U.S. prior to the Civil War?”).

Ms. Williams used part of the first day to introduce students to the compelling question and prepare them with tools and strategies to analyze challenging sources. For example, she modeled “translating” the Preamble of the Constitution with students, consulting the dictionary for help defining difficult words. In an interview after her inquiry, she said, “To use the primary sources, you *have* to set the stage....They'll work hard to understand the sources but they have to know how and know it's important.”

After setting the stage for the inquiry on the first day, she began the second day by reminding students of the compelling question and introducing the first supporting question. Ms. Williams had aligned three primary source documents to the supporting question and divided students into groups so that each group was only working on one document. Even so, the time necessary for students to analyze the primary source documents surprised her, as students needed part of a third day to finish reading and analyzing their assigned document. Also on the third day, student groups presented their analyses to the class.

After all students had complete graphic organizers for all three primary source documents, they worked in groups to answer the first supporting question. Because the inquiry ended up being so time-intensive, Ms. Williams and her students did not have enough time to complete the inquiry in full as she had designed it. Instead, she covered the American Civil War content in more traditional ways due to schedule interference from standardized testing and end-of-year celebrations.

Scaffolding. Teachers created and used a variety of supports to help their students work through the inquiry modules. Participants credited the use of scaffolding for much of the success of the classroom implementation of their inquiry modules. For example, in designing the inquiry on democracy during the Civil War for her fifth-graders, Ms. Williams created a series of graphic organizers to support students as they analyzed each document and separate organizers to help students summarize the information from multiple documents in answering the supporting question. As groups began to analyze

their assigned document, they immediately looked to the primary source analysis tool (National Archives and Records Administration, n.d.) to see what information they could record. For Supporting Question 1, each group completed the general primary source analysis tool as well as a graphic organizer created by Ms. Williams (Figure 3) to correspond with the supporting question, “How were slaves and freed-African Americans excluded from membership in the democratic society of the U.S. prior to the American Civil War?”

| Primary Document | Rights of slaves and freed-African Americans | Rights of other citizens |
|-----------------------------------|--|--------------------------|
| Constitution of 1860 | | |
| A “House Divided” Speech | | |
| Speech on the Dred Scott Decision | | |

Figure 3. Graphic organizer for Supporting Question 1.

As they got deeper into the texts, students began asking questions of each other and of Ms. Williams. A few minutes into the activity, one student exclaimed, “We need help! We looked up ‘impeachment’ and it means to adorn with curls!” Ms. Williams walked over to the group and responded to them, guiding them to work through their confusion: “Remember that words have multiple definitions. You’re looking for the social studies definition.” She did not tell students the correct answer but encouraged them to dig deeper in order to find the answer themselves.

Because she taught both advanced/seminar and general classes, Ms. Easterling found that the amount of scaffolding she provided for students was an effective way to differentiate for student readiness and ability. In particular, in her implementation of the checks and balances inquiry in one 90-minute class period, she provided students with graphic organizers for each supporting question that were designed to coordinate with the sources in the inquiry. The [appendix](#) provides an example of one of these organizers, for Supporting

Question 2 (“Which parts of the Constitution and the founding documents limit executive power?”).

Further, in her implementation of the inquiry in the seminar class, Ms. Easterling had students work in groups to analyze the sources and answer each supporting question. She expected students to help each other understand the sources and find the appropriate answers. The day she implemented the checks and balances inquiry, her seminar students struggled to focus on the task at hand and found some of the documents to be difficult to understand.

The first source her seminar students were tasked with reading was an excerpt of Article I, Section VIII, of the U.S. Constitution. After several students asked for help on similar questions, she provided more support, asking the class, “Do you all want me to help?” Students responded in a chorus, “Yes!,” with one student adding, “It’s Friday *and* it’s raining!” as a way to explain their difficulty getting started. So Ms. Easterling talked students through the most important aspects of the constitutional excerpt, asking them questions such as, “Who has control of the military?” to which students responded, “Congress.” Then she asked, “What is the President’s military title?” guiding students to point out the balance of powers between Congress and the Executive in military matters.

As students worked through the next source and continued to ask her questions, she pushed them to be more independent, saying, “You can do it! Even if it’s a Friday morning and it’s raining outside....Use your groups!” In the general class, however, both for the sake of time and to provide enough student support, she chose to work through many of the sources and supporting questions as a full class. In the latter case, she consistently used the question and response technique to ensure all students could interpret the sources.

Student Engagement. Despite the challenges, participants were pleased with students’ responses to inquiry. Students learned social studies content, asked meaningful questions, and succeeded on performance tasks. In Ms. Easterling’s inquiry on the Federal Reserve, a student said, “So you said we use the Federal Reserve Bank in Virginia. Are there others?” Ms. Easterling replied enthusiastically: “Oh, I just love when you all ask questions! If you have a dollar bill, please take it out.” Then, she projected a PowerPoint slide on the large television monitor set up in her room and clicked through to show an image of a dollar bill. Without prompting from the teacher, students examined the dollars in their hands and on the screen. One student exclaimed: “Whoa! It’s a Federal Reserve note! From Chicago, Illinois!” Another student added, “From Ohio – Cleveland!” and a third: “From San Francisco! Oh my gosh, all the way across the country!”

The classroom practically erupted with students comparing bills, passing bills within their groups, and gaining a fledgling appreciation of the scope of the Federal Reserve in their lives and wallets. Students expanded on an initial awareness of the Fed in the summative assessment in which they analyzed current economic data to determine whether the Fed should raise or lower interest rates. Ms. Easterling capitalized upon students’ interest in their money to entice them to do the more difficult intellectual work of drawing conclusions based on their interpretation of current economic trends.

As they engaged in the inquiry about democracy in the Civil War, Ms. Williams’ students asked meaningful questions as well. Ms. Williams leveraged one question in particular as a way to wrap-up during the second day of the inquiry lesson:

I’m hearing some great questions. [Student] is looking at the Constitution and asked, “Where does it say that women don’t have the right to vote?” She said they

use the word “people” and women are people. That’s a great question—what did they mean by “people”? Part of why it’s useful for us to look at these documents is thinking about those kinds of things. Where does it say that women don’t have the right to vote? Where does it say that African Americans and slaves don’t have the right to vote? [pause] I’m glad you came up with that question. I know it’s coming out of the lesson with a question, but that’s a great thing to be thinking about. Where did these meanings come from?

The student’s question came straight from her reading of the excerpt from the Constitution. Had Ms. Williams not given students the time and resources to engage with the inquiry, students may not have questioned why and how various groups were excluded from suffrage over time. Ms. Williams tried to express the value of struggling with open questions to her students, creating a welcome environment for such questioning in her classroom. Many students are accustomed to ending activities with all of the answers, so ending the lesson with an open question was unfamiliar.

Similarly, on the second day of the atomic bomb inquiry, Mr. Thompson’s students enthusiastically participated in a whole-class discussion in which they reflected on President Truman’s decision. In a “Socratic debate” students sat in one large circle to discuss the benefits and drawbacks of utilizing atomic weaponry. After a few minutes at the beginning of class to allow students to brainstorm their thoughts, Mr. Thompson reminded students of the ground rules for the activity (no interrupting, raise your hand to speak, and no more than 1 minute to talk in a turn).

Then a student opened the discussion saying, “I want to start with Truman’s idea of bombs creating peace....It reminds me of Robespierre.” Soon, students in five different groups had their hands up, eager to make a point. The class continued in this way, with high levels of participation from various students in every group. Student comments showed evidence of their engagement in the source analyses the previous day, with one student exclaiming, “Look at Truman’s journal! The next day after the second bomb they were talking surrender.”

Mr. Thompson concluded the seminar with questions connecting to today: “Take a minute to think about it. This could apply to modern day. What’s your opinion on drones?” In the final minutes of class, students pondered their opinions on drones. While not enough time remained to discuss the question as a full class, groups of students began discussing their opinions as the class ended. Given more time or different emphases during the planning stage, students could have expanded upon the discussion in ways relevant to current events and policy issues, even going so far as to take informed action; however, the inquiry ended in pondering the connections to modern day.

Taking Informed Action. The version of the IDM adapted by the district (Figure 2) did not include a section focused on taking informed action. Rather, in the final section of the template, teachers described their summative performance task, which varied, with only one of three including informed action. Table 2 summarizes each participant’s summative tasks.

Table 2
Summative Performance Tasks and Taking Informed Action

| Teacher | Summative Performance Task | Communicating Conclusions | Taking Informed Action |
|----------------|---|----------------------------------|-------------------------------|
| Ms. Williams | Written argument to answer compelling question, using information from supporting questions and sources used throughout inquiry | Yes | No |
| Ms. Easterling | Creation of a class model of the business cycle using economic data; written letter to the Fed suggesting best discount rate policy using current economic data | Yes | Yes |
| Mr. Thompson | Class discussion of compelling question using evidence from supporting questions and sources to support claims | Yes | No |

While each inquiry included summative assessment in the design, the extent to which they approached the end goal of the inquiry arc—getting students to take informed action—was quite different, with only Ms. Easterling designing the task to include taking informed action. Further, due to time constraints that were more profound at the elementary level, Ms. Williams’ students did not complete the summative performance task. Time was also an issue for Ms. Easterling, and in order to finish the inquiry, she used an extra day of instruction.

Theoretical Analysis

Activity theory (Wertsch, 1998) highlights the importance of the tools teachers used as they engaged in the inquiry process. Teachers’ tool use included sources, teacher-created scaffolds, and a shared template. While teachers interacted with other tools in the environment—such as instructional time and feedback from colleagues—over the course of their planning and teaching with inquiry, the discussion here focuses on those tools whose presence was unique to the lived experience of teachers planning and implementing inquiry. Environmental tools were experienced more as they intersected with the inquiry tools—helping to enhance or constrain the utility of an inquiry tool. Our findings suggest that the tools teachers used to design and implement inquiry modules helped facilitate teachers’ instructional design and student engagement with content. As Wertsch (1998) suggested, tools can enable and constrain action, so examining how tools may have constrained teachers’ actions is important.

Sources

One of the most central sets of tools teacher participants used were sources and access to sources. Participants used technological tools to find sources, including computers, the Internet, specific websites that offered collections of sources such as the Library of

Congress, and topic specific sites, such as those on the American Civil War or the Federal Reserve Bank.

Sources and their accessibility had both affordances and constraints. Beginning with the design process, sources enabled teachers to strengthen their own content knowledge. Ms. Williams used her initial exploration of the Civil War through online sources as a way to discover more content so she could better determine what to include as she designed her inquiries. Ready access to a variety of sources through reliable search engines and archives allowed teachers to support the design of their inquiries with rigorous source work; however, by exclusively finding sources online, teachers limited their possibilities to digitized sources.

Further, the use of online repositories themselves was frustrating for teachers, yielding too many search results, resulting in teachers having difficulty deciding what to include. Ms. Easterling found it impossible to leave some of the documents she found out of the inquiry design; yet, when it came time to implement the inquiry in class, she realized all of the sources were not of equal value and only had students work with the most relevant sources. Ideally, only the most relevant sources would be included in the design of the inquiry, but teachers were overwhelmed by the sheer number of sources available on a given topic and did not know how best to limit sources. If wading through thousands of sources to find the “right” one takes a long time, almost assuredly, the frequency with which teachers design inquiries will be hampered.

Teacher-Created Scaffolds

Each participant utilized hard and soft scaffolds (Brush & Saye, 2002) with their students. They created hard scaffolds in the design process, including graphic organizers, primary source analysis tools, and edited or carefully chosen excerpts of primary source documents. Teachers used soft scaffolds when they asked questions of students during an inquiry and when they edited their implementation plans in response to students’ needs, such as when Mr. Thompson added a discussion of the first two supporting questions rather than waiting until students had analyzed the sources for all three.

Using scaffolds enabled teachers to support students in the rigorous work of social studies inquiry. As teachers designed the inquiries and planned for implementation, they built hard scaffolds they envisioned students would need, such as graphic organizers and questions to guide student interpretation of primary source documents. As Ms. Williams explained in a follow-up interview, in order to ensure students could be successful in the inquiry tasks, “the biggest thing is setting it up well” to support student learning. As they implemented the inquiries, teachers’ soft scaffolds afforded them the flexibility to provide additional support for students based on real-time student reactions, questions, and challenges. At the same time, scaffolds may have constrained the implementation of their inquiry modules or may potentially constrain future implementations. Teachers used soft scaffolds at times when perhaps students could have successfully struggled through the inquiry without the teacher’s guidance.

Teachers realized this overscaffolding in the moment but made those instructional decisions based on a number of factors, especially efficiency. As Ms. Easterling commented after helping her seminar students interpret the Constitution on a rainy Friday morning, “Now I’ve done some work for you that I probably should have let you work through yourself.” Her students most likely could have worked through the source in their groups but they almost automatically turned to the teacher when they did not feel up to the task. In her case, the scaffold was less a tool to support students and more a tool used to expedite

the lesson, as having students slog through the text took longer than expected. In this case, the soft scaffold may have actually limited students' learning and critical thinking skill development.

Hard scaffolds, too, are not without constraints. They guide students through the selected sources in a particular way. The teacher-created hard scaffolds included in the design process and implemented by each teacher participant guided students to interpret the sources through the same lens as the teacher. Whether or how students would have worked through the sources differently with less explicit instructions is unclear. Similarly, while the teachers' use of inquiry was a new strategy, when or if teachers will begin to take away the hard scaffolds and let students work through the inquiries more independently is unclear.

Design Template

Teachers used the design template as both a material and intellectual tool (Wertsch, 1998). The IDM served as a model for the template used by the school district in this study. The IDM and the inquiry arc provided a conceptual frame through which teachers could organize their inquiries. In particular, the use of compelling and supporting questions helped focus all of the inquiries, even before the group decided to use a common format.

The intellectual and material tools teachers used to guide their design helped them align the inquiries with instructional strategies embedded in the C3 Framework, with the IDM providing a useful support structure (Swan et al., 2014). The IDM is not the only way in which to structure an inquiry, however. The exclusive use of IDM may limit teachers' understanding of ways in which they can design and use inquiry.

Further, preparing an inquiry using the district's design template (or the IDM) is time-consuming. While participants valued the work and found planning and implementing the inquiries to be worthwhile, reliance on such an intense template may deter some teachers from implementing inquiry in their classrooms. Moreover, the district template, by omitting the section on taking informed action, may have failed to push teachers to include taking informed action. While students were clearly interested in and engaged with the content, the fifth instructional shift (Swan et al., 2014), taking informed action, was limited. In a subsequent district project, however, they emphasized taking informed action and included it on the template in an effort to remedy this limitation.

Further, although each teacher had developed plans for authentic summative assessment, their plans did not always match what transpired in the classrooms. For example, Mr. Thompson had initially desired for his students to transfer their knowledge of President Truman's decision to the military's use of drones today and develop an oral and written opinion on their stance. However, because of a lack of instructional time, the summative assessment did not take place as planned.

In order for her students to complete the summative assessment of creating a model of the business cycle and making a suggestion for current interest rate policy, Ms. Easterling provided students with an entire additional day of class, and time was still tight. Designing and implementing inquiries that support students in taking informed action takes careful planning, supported by training and tools that were lacking in this study and may require different allocation of instructional time.

Conclusion

Engaging students in inquiry is no easy task. As implemented in this study, inquiry lessons were time consuming, both in teacher preparation and in implementation. They were reading heavy and demanding of students. Yet, they were also engaging, challenging, and worthwhile. Over the long term, the instructional time required could prove detrimental to widespread C3 Framework-based instruction. One way to alleviate this concern would be to create inquiries of different lengths, in which various options could be completed over several weeks or in just a day using a few sources. Designed thoughtfully, all options could include an assessment that requires students to take informed action. This model would continue to maintain the integrity of the C3 Framework but would take less instructional time. These inquiries could be stored and shared alongside other inquiries that are already present on the <http://www.c3teachers.org> website. Two other ideas that could potentially reduce the planning time for teachers would be (a) to work on inquiries in professional learning teams and (b) to work on developing inquiries during professional development days.

If K-12 teachers are to dedicate the necessary time and effort to design and implement inquiry in their classrooms, they must be convinced that it is an effective practice. When technology resources first emerged in the social studies classroom and, subsequently, into social studies literature, a question emerged of whether they were “worth” it (Mason et al., 2000). Fourteen years later, many of these same scholars revised their guidelines, including recommending that “Extend learning beyond what could be done without technology,” be changed to “Use technologies to promote effective student learning” (Hicks, Lee, Berson, Bolick, & Diem, 2014, p. 436). A starting point for measuring the effectiveness of the use of inquiry in a K-12 social studies classroom might be, “Did the inquiry model promote effective student learning?”

Despite increasing amounts of resources available to support teachers’ implementation of high quality social studies instruction, the disconnection between theory and practice persists (as it did in Levstik, 2008). The C3 Framework—particularly considering the instructional shifts and implications to classroom practice—provides social studies educators with an additional model for how to understand, plan, and implement inquiry-based instruction. This study constituted an initial exploration of one school district’s efforts to support a small group of teachers in an inquiry effort. The lessons from this study can inform future research in teacher classroom practice and social studies inquiry, as well as influence the continued creation and refinement of supports for teachers and students using inquiry.

References

- Adler, S. A. (1991). The education of social studies teachers. In J. P. Shaver (Ed.), *Handbook of research on social studies teaching and learning: A project of the National Council for the Social Studies* (pp. 210–221). New York, NY: Macmillan.
- Alleman, J., & Brophy, J. (2003). History is alive: Teaching young children about changes over time. *The Social Studies, 94*(3), 107-110. [doi: 10.1080/00377990309600191](https://doi.org/10.1080/00377990309600191)
- Ball, D. L., & Cohen, D. K. (1999). Developing practice, developing practitioners: Toward a practice-based theory of professional education. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 3-32). San Francisco, CA: Jossey-Bass.

Barton, K. C., & Levstik, L. S. (2004). *Teaching history for the common good*. Mahwah, NJ: Lawrence Erlbaum Associates.

Brophy, J., Alleman, J., & Knighton, B. (2009). *Inside the social studies classroom*. New York, NY: Routledge.

Bolick, C. M., Adams, R., & Willox, L. (2010). The marginalization of elementary social studies in teacher education. *Social Studies Research and Practice, 5*(1), 1-22.

Braun, J., & Risinger, F. (Eds.). (1999). *Surfing social studies: The Internet book*. Washington, DC: National Council for the Social Studies.

Brush, T. A., & Saye, J. W. (2002). A summary of research exploring hard and soft scaffolding for teachers and students using a multimedia supported learning environment. *The Journal of Interactive Online Learning, 1*(2), 1-12.

Cohen D. J., & Rosenzweig, R. (2006). *Digital history: A guide to gathering, preserving, and presenting the past on the web*. Philadelphia, PA: University of Pennsylvania Press.

Cornbleth, C. (2002). What constrains meaningful social studies teaching? *Social Education, 66*, 186-190.

Cuban, L. (1993). *How teachers taught: Constancy and change in American classrooms 1880–1990* (2nd ed.). New York, NY: Teachers College.

Dewey, J. (1910). *How we learn*. Boston, MA: D. C. Heath.

Elmore, R. F. (2002). *Bridging the gap between standards and achievement: The imperative for professional development in education*. Washington, DC: Albert Shanker Institute.

Fitchett, P. G., & Heafner, T. L. (2010). A national perspective on the effects of high-stakes testing and standardization on elementary social studies marginalization. *Theory & Research in Social Education, 38*, 114-130. doi: [10.1080/00933104.2010.10473418](https://doi.org/10.1080/00933104.2010.10473418)

Friedman, A. M. (2006). State standards and digital primary sources: A divergence. *Contemporary Issues in Technology and Teacher Education, 6*, 313-327. Retrieved from <http://www.citejournal.org/volume-6/issue-3-06/social-studies/state-standards-and-digital-primary-sources-a-divergence/>

Friedman, A. M., & Heafner, T. L. (2007). You think for me, so I don't have to. The effect of a technology-enhanced, inquiry learning environment on student learning in 11th-grade United States History. *Contemporary Issues in Technology and Teacher Education, 7*, 199-216. Retrieved from <http://www.citejournal.org/volume-7/issue-3-07/social-studies/you-think-for-me-so-i-dont-have-to-the-effect-of-a-technology-enhanced-inquiry-learning-environment-on-student-learning-in-11th-grade-united-states-histor>

Friedman, A. M. (2008). Social studies teachers' use of the Internet to foster democratic citizenship. In P. J. VanFossen & M. J. Berson (Eds.), *The electronic republic? The impact of technology on education for citizenship* (pp. 173-195). West Lafayette, IN: Purdue University Press.

Gerwin, D., & Visone, F. (2006). The freedom to teach: Contrasting history teaching in elective and state-tested courses. *Theory and Research in Social Education, 34*, 259-282. doi: [10.1080/00933104.2006.10473307](https://doi.org/10.1080/00933104.2006.10473307)

Goodlad, J. I. (1984). *A place called school: Prospects for the future*. New York, NY: McGraw Hill.

Grant, S. G. (2003). *History lessons: Teaching, learning, and testing in U.S. high school classrooms*. Mahwah, NJ: Lawrence Erlbaum.

Grant, S. G. (2013). From inquiry arc to instructional practice. In NCSS Bulletin 113, *Social studies for the next generation: Purposes, practices, and implications of the College, Career, and Civic Life (C3) Framework for Social Studies State Standards* (pp. xvii–xx). Silver Spring, MD: NCSS.

Grant, S. G., & Gradwell, J. M. (Eds.). (2010). *Teaching history with big ideas: Cases of ambitious teachers*. Lanham, MD: Rowman & Littlefield.

Grant, S. G., Lee, J. K., & Swan, K. (2014). *Inquiry design model*. C3 Teachers. Retrieved from <http://www.c3teachers.org/IDM>

Grant, S. G., Swan, K., & Lee, J. (2012). *Lurching toward coherence: An episodic history of curriculum and standards development in social studies*. Paper presented at the meeting of the American Educational Research Association, Vancouver, Canada.

Guskey, T. R. (1986). Staff development and the process of teacher change. *Educational Researcher, 15*(5), 5-12. doi: [10.3102/0013189X015005005](https://doi.org/10.3102/0013189X015005005)

Guskey, T. R., & Huberman, M. (1995). Introduction. In T. R. Guskey & M. Huberman (Eds.), *Professional development in education: New paradigms and practices* (pp. 1-6). New York, NY: Teachers College Press.

Haas, J. D. (1977). *The era of the new social studies*. Boulder, CO: ERIC Clearinghouse for Social Studies/Social Science Education and Social Science Education Consortium.

Hawkman, A. M., Castro, A. J., Bennett, L. B., & Barrow, L. H. (2015). Where is the content? Elementary social studies in preservice field experience. *The Journal of Social Studies Research, 39*, 197-206. doi: [10.1016/j.jssr.2015.06.001](https://doi.org/10.1016/j.jssr.2015.06.001)

Heafner, T. L., Lipscomb, G. B., & Fitchett, P. G. (2014). Instructional practices of elementary social studies teachers in North and South Carolina. *Journal of Social Studies Research, 38*, 15-31. doi: [10.1016/j.jssr.2013.12.002](https://doi.org/10.1016/j.jssr.2013.12.002)

Herczog, M. M. (2013). The College, Career, and Civic Life (C3) Framework for Social Studies State Standards: A watershed moment for social studies. In NCSS Bulletin 113, *Social studies for the next generation: Purposes, practices, and implications of the College, Career, and Civic Life (C3) Framework for Social Studies State Standards* (pp. vii–x). Silver Spring, MD: National Council for the Social Studies.

Hicks, D., Lee, J., Berson, M., Bolick, C., & Diem, R. (2014). Guidelines for using technology to prepare social studies teachers. *Contemporary Issues in Technology and Teacher*

Education, 14, 433-450. Retrieved from <http://www.citejournal.org/volume-14/issue-4-14/social-studies/guidelines-for-using-technology-to-prepare-social-studies-teachers>

King, M. B., Newmann, F. M., & Carmichael, D. L. (2009). Authentic intellectual work: Common standards for teaching social studies. *Social Education, 73*(1), 43-49.

Levstik, L. S., & Barton, K. C. (2001). *Doing history: Investigating with children in elementary and middle schools*. Mahwah, NJ: Lawrence Erlbaum Associates.

Levstik, L. (2008). What happens in social studies classrooms? Research on K–12 social studies practice. In L. Levstik & C. Tyson (Eds.), *Handbook of research in social studies education* (pp. 50-64). New York, NY: Routledge.

Mason, C., Berson, M., Diem, R., Hicks, D., Lee, J., & Dralle, T. (2000). Guidelines for using technology to prepare social studies teachers. *Contemporary Issues in Technology and Teacher Education, 1*, 107-116. Retrieved from <http://www.citejournal.org/volume-1/issue-1-00/social-studies/guidelines-for-using-technology-to-prepare-social-studies-teachers-2/>

McMillan, J. H., & Schumacher, S. (2010). *Research in education: Evidence-based inquiry* (7th ed.). Upper Saddle River, NJ: Pearson.

National Archives and Record Administration. (n.d.). *Written document analysis worksheet*. Retrieved from https://www.archives.gov/files/education/lessons/worksheets/written_document_analysis_worksheet_former.pdf

National Council for the Social Studies. (2010). *National curriculum standards for social studies*. Baltimore, MD: Author.

National Council for the Social Studies. (2013). *College, career, and civic life (C3) Framework for Social studies state standards*. Washington, DC: Author.

National Governors Association Center for Best Practices & Chief Council of State School Officers. (2010). *Common core state standards*. Washington, DC: Author.

Nokes, J. D. (2014). Elementary students' roles and epistemic stances during document-based history lessons. *Theory and Research in Social Education, 42*, 375-413. doi: [10.1080/00933104.2014.937546](https://doi.org/10.1080/00933104.2014.937546)

Oliver, D. W., & Shaver, J. P. (1966). *Teaching public issues in the high school*. Boston, MA: Houghton Mifflin.

Passe, J. (2006). New challenges in elementary social studies. *The Social Studies, 97*, 189-192. doi: [10.3200/TSSS.97.5.189-192](https://doi.org/10.3200/TSSS.97.5.189-192)

Saye, J. W., & Brush, T. (2006). Comparing teachers' strategies for supporting student inquiry in a problem-based multimedia-enhanced history unit. *Theory and Research in Social Education, 34*, 183-212. doi: [10.1080/00933104.2006.10473304](https://doi.org/10.1080/00933104.2006.10473304)

Saye, J. W., Kohlmeier, J., Brush, T., Mitchell, L., & Farmer, C. (2009). Using mentoring to develop professional teaching knowledge for problem-based historical inquiry. *Theory and Research in Social Education, 37*, 6-41. doi: [10.1080/00933104.2009.10473386](https://doi.org/10.1080/00933104.2009.10473386)

Saye, J. W., & the Social Studies Inquiry Research Collaborative. (2013). Authentic pedagogy: Its presence in social studies classrooms and relationship to student performance on state-mandated tests. *Theory and Research in Social Education, 41*, 89-132. doi: [10.1080/00933104.2013.756785](https://doi.org/10.1080/00933104.2013.756785)

Saye, J. W., & the Social Studies Inquiry Research Collaborative. (2014). Achieving authentic pedagogy: Plan units, not lessons. *Social Education, 78*(1), 33-37.

Spradley, J. P. (1980). *Participant observation*. New York, NY: Holt, Rinehart, & Winston.

Swan, K., & Griffin, S. (2013). The development of the C3 Framework. In NCSS Bulletin 113, *Introducing the C3 Framework* (pp. xi–xv). Silver Spring, MD: National Council for the Social Studies.

Swan, K., Lee, J., & Grant, S. G. (2014). *C3 instructional shifts. C3 Teachers*. Retrieved from <http://c3teachers.org/c3shifts>

Thacker, E. S., Lee, J. K., & Friedman, A. M. (2016). Teaching with the C3 Framework: Surveying teachers' beliefs and practices. *Journal of Social Studies Research, 41*, 89-100. doi: [10.1016/j.jssr.2016.08.001](https://doi.org/10.1016/j.jssr.2016.08.001)

Thornton, S. J. (2005). *Teaching social studies that matters: Curriculum for active learning*. New York, NY: Teachers College Press.

VanFossen, P. J., & Shiveley, J. M. (2000). Using the Internet to create primary source teaching packets. *The Social Studies, 91*, 244-252. doi: [10.1080/00377990009602473](https://doi.org/10.1080/00377990009602473)

VanFossen, P. J., & Waterson, R. (2008). "It's just easier to do what you did before...": An update on Internet use in secondary social studies classrooms in Indiana. *Theory and Research in Social Education, 36*, 124-152. doi: [10.1080/00933104.2008.10473369](https://doi.org/10.1080/00933104.2008.10473369)

van Hover, S. (2008). The professional development of social studies teachers. In L. S. Levstik & C. A. Tyson (Eds.), *Handbook of research in social studies education* (pp. 352-372). New York, NY: Routledge.

Wertsch, J. V. (1998). *Mind as action*. New York, NY: Oxford.

Yin, R. K. (2011). *Qualitative research from start to finish*. New York, NY: Guilford.

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Appendix
Graphic Organizer From Ms. Easterling's Checks and Balances Inquiry

Complete the information in the chart.

Name (s) _____

| Reading | How Executive is limited? | Can dictatorship be prevented? |
|--|---------------------------|--------------------------------|
| A. Federalist #68 (the Electoral College) | | |
| B. George Washington's Farewell Address | | |
| C. Marbury v Madison overview | | |
| D. Letter, Madison to Adams | | |
| E. Ex Parte Merryman (suspension of habeas corpus) | | |
| F. War Powers Resolution | | |

Final conclusion: Can the structure of the US government prevent a dictatorship? _____

Proof (at least 3 reasons)

- 1.
- 2.
- 3.