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QUESTIONING AS A CIVIC ACT: AN EXAMINATION OF HOW SOCIAL
STUDIES TEACHERS DEFINE, DEVELOP, AND CULTIVATE
QUESTIONS FOR INQUIRY

DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy in the
College of Education
at the University of Kentucky

By

Rebecca Glasgow Williams Mueller

Lexington, KY

Director: Dr. Kathy Swan, Professor of Social Studies Education

Lexington, KY

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ABSTRACT OF DISSERTATION

QUESTIONING AS A CIVIC ACT: AN EXAMINATION OF HOW SOCIAL STUDIES TEACHERS DEFINE, DEVELOP, AND CULTIVATE QUESTIONS FOR INQUIRY

The present qualitative study used socio-cultural theory (Wertsch, 1998), pedagogical content knowledge (Shulman, 1987), and reflective practice (Schön, 1983) to examine how social studies teachers define and develop inquiry questions. Existing literature reflects a long tradition of equating inquiry with high quality social studies instruction (e.g., Barton & Levstik, 2004; Bruner, 1977; Griffin, 1942) and arguing that successful inquiry hinges on an engaging question (Barton & Levstik, 2004; Grant, 2003), but relatively little attention has been paid to how teachers characterize and develop questions for use with inquiry (Grant & Gradwell, 2010). The main research question was: How do high school social studies teachers understand the role questions play in inquiry? Supporting questions included: (1) How do teachers define inquiry? (2) What traits do teachers attribute to questions used for inquiry? (3) How do standards impact teachers' understandings of questions used for inquiry? (4) How do teachers approach developing questions used for inquiry? Data included transcripts from semi-structured interviews, field notes from verbal report exercises, and documents from teacher completed tasks. Results indicated that teachers identified questioning as an important inquiry skill and civic practice, identified student relevance and complexity as key attributes of inquiry questions, and approached the development of inquiry questions in a deliberate and reflective way. Additionally, results indicated that a proposed state social studies standards document provided teachers with useful terminology and that experience developing and implementing inquiry questions positively influenced teachers' comfort with inquiry. This study sheds light on the potential of cultural tools to influence teachers' curricular and instructional decisions. Further consideration of how teachers develop and implement inquiry questions may offer insight into the presence and success of questions and inquiry in social studies classrooms.

KEYWORDS: Inquiry, Questions, Secondary Social Studies, Civics, State Standards

Rebecca Glasgow Williams Mueller
Student's Signature

April 19, 2016
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QUESTIONING AS A CIVIC ACT: AN EXAMINATION OF HOW SOCIAL
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For Chad

I will forever be grateful you said “yes” to my questions.

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TABLE OF CONTENTS

Acknowledgments.....	iii
List of Tables	viii
List of Figures.....	ix
Chapter One: Introduction to the Study	ix
Introduction.....	1
Purpose of the Study.....	6
Research Questions.....	7
Significance of the Study.....	7
Chapter Two: Literature Review	9
Inquiry.....	10
Inquiry Skills as Civic Skills	12
Questioning.....	13
Attention to evidence.....	13
Agency in service of the common good	14
Inquiry and Citizenship Education.....	15
The Teacher as the Facilitator of Inquiry.....	17
Intellectualizing students' questions.....	18
Modeling inquisitive behaviors.....	19
Providing space and scaffolds.....	20
The Challenges of Inquiry	21
Summary	22
Questions.....	23
How Teachers Use Questions	23
A method of control.....	24
A guide for discussion	25
An approach to ambitious teaching.....	27
Questions as the Foundation for Inquiry.....	28
Teacher Development of Questions for Inquiry	29
Theoretical Framework.....	33
Sociocultural Theory.....	33
Pedagogical Content Knowledge.....	34
Reflective Practice	35
Summary	36
Chapter Three: Methodology.....	37
Rationale	38
Research Design.....	40
Selection of Participants	41
Procedures.....	45
Interview 1: Putting the experience in context	47

Interview 2: Details of the lived experience	48
Question development task	49
Interview 3: Reflecting on the meaning of the experience	50
Question evaluation task	51
Methods of Data Analysis	51
Validity	52
Ethical Issues	53
Limitations	54
Conclusion	55
Chapter Four: Findings	56
Questions Considered Important to Inquiry and Citizenship	57
Defining Inquiry	57
Questions and Inquiry	63
Questions and Citizenship	64
Influence of KASSS	65
Clarity	67
Terminology	67
Summary	69
Relevance and Complexity as Key Question Attributes	70
Student Relevance	70
Influence of KASSS	72
Complexity	73
Influence of KASSS	74
Both Attributes Were Essential	76
The Subjective Nature of Compelling Questions	79
Summary	82
Question Attributes Influenced Question Development	82
Beginning With Student Relevance	82
Beginning With Complexity	84
Question Development Was a Deliberate Process	86
Influence of KASSS	88
Summary	89
Experience Influenced Comfort With Questions	89
Constraints on Inquiry	90
Constraints on Questions	91
Students naturally question	92
Students' questioning is suppressed	92
Students must be taught to question	93
Learning by Doing	95
Quentin: "Makes me feel a little more comfortable letting go"	96
Agatha: "It does require some thought and some strategy"	98
Molly: "I can't go back and not teach that way"	100
Desired KASSS Supports	102
Summary	105
Chapter Summary	106

Chapter Five: Discussion and Implications	107
Will These Tools Make Inquiry More Likely?	109
Inquiry Reinforced by Standards	110
Inquiry Clarified Yet Still Muddled.....	113
Will These Tools Influence Curricular Choices?.....	116
Contradictions of Purpose.....	117
Level 1 contradictions.....	119
Level 2 contradictions.....	120
The impact of contradictions	120
Contradictions as innovation.....	122
The Civic Purpose of Compelling Questions.....	125
Will These Tools Increase Students' Agency?.....	127
Students as Partners	128
Questions and Action.....	132
Implications.....	133
Implications for the Kentucky Department of Education.....	134
Implications for Teacher Educators.....	138
Suggestions for Future Research	140
Conclusion	141
Appendices	
Appendix A: Questionnaire	142
Appendix B: Interview 1 Protocol	144
Appendix C: Interview 2 Protocol	146
Appendix D: Question Development Task Template.....	148
Appendix E: Question Development Task: Calvin.....	149
Appendix F: Interview 3 Protocol.....	150
Appendix G: Question Evaluation Task: Molly	152
References.....	153
Vita.....	171

LIST OF TABLES

Table 2.1, Selected Definitions of Inquiry	11
Table 2.2, Approaches to Citizenship Education.....	16
Table 2.3, Selected Descriptions of Inquiry Questions.....	31
Table 3.1, Selected Items From Teacher Questionnaire	43
Table 3.2, Participants.....	44
Table 3.3, Three-Interview Sequence	46
Table 3.4, Verbal Report 1 Prompts: Question Quotes	47
Table 3.5, Verbal Report 2 Prompts: Selected Standards From KASSS.....	49
Table 4.1, Definitions of Inquiry-Based Instruction	58
Table 4.2, Examples of Inquiry-Based Instruction	60
Table 4.3, Question Development Task.....	71
Table 4.4, Question Comparison	78
Table 4.5, Question Evaluation Task	80
Table 4.6, Quentin Excerpts: Questions and Content Knowledge.....	93
Table 5.1, Selected Compelling Questions From Comparative Studies Course.....	136

LIST OF FIGURES

Figure 3.1, Practices of the Inquiry Cycle	51
Figure 5.1, Model of mediated action.....	108
Figure 5.2, Inquiry as mediated action.....	109
Figure 5.3, Curricular choices as mediated action.....	116
Figure 5.4, Model of second-generation activity theory.....	119
Figure 5.5, Opportunities for student agency as mediated action.....	127

Chapter One

Introduction to the Study

“Questions are the engines of intellect, the cerebral machines which convert energy to motion and curiosity to controlled inquiry” (Fischer, 1970, p. 3).

Introduction

John F. Kennedy (1961) challenged Americans to “ask what you can do for your country” (p. 3). Dr. Martin Luther King Jr. (1963/1964) maintained that “life’s most persistent and urgent question is ‘What are you doing for others?’” (p. 202). These historic leaders believed in the civic power of questions. Scholars have also emphasized the importance of questions to learning, characterizing questions as “engines of intellect” (Fischer, 1970, p. 3) and “our most important intellectual tool” (Postman, 1979, p. 454). Central to each of these sentiments is the assertion that questions are fundamental to the inquiries we undertake in life. They can propel us forward as we search for insight into the state of society, solutions to vexing problems, and new ways of seeing the world.

Berger (2014) identified questioning as a “key survival skill for the new marketplace” (p. 49). In a constantly changing world, questioners thrive because they are less likely to get caught up in how things are and more likely to be inspired by how things could be. Berger’s investigation of various innovations that resulted from creative questioning (e.g., Airbnb, Pandora Radio, Flex-Foot prosthetics) emphasized the powerful impact questioning has on business and the marketplace. So, too, can good things happen when citizens question. Sometimes these questions rectify injustice: Lily Ledbetter’s questions about why she earned less than her male counterparts paved the way for legislation that makes it easier to challenge pay discrimination (NWLC, 2013). Sometimes these questions expose corruption: employees’ questions about wait time

reports uncovered serious failings within the Veterans Administration health system (Zezima, 2014). Sometimes these questions raise awareness: land owners' questions about the safety of the proposed Bluegrass Pipeline spurred a number of public forums (Kocher, 2014). Sometimes these questions build partnerships: residents' questions about the persistence of homelessness in Lexington, Kentucky led to the creation of the Mayor's Commission on Homelessness, composed of representatives from government, business, education, community services, and the faith community (Gray, 2012). In each case, questioning was a civic act, challenging the status quo and supporting citizens' growth as agents of change within their own communities.

But questioning should not be a hallmark of adulthood. Students are citizens as well, and making room for questions in a classroom is an important step toward building students' senses of agency, allowing students to see themselves as actors within the classroom and beyond. Unfortunately, despite the ability of questions to facilitate powerful academic and civic experiences, teachers are often hesitant to open their classrooms to students' questions. The transmission model of schooling in tandem with high-stakes assessments leads many teachers to view students' questions as unwelcome distractions (Aguilar, Mortimer, & Scott, 2010; Chin & Osborne, 2008; Dillon, 1988b; Rop, 2002). The reality of testing pressures may exacerbate the discomfort that many teachers have with the shift of control that comes with students' questions (Aguilar, Mortimer, & Scott, 2010; Nystrand, Gamoran, Kachur, & Prendergast, 1997). In addition, many teachers do not have the confidence necessary to encourage students' questions, whether because they are uncomfortable with their own knowledge base, are fearful of potential controversy, or are unsure of their ability to successfully manage a

classroom without exerting substantial authority (Chin & Brown, 2002; Chin & Osborne, 2008; Dull & Murrow, 2008; Watts, Alsop, Gould, & Walsh, 1997).

Improving teachers' attitudes toward students' questions is an important step in fostering this practice, but student confidence also factors into the presence of questions in the classroom. Even when prompted, students are often hesitant to ask questions in class (Chin & Osborne, 2008; Good, Slavings, Harel, & Emerson, 1987; Pedrosa de Jesus, Almeida, & Watts, 2004; Watts, Alsop, Gould, & Walsh, 1997). Having experienced few opportunities in school to pursue their own questions, students may doubt the quality of their questions and be uncomfortable opening themselves up to potential judgment from their teacher and peers (Chin & Brown, 2008; Good, Slavings, Harel, & Emerson, 1987). A sense of vulnerability often accompanies questions; therefore, "trust is a necessary ingredient for open questions" (Watts, Alsop, Gould, & Walsh, 1997, p. 1028). Teachers must trust students to ask productive questions, and reciprocally, students must trust teachers to respect their questions (Grant, 2013).

Beyond attitudinal elements, building a questioning-culture in classrooms also requires training. As with many academic skills, students may innately possess the basic tools, but without thoughtful guidance from a teacher, those tools are likely to remain under-developed and under-used (Barton & Levstik, 2004; Swan, Lee, & Grant, 2014). Nonetheless, when it comes to preparing students to effectively participate in inquiry, questioning is often left behind. Berger (2014) noted that educators "see questioning as something so fundamental and instinctive that we don't need to think about it" (p. 4). The belief that questioning skills need not be addressed may be compounded by educators' lack of understanding regarding how to teach questioning (Berger, 2014).

With the absence of explicit questioning instruction, teacher modeling becomes an even more powerful force on students' development as questioners (Dewey, 1933). Students who witness their teacher's curiosity embodied through the examination of authentic, open-ended questions gain a drastically different conception of the possibility and purpose of questioning than students who are bombarded by recall questions that force a singular view of the world (Nystrand, Gamoran, Kachur, & Prendergast, 1997). As curricular-instructional gatekeepers (Thornton, 2005), teachers' beliefs about questions and the questioning-culture they create matters. Thornton (2005) argued that teachers' purposes influence "the day-to-day decisions concerning both the subject matter and the experiences to which pupils have access and the nature of that subject matter and those experiences" (p. 1). Consequently, an initial step in understanding the place and potential of students' questions is a closer examination of how *teachers* think about and develop questions as well as the obstacles teachers face in cultivating curricular spaces for students' questions.

Some teachers see content-heavy standards and high-stakes assessment as barriers not only to the presence of students' questions but to inquiry more generally. As Berger (2004) explained,

Under pressure to preserve test scores, [teachers have] tried to instill businesslike efficiency into a process designed to impart as much information as possible to students, within a given time frame – leaving little or no time for student inquiry. When teachers are under this kind of pressure to follow mandated guidelines, it can cause them to be less receptive to students' ideas or inquiries. (p. 47)

Although identified as one of many influential factors, studies reveal that state-mandated curricula and assessments impact teachers' choices around content, instruction, and assessment, often in negative ways (e.g., Au, 2009; Grant, 2007; Vogler, 2006). What

happens when teachers are presented with curriculum standards that focus student outcomes around questions and inquiry? This is the current context in Kentucky. Prompted by Senate Bill 1 (2009), Kentucky engaged in a revision of social studies standards as one element of broader educational reform designed to elevate college and career readiness among Kentucky students (KDE, 2009). The Kentucky Department of Education (KDE) has proposed the Kentucky Academic Standards for Social Studies (KASSS) that specifically incorporates questioning into the framework for student outcomes (KDE, 2015b).

Identified as a document that was integral to the development of Kentucky's proposed social studies standards, it is easy to see the influence of the *College, Career, and Civic Life (C3) Framework for Social Studies State Standards* (NCSS, 2013) on KASSS. The *C3 Framework* includes an Inquiry Arc, which is composed of four dimensions: developing questions and planning inquiries, applying disciplinary concepts and tools, evaluating sources and using evidence, and communicating conclusions and taking informed action. The KASSS grade-level disciplinary standards are framed by an Inquiry Cycle, which includes ten inquiry practices grouped into categories of questioning, evaluating sources, communicating, and taking action. KASSS includes two types of questions also identified in the *C3 Framework*: compelling and supporting. Incorporating language similar to the *C3 Framework*, compelling questions are described as ones that “promote inquiry around key disciplinary concepts and embedded enduring issues” and supporting questions as ones that “identify facts, concepts, and research interpretations associated with a key disciplinary concept” (KDE, 2015b, p. 6). Although other states' social studies standards incorporate higher-order cognitive demands (see

DeWitt et al., 2013), KASSS is unusual in its suggestion of an ambitious pedagogical model and focus on disciplinary habits of mind (e.g., economic decision making, historical thinking) over explicit factual content. Nonetheless, if not reinforced by curricular and assessment models, these seemingly innovative standards may fail to induce innovative instruction.

As with other standards documents, Kentucky social studies teachers will ultimately determine the extent to which this set of standards, however innovative, changes their instructional practices (Thornton, 2005). Kentucky's efforts to bring questioning to the forefront of social studies instruction is encouraging, but how Kentucky teachers understand and choose to respond to these standards will determine the degree to which a curriculum more consciously built around questions will emerge. The revised standards may provide the opportunity for questioning to become an integral part of social studies instruction; however, since teachers' curricular-instructional gatekeeping shapes the overall questioning-culture of a classroom, these possibilities will only be realized if teachers see that their instructional purposes align with KDE's vision for questioning.

Purpose of the Study

The study took advantage of the development of Kentucky's new social studies standards as the context in which to explore teachers' views of questions for use with inquiry. Because of the important space that questioning is afforded in the new standards document, this is an opportune time to investigate teachers' understanding of questions, how teachers approach questions, and the potential, if any, for a standards document that incorporates questioning to influence teachers' practices. The study examined how six

high school civics teachers defined inquiry questions and the processes those teachers employed when developing inquiry questions. The main assumption in this study was that a teacher's understanding of and approach to questions will influence students' questioning opportunities (Dillon, 1988b; Dull & Morrow, 2008; Nystrand, Gamoran, Kachur, & Prendergast, 1997). Two additional assumptions were that productive inquiry necessitates certain types of questions (Aguiar, Mortimer, & Scott, 2010; Chin & Osborne, 2008; Swan, Lee, & Grant, 2014) and that teachers must be attuned to their own questioning beliefs and practices before they can effectively teach questioning to students (Oliveira, 2010; Wolf, 1987).

Research Questions

The main research question for the present study was: How do high school social studies teachers understand the role questions play in inquiry? Supporting questions included:

- (1) How do teachers define inquiry?
- (2) What traits do teachers attribute to questions used for inquiry?
- (3) How do standards impact teachers' understanding of questions used for inquiry?
- (4) How do teachers approach developing questions used for inquiry?

Significance of the Study

Although a number of studies have examined the importance of effective teacher questioning during discussion (e.g., Dillon, 1988a; Dull & Morrow, 2008; Oliveira, 2010) and recitation (e.g., Albergaria-Almeida, 2010; Gall, 1984; Nystrand, Gamoran, Kachur, & Prendergast, 1997), little attention has been paid to teachers' understanding and use of

questions within the context of inquiry (Grant & Gradwell, 2010). Considering the emphasis placed on questioning within documents such as the *C3 Framework* and KASSS, we may benefit from an empirical understanding of how teachers conceptualize questions as part of their instruction. The present study is unique in its focus on a particular state's efforts to integrate questioning into social studies instruction, in its examination of questions as a contributing factor to the presence of inquiry in social studies classrooms, and in its use of verbal protocols as a method to better understand the processes teachers employ when developing questions. Such qualitative data can improve our understanding of how teachers define and develop questions for inquiry and shed light on potential barriers to shifting social studies instruction in a question-oriented direction.

Chapter Two

Literature Review

Citizenship has long been considered the overarching purpose of schooling in general and social studies more specifically (Carnegie Center of New York & CIRCLE, 2003; Engle & Ochoa, 1988). Despite varied conceptions of citizenship education, the goal of supporting informed and engaged citizens remains constant (Barr, Barth, & Shermis, 1977). Most recently, the National Council for the Social Studies re-identified the primary purpose of social studies as “help[ing] young people develop the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world” (NCSS, 1994, p. 3). There is a long tradition of educators who identify inquiry as the most effective way to assist students in building the “basic intellectual skills” (Engle & Ochoa, 1988, p. 24) required of democratic citizens (e.g. Barton & Levstik, 2004; Bruner, 1977; Engle & Ochoa, 1988; Griffin, 1942). Although students’ abilities to find relevant information, make reasoned judgments, and organize others around a viable solution are commonly identified as civic skills (e.g., Engle & Ochoa, 1988; NCSS, 2013), one can also argue that questioning is a foundational skill required for democratic participation (Croddy & Levine, 2014). After all, questions support the “open-ended (and open-minded) discussion and reflection necessary for understanding our fellow citizens and for taking action toward a mutually satisfying future” (Barton & Levstik, 2004, p. 34).

In this chapter, I review the relevant literature as it pertains to the study of teacher questions for the purpose of student inquiry. I begin by addressing the definition of inquiry and discussing the literature that highlights the intersection of inquiry skills and

civic skills. Next, I review approaches to citizenship education that incorporate inquiry before examining the important role teachers play in facilitating inquiry. I then shift my focus to questions and discuss the literature on the different ways teachers use questions in the classroom and the important role questions play in facilitating inquiry. This section concludes with an argument for why teachers' understanding and development of questions for the purpose of student inquiry deserves further study. Finally, I discuss the theoretical framework for the present study, describing each theory and how it contributes to this study.

Inquiry

Inquiry is a common term among educators, but it does not necessarily carry a common definition (Barton & Levstik, 2004; Beyer, 1971). Dewey (1933) described inquiry as the “active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends” (p. 9). In subsequent decades, educators have offered more particularized definitions. For example, King, Newmann, and Carmichael (2009) defined inquiry as when “learners (1) use a prior knowledge base, (2) strive for in-depth understanding rather than superficial awareness, and (3) develop and express their ideas through elaborated communication” (p. 44). Banchi and Bell (2008) presented an “inquiry continuum” that includes the four levels of confirmation, structured, guided, and open (p. 26). Aulls & Shore (2008) identified 11 different approaches to inquiry instruction, often tied to particular disciplines, including project-based learning, experimentation, and research. Descriptions of inquiry in the social studies literature also present slightly different understandings of this concept (See Table 2.1).

Table 2.1

Selected Definitions of Inquiry

Source	Definition
Barr, Barth, & Shermis (1977)	“The method for reflective inquiry is the process of making decisions and encouraging students to analyze what is involved in a decision....[and] involves all of the techniques and strategies that lend themselves to improving the student’s ability to ask important questions and find satisfactory answers” (p. 65).
Beyer (1971)	“Inquiry is a quest for meaning that requires one to perform certain intellectual operations in order to make experience understandable” (p. 14).
C3 Framework (2013)	“[The Inquiry Arc is] a set of interlocking and mutually supportive ideas that frame the ways students learn social studies content...[in which] students develop questions and plan inquiries; apply disciplinary concepts and tools; evaluate and use evidence; and communicate conclusions and take informed action” (p. 6).
Grant & VanSledright (2001)	“[Inquiry is] the passion for pulling ideas apart and putting them back together” (p. 196).
Levstik & Barton (2015)	“The process of asking meaningful questions, finding information, drawing conclusions, and reflecting on possible solutions is known as inquiry” (p. 13).

Despite myriad definitions, researchers have noted that common themes emerge, such as “asking new and important questions, collecting data that will help answer them, choosing criteria for the acceptability of evidence, selecting the desired degree of generalizability, and communicating the results to a critical community and the greater public” (Oppong-Nuako, Shore, Saunders-Stewart, & Gyles, 2015, p. 201).

Although understood and practiced in various ways, inquiry is typically considered exceptional teaching practice because it aligns with modern learning theories that emphasize that learning is most effective when students construct their own

knowledge, meaning opportunities for students to engage with resources and experiences that allow students to come to their own understandings (Bransford, Brown, & Cocking, 1994; Dewey, 1900/1990). Inquiry-based classrooms hopefully foster students' meaning making by providing time for students to think about complex, substantive issues in a supported and supportive environment (Saye & Brush, 2007). Although a favored approach across disciplines (Brophy, 2001; Saunders-Stewart, Gyles, & Shore, 2012), inquiry is especially valuable in social studies because it is a potential pedagogical avenue for introducing students to the skills needed for citizenship.

Inquiry Skills as Civic Skills

In its broadest sense, while conducting inquiry in a social studies classroom students move through the steps of questioning, gathering and evaluating information, and drawing evidence-based conclusions (Aulls & Shore, 2008; Brophy, 2001).

Although the literature reflects diversity in how inquiries originate and unfold, often present is the argument that the skills students employ during classroom-based inquiry are related to the skills required of productive citizens in a democracy. For example, Engle & Ochoa (1988) argued, “[if classrooms] do not provide every opportunity for students to think for themselves and to make decisions on their own, then there is little hope for developing a reasoned commitment to democratic ideals among the citizenry at large” (p. 29). Although empirical evidence supporting the relationship between inquiry and students' development of civic skills is limited, the linkage between the two appears logical. This section explores elements commonly associated with inquiry and their connections to civic behaviors. The section closes with an argument that acting upon

one's conclusions is a vital step to developing students' intellectual and civic dispositions.

Questioning. Dewey (1933) asserted that inquiry begins with "a state of doubt, hesitation, perplexity, mental difficulty" (p. 12). Some claim this perplexity must directly reflect students' own concerns (e.g., Barton & Levstik, 2004), and other traditions describe it as relating to structures of social studies disciplines (e.g., Bruner, 1977). Nonetheless, the central place of questioning to inquiry endures because of its role in both initiating and sustaining inquiry (Swan, Lee, & Grant, 2014). Questioning is also vital to democracy, as citizens who are unwilling to critically question societal issues and problems may be less likely to engage in society (Engle & Ochoa, 1988). Inquiry can foster students' curiosity, thereby producing students who are more confident in their own questions and more comfortable with others' questions (Barton & Levstik, 2004; Grant, 2013; Oliveira, 2010). These students, in turn, may become more curious citizens, capable of the "independent thinking and responsible social criticism" (Engle & Ochoa, 1988, p. 7) needed to move democratic societies forward.

Attention to evidence. Dewey (1933) argued that perplexity drives students to begin "searching, hunting, inquiring to find material that will resolve the doubt, settle and dispose of the perplexity" (p. 12). In other words, to answer their questions, students must gather information. As students proceed through an inquiry, they are challenged to find and evaluate sources in order to develop evidence-based claims (King, Newmann, & Carmichael, 2009; NCSS, 2013; Saye & Brush, 2004). Because the personal knowledge that students bring to the classroom is often naïve or incomplete (Barton & Levstik, 2004; NCSS, 2013, p. 82-91), students working through an inquiry may learn "how to fill in the

gaps in their knowledge by learning how to work with sources and evidence in order to develop explanations and to make persuasive arguments in support of their conclusions” (Grant, 2013, p. 324). Citizens should also be adept at both evaluating the reliability of the information they encounter and making evidence-based arguments (Barton & Levstik, 2004; Engle & Ochoa, 1988). Inquiry’s emphasis on strengthening students’ critical reasoning and reading skills may prepare students to transfer these same skills when they encounter evidence outside the classroom, whether through traditional sources or non-traditional sources, such as their Twitter feed or their favorite “fake news” program (Shister, 2007). Equipped with the skills to more thoughtfully investigate complex social issues, students may be better prepared to engage in the informed decision making required of citizens in a democracy (Barton & Levstik, 2004; Engle & Ochoa, 1988).

Agency in service of the common good. Although descriptions of inquiry often conclude with the formulation of an evidence-based conclusion, some claim that inquiry should ideally culminate in the application of students’ learning into an authentic environment (King, Newmann, & Carmichael, 2009; NCSS, 2013), thereby enhancing the connection between inquiry and the critical civic skill of active participation in civic society. Inquiry is a path by which students may move beyond the accumulation of knowledge to the practicing of civic behaviors. Through inquiry, “students do civics and behave as citizens by engaging in a cycle of research, action, and reflection about problems they care about personally while learning about deeper principles of effective civic and especially political action” (Levinson, 2012, p. 224). For example, the Mikva Challenge developed an “Issues to Action” curriculum that implements a six-step process of examining the community, choosing an issue, researching the issue and setting a goal,

analyzing power, developing strategies, and taking action to affect policy (Brady, 2015). By investigating issues that are of personal value to the students, practicing civic behaviors may improve students' senses of agency, allowing students to learn that their impacts can be felt in the classroom and in the community (Kahne & Middaugh, 2010; Levinson, 2012). When students do this work collaboratively, their "shared inquiry results, therefore, in shared understanding" (Parker & Hess, 2001, p. 275), leading students to consider the importance of directing their civic skills toward the betterment of society. Ideally, classroom-based inquiry allows students to "determine for themselves what the common good is and their roles in bringing it about" (Barton & Levstik, 2004, p. 39-40).

Mirroring the language of the *College, Career, and Civic Life (C3) Framework for State Social Studies Standards* (NCSS, 2013), Croddy and Levine (2014) noted that the elements of inquiry provide a civic learning arc as well. By "anticipat[ing] the concepts and tools necessary for informed, skilled, and engaged participation in civic life" (p. 282), inquiry potentially creates learning environments that are not only better reflective of modern learning theories but also more aligned with the civic purposes of social studies.

Inquiry and Citizenship Education

Citing disappointing levels of civic knowledge and participation among young people, groups such as the Carnegie Corporation of New York and CIRCLE have called for renewed attention to citizenship education. *The Civic Mission of Schools* (2003) report emphasized the unique position schools play in citizenship preparation, as schools not only reach the vast majority of young people but also serve as "communities in which

young people learn to interact, argue, and work together with others” that are “best equipped to address the cognitive aspects of good citizenship” (p. 5). The report did not endorse a particular approach to civic education but identified several general principles they ascribe to high-quality civic education: (1) “deliberate, intentional focus on civic outcomes,” (2) “explicit advocacy of civic and political engagement,” (3) “active learning opportunities that offer students the chance to engage in discussion of issues and take part in actions that can help put a ‘real life’ perspective on what is learned in class,” and (4) “an emphasis on the ideas and principles that are essential to constitutional democracy” (p. 20). The report also noted that these approaches are most successful when incorporated within formal instruction of government, history, law, and democracy.

Other educators have echoed the third principle (e.g., Kahne & Middaugh, 2010; Levinson, 2012), emphasizing that “students should learn more than how their government works; they should learn how to be citizens – to engage in the behaviors that characterize active participation in democratic societies” (Barton & Levstik, 2004, p. 30). Therefore, the skills associated with inquiry are often linked to the skills associated with citizenship. As a result, although inquiry is not always specifically cited as an instructional strategy, many approaches to citizenship education incorporate the traits of inquiry. Table 2.2 summarizes a selection of approaches to citizenship education.

Table 2.2

Approaches to Citizenship Education

Approach	Key Elements	Connection to Inquiry
Action Civics (Levinson, 2012, 2014; Rubin & Hayes, 2010)	focuses on issues of interest to students, policy-oriented, students reflect on achievements and learning	students conduct research and take informed action to improve their communities

Table 2.2 (continued)

Approach	Key Elements	Connection to Inquiry
Public Issues Model (Newmann & Oliver, 1970; Oliver & Shaver, 1966)	centers on values conflicts, examines general values within concrete situations, emphasizes rational discourse	units situated around questions, emphasizes student research and evidence-based conclusions
Service Learning (Ohn & Wade, 2009; Wade, 2007, 2008)	incorporates curriculum integration, structured reflection, student ownership, and community celebration	CiviConnections model specifically incorporates historical inquiry to establish a context for service
Structured Academic Controversy (Johnson & Johnson, 1988; Parker & Hess, 2001)	collaborative, students must be able to explain both sides of an issue before reaching a group consensus	students work closely with sources, emphasizes evidence-based decision- making

Proponents of inquiry and citizenship education are often striving for the same goal – capable, confident, action-oriented learners. For this reason, inquiry within the context of citizenship education may create a reinforcing relationship. Inquiry can support an instructional environment in which civic identities and behaviors can develop, and citizenship education often provides a relevant and personal context capable of sustaining inquiry. Guided by the actions of a skilled teacher, this relationship can be particularly powerful (Grant, 2013).

The Teacher as the Facilitator of Inquiry

Students may be naturally curious, but scholars suggest that few possess the skills necessary to independently pursue and practice inquiry (e.g., Beyer, 1971). As Levstik and Barton (2015) argued, “simply assigning tasks won’t guarantee meaningful results. Most students need direct help to make the most of their experiences, and teachers’ most important responsibility is to provide them with the structure they need to learn” (p. 18).

This is a challenging task, for “there is a vast amount of skilled activity required of a ‘teacher’ to get a learner to discover on his own” (Bruner, 1977, p. xiv). This section examines three important ways in which teachers support students through inquiry, including harnessing students’ interest in productive directions, modeling inquisitive behaviors, and scaffolding students’ experiences.

Intellectualizing students’ questions. Disciplinary inquiry requires a question of significance, but if too removed from the student, such questions lose their authenticity. Skillful teachers are capable of nudging students’ interests in more viable, scholarly directions (Barton & Levstik, 2004; Brooks & Brooks, 1993; Dewey, 1900/1990, 1902/1990). Dewey (1933) referred to this process as the “intellectualization” of students’ curiosities (p. 107). By selecting stimuli that will spark students’ instincts, teachers can induce “a vital and personal experiencing” (Dewey, 1902/1990, p. 201) within students that also meets the curricular demands of modern schools.

Beyond bridging students’ interests with instructional goals so that “curriculum content is ‘discovered’” (Brown & Campione, 1994, p. 237), scholars suggest that teachers must also work to build students’ questioning capacity, which includes teaching students how to ask questions that are suitable for inquiry (Aguiar, Mortimer, & Scott, 2010; Barton & Levstik, 2004). Although there is no consensus as to what constitutes an inquiry question, various researchers have proposed certain criteria. Chin and Brown (2002) identified “wonderment questions” (p. 521) as capable of initiating and sustaining an inquiry because they required the “integration of complex and divergent information from various sources, and reflected curiosity, puzzlement, scepticism or speculation” (p. 531) and facilitated “conceptual talk that pertain[ed] to the core concepts of an activity”

(p. 540). Applied within the context of a science inquiry, the authors concluded that wonderment questions could take the form of comprehension, prediction, anomaly detection, application, or strategy questions (p. 531). Barton and Levstik (2004) claimed that inquiries should be situated around questions of “enduring significance” (p. 198), either to contemporary culture or the disciplines. As an example, the authors identified “Why was the United States fighting in Vietnam, and why were some people opposed to it?” (p. 199-200) as a question with both disciplinary heft and personal appeal. Assuming that certain questions are better able to support extended investigations, teachers who assist students in strengthening their questions are also increasing the likelihood that students’ inquiries will be productive.

Modeling inquisitive behaviors. Scholars suggest that inquiry is more likely to take root in classrooms in which curiosity is welcomed and positively reinforced. An important step in developing this culture is the teacher’s modeling of curiosity and inquisitiveness in hopes of sparking those same behaviors in students (Brooks & Brooks, 1993). As students move through the inquiry, teachers should also model reasoning and problem solving strategies (Saye & Brush, 2004). Teachers who choose to situate their curriculum around the investigation of questions may impress upon students the potential traits of inquiry questions, the skills associated with inquiry, and the power of inquiry to make students agents of their own learning. This modeling, thereby, assists in “creat[ing] educational environments that permit students to assume the responsibility that is rightfully and naturally theirs” (Brooks & Brooks, 1993, p. 49). In essence, by showing students what inquiry looks like, teachers both invite and prepare students to pursue their own inquiries.

Providing space and scaffolds. Beyond creating a learning environment that values questioning and inquiry, researchers have found that students benefit when they are supported throughout the inquiry process. Inquiry is demanding work, and educators cannot expect students, of any age, to traverse this challenging path alone. An initial support is the provision of space in which students can experiment with the skills of inquiry, thereby creating “opportunities [for students] to ask questions, pursue answers to those questions under the tutelage of expert teachers who can show them how to discipline their thinking processes, and take part in opportunities to communicate and act on their understandings” (NCSS, 2013, p. 83).

As students fumble through these early experiences, teachers should provide scaffolds (Levstik & Barton, 2015; Saye & Brush, 2004). Scaffolds include collaboration with experts or within communities of learners (Brown & Campione 1994), so that students can “do with assistance today [what] she will be able to do by herself tomorrow” (Vygotsky, 1978, p. 87). Teachers may provide hard scaffolds, which “are static supports that can be anticipated and planned in advance based on typical student difficulties with a task” (Saye & Brush, 2002, p. 81). These may include a structured question-development process such as the Question Formulation Technique (Rothstein & Santana, 2013), source evaluation tools (e.g, Breakstone, Smith, & Wineburg, 2013; Hicks, Doolittle, & Ewing, 2004), and guidelines for communicating conclusions (e.g., Monte-Sano, 2011; Swan & Hofer, 2014). For example, the Question Formulation Technique (Rothstein & Santana, 2013) outlines a particular process used to assist students in producing, improving, and prioritizing their questions. This process includes the teacher’s creation of a QFocus to prompt question development, a list of rules to guide question development, and an

exercise in changing closed-ended questions to open-ended questions and vice versa. Just as important, teachers must provide soft scaffolds, which are “dynamic and situational” and require teachers to “diagnose the understanding of learners and provide timely support based on responses” (Saye & Brush, 2002, p. 82). For example, during more informal conversations with students as they progress through an inquiry, a teacher might pose questions or suggest resources to deepen a student’s thinking. By intentionally planning for and guiding inquiry, teachers create learning environments in which students are more capable of instigating and completing an inquiry.

The Challenges of Inquiry

Despite calls for more rigorous instruction, inquiry is still not common practice in social studies classrooms (King, Newmann, & Carmichael, 2009; Levstik, 2008; Saunders-Stewart, Gyles, & Shore, 2012). One factor may be confusion among teachers as to what constitutes inquiry. As Barton and Levstik (2004) explained,

Educators are not always clear about the meaning of inquiry. Sometimes it amounts to little more than a buzzword....Other times it refers to any hands-on, motivating activity....Other times, educators use the term to refer to a set of curricular and instructional perspectives popular from the late 1950s through the early 1970s. (p. 186)

In addition, pressure to cover content and calls for schools to go “back to basics” discourage teachers from pursuing time-intensive inquiry activities (Parker, 2008; Thornton, 2008). Teacher preparedness, or lack thereof, is also a problem. Inquiry-based instruction is difficult, and many teachers continue to lack the pedagogical and disciplinary knowledge to design and guide effective inquiries (Bransford, Brown, & Cocking, 1999; Brown & Campione, 1994). At the same time, inquiry is often at odds with teachers’ dispositions, making it less likely that inquiry-based curriculum will be

realized in classrooms as intended (Thornton, 2005). As Saye and Brush (2004) discovered, even teachers specifically recruited to implement inquiry-based units may be sluggish to adopt necessary beliefs and behaviors, especially if they are more comfortable with traditional instructional methods. Students may also be complicit in the limited uptake of inquiry, as these instructional methods are demanding of students as well. Uncomfortable with risk-taking or unwilling to put forth the effort, students often know how to engage in inquiry but choose to take the easy way out instead (Barton & Levstik, 2004). If not properly facilitated, inquiry might also leave students with incomplete or incorrect understandings, which may tarnish inquiry's reputation as an effective instructional approach (Aulls, 2008).

Summary

Students who engage in inquiry may gain valuable intellectual and civic skills. Providing students with opportunities to develop and investigate questions, deepen conceptual understandings, and critically evaluate sources can prepare students to apply these same strategies in their communities and beyond, thereby helping to fulfill the civic mission of social studies education. Because of the challenging nature of inquiry, collaboration between students and a skillful teacher is critically important at each stage of the inquiry process – starting with the initial question. Although children possess an innate sense of wonder and curiosity, learning to develop questions about the social world can prove challenging, as students must refine their questions to take into account what we already know and what is worth investigating. If this process is not properly valued or structured, an ill-formed question can derail inquiry from the onset.

Questions

Of the various stages of inquiry, researchers have given questioning limited attention. Scholars argue that provocative questions that resonate with students are more likely to spur inquiry (Barton & Levstik, 2004; Grant, 2013), but there is little discussion of what that means or how such questions are developed. As Wolf (1987) explained,

Ask a teacher how he or she teaches, and chances are, the answer is, “By asking questions.” However, if you go on and ask just how he or she uses questions or what sets apart keen, invigorating questioning from perfunctory versions, that same teacher might have a hard time replying. (para. 1)

Some form of teacher questioning may be ubiquitous throughout social studies classrooms, but not all questions are created equal. Understanding the distinction Wolf identified is especially important for inquiry-based instruction, as teachers who mistake perfunctory questions for inquiry questions may undermine inquiry’s potential to create meaningful learning experiences for students.

How Teachers Use Questions

Despite the limited attention within the research literature to teachers’ use of questions to situate student inquiry, there is a relatively long history of emphasizing teacher questioning as a valuable instructional strategy (e.g., Bulgren et al., 2001; Dillon, 1988a; Morgan & Saxon, 1991; Moguel, 2003; Postman, 1979). Although teachers’ questions can be used to deepen students’ thinking or to ground more ambitious curricula, when teachers’ questions are used poorly, they can also prompt low levels of thinking and engagement among students. Representing a spectrum of approaches, this section reviews teachers’ use of questions as a means to maintain classroom control, guide classroom discussion, and center ambitious teaching.

A method of control. Researchers have found that the Initiation-Response-Evaluation (IRE) model of discourse is most prevalent in classrooms (Cazden, 1988; Gall, 1984; Nystrand, Gamoran, Kachur, & Prendergast, 1997). With this model, the teacher takes responsibility for posing questions to students, who provide an answer, which is judged by the teacher before she poses the next question. IRE allows teachers to control classroom discourse because they are able to “prescript” both the questions they ask and the answers they accept, as well as the order in which they ask the questions. Furthermore, teachers control discussions by the topics they allow to be formulated and the ‘off-topics’ they ignore” (Nystrand, Gamoran, Kachur, & Prendergast, 1997, p. 12).

Unfortunately, when teachers take responsibility for questioning, they often model low-level questions. Albergaria-Almedia’s (2010) study of teacher questioning patterns in three high school classrooms classified the preponderance of teacher questions as acquisition questions, as opposed to specialization or integration questions. Albergaria-Almedia concluded that the prevalence of low-level, fact-based questions “places the teacher in a central role and acts to test knowledge, instead of stimulating [students] to elaborate on their ideas or to extend their thinking” (p. 755). As a result, students receive few opportunities to engage in co-construction of knowledge, which “limits students’ opportunities to further develop their ideas and to be supported to reach higher cognitive levels” (p. 754). Nystrand, Gamoran, Kachur, & Prendergast (1997) argued that reliance on IRE communicates a clear - and disconcerting - message to students that can only be rectified by dialogic classrooms that incorporate authentic questions,

When teachers respond to students by evaluating their answers...they treat learning as remembering and students as rememberers. By contrast, when

teachers respond to students by making an observation of their own, as in conversation and discussion, they treat learning as reflection and validate students not just as rememberers but also as thinkers. (p. 91-92)

As the IRE model illustrates, the presence of questions does not necessarily equate to student-centered learning experiences. Simply asking questions, especially if those questions are used to reinforce select interpretations, is not enough. Instead, teachers are encouraged to pose questions that challenge students to think deeply and allow students to construct their own meaning.

A guide for discussion. More positively, teachers frequently use questions to frame and direct class discussion. The Public Issues Model identifies “critical dialogue between the teacher and the student and among the students” (Krug, Poster, & Gillies, 1970, p. 229) as the heart of instruction. In their explanation of the Public Issues Model, Oliver and Shaver (1966) claimed that teacher developed questions are necessary for both stimulating and sustaining discussion around issues of public policy and suggested the use of ethical questions that are designed to “have some common meaning and relevance for all students” (p. 133). Parker and Hess (2001) also argued the importance of teaching for and with discussion through the use of genuine questions for which the teacher “has not yet crystallized an interpretation or firmly ‘made up her mind.’ She is, therefore, concerned to think with and listen to her students” (p. 279). In their descriptions of three types of discussion (p. 281-283), the authors identified a focus question that reflects the purpose of that form of discussion. The purpose of deliberation is to reach a decision that will resolve a problem, leading to the focus question “What should we do?” During a seminar, students are “developing, exposing, and exploring meanings [to develop] deepened and widened understanding” (p. 282) and are focused on the question “What

does ____ mean?” Finally, conversation supports students’ attempts to “reach agreement on ends” (p. 281) through the focus question “What kind of society do we want to have?”

In some cases, teacher questioning during discussion has produced positive cognitive effects. vanZee & Minstrell (1997) examined a university professor’s use of “reflective toss” (p. 228) to increase students’ thinking. Designed as almost a mirror image of IRE, a reflective toss is initiated when a student makes a statement, from which the teacher poses a question that turns the discussion back to the student. Oliveira (2009) would categorize this type of teacher question as “reactive” because they are “asked by teachers in response to students’ previous contributions to classroom discourse for reactive purposes such as sustaining discussion on a particular topic, following up on ideas previously introduced by students, and requesting elaborations or clarifications from students” (p. 425). Oliveira’s study of 15 elementary teachers found that a particular type of reactive question, termed “referential” because they “serve as requests for information that the teacher truly wants or needs to learn” (p. 425-426) induced more sophisticated thinking and responses from students.

Unfortunately, teachers often mask recitation as discussion and do not pose questions that will encourage discussion (Hess, 2010; Nystrand, Gamoran, Kachur, & Prendergast, 1997). This is especially true in high-need classrooms. Dull and Murrow’s (2008) study of 26 high school classrooms found that even though information-gathering questions were most common in all classrooms, sustained interpretive questions, which “encourage students to interpret texts, make connections, solve problems, support or dispute ideas, and/or ask further questions” (p. 398), only occurred in the high-ability, low-diversity school. Values questions, which “invite reflection on personal beliefs and

social problems” (p. 398), were more common in low-income schools, but they were substantially less common in low-ability classrooms across the school settings. As with the IRE model, discussion that is not rooted in questions “that elicit and depend upon students’ diverse perspectives” (Hess, 2010, p. 210) is unlikely to generate quality student contributions necessary for discussion to thrive.

An approach to ambitious teaching. Although questions may be a regular part of a teacher’s practice, “there is a big difference between using questions to check students for understanding and using questions to frame a teaching and learning inquiry” (Grant, 2013, p. 325). Despite the challenge of developing and incorporating such questions, they can be a powerful tool for those wishing to engage in ambitious teaching (Grant & Gradwell, 2010). Grant and Gradwell (2010) described ambitious teachers as ones who,

(1) know their subject matter well and see within it the potential to enrich their students’ lives; (2) know their students well, which includes understanding the kinds of lives their students lead, how these youngsters think about and perceive the world, and that they are far more capable than they and most others believe them to be; and (3) know how to create the necessary space for themselves and their students in environments in which others...may not appreciate their efforts. (p. vii)

Because “ambitious teaching is less about the instructional practices a teacher uses than it is about what a teacher knows and how she or he interacts with ideas, with students, and with the conditions of schooling” (p. vii), this type of teaching can take many forms. One approach is big idea teaching, which encourages teachers to root instruction in issues that are “meaty, complex, and open to multiple perspectives and interpretations” (Grant & VanSledright, 2006, p. 26). Through this approach, teachers draw upon their knowledge of subject matter, students, and context as they strive to “frame intellectually rich ideas

into questions that students can embrace” (p. Grant & Gradwell, 2010, 187). Caron (2005) made a similar argument in his promotion of issues-centered history instruction,

Using central questions to design history units...offer[s] teachers a way to design units more coherently and in a way that privileges important historical issues....and offers students a more purposeful learning experience....Central questions not only afford teachers the opportunity to select and organize content in a coherent unit framework but also expose students to an array of issues that are important for young citizens to consider in a democratic society. (p. 52)

The five types of questions Engle & Ochoa (1988) offered can also be used to organize a unit: definitional, evidential, policy, value, and speculative (p. 41-43). These questions lend themselves to ambitious teaching because each category of question has a “dynamic, vigorous quality. None can be easily answered, all require serious thought, and the answers to most of them will have a tentative quality” (p. 171). As a frame for ambitious teaching, questions can serve as a bridge between curricular requirements and students’ lives, allowing teachers to more easily foster the state of perplexity necessary for inquiry.

Questioning is a common instructional strategy; however, teachers can choose to employ this strategy to limit or expand thinking, to hoard or to share authority, and “to embarrass or to empower” (Wolf, 1987, “Decent Questions,” para. 4) students. Because teachers’ questions can substantially impact classroom culture, teachers who wish to create an inquiry-based classroom should be particularly conscious of their questioning practices.

Questions as the Foundation for Inquiry

Engle and Ochoa (1988) argued that “probing questions must become the stock-in-trade of teachers who support a reflective decision-making curriculum....Without the persistent use of probing questions, the goals of reflective process will not be realized” (p. 171). Questions are essential, in part, because the curiosity and perplexity that drive

inquiry originate from and manifest themselves in questions (Dewey, 1933; Grant, 2013; Rossi & Pace, 1998). Students can engage in worthwhile exercises around source evaluation and claim development, but if not grounded in a provocative question, “the tool of inquiry is incomplete” (Barton & Levstik, 2004, p. 202).

In addition, the deep understandings that result from inquiry may become more purposeful when developed in response to a question of personal significance. “The lack of any organic connection with what the child has already seen and felt and loved makes the material purely formal and symbolic” (Dewey, 1902/1990, p. 202); therefore, questioning is key to student agency. Questions that derive from students as well as teacher-generated questions that are developed with the “needs and doings” (Dewey, 1902/1990, p. 201) of students in mind can create learning environments in which students see the influence of their actions on the curriculum and their own learning. The student agency that results from asking and investigating meaningful questions has broader civic implications, as it may lead “to the capacity and willingness to act upon one’s learning – to produce something of value, to be valued and to value one’s self as someone who can make a difference” (Holdsworth, 2000, p. 353).

Teacher Development of Questions for Inquiry

As previously discussed, the existing literature suggests that teacher guidance contributes to successful inquiry, including during the questioning phase. There is evidence to suggest that teachers’ low-level questions prompt low-level thinking and questioning by students (Albergaria-Almedia, 2010). On the other hand, Wolf (1987) argued that “being asked and learning to pose strong questions might offer students a deeply held, internal blueprint for inquiry” (“Why Question,” para. 3). This suggests that

for students to become strong questioners, they benefit from strong teacher models. Teachers play a key role in creating environments that stimulate questions and in guiding students' naïve questions in more robust directions. Considering the role of teacher as curricular-instructional gatekeeper (Thornton, 2005), a teacher's understanding of inquiry, criteria for a good question, and process for developing questions can have a significant impact on the questions students investigate and generate.

The previous statement implies a certain level of subjectivity to this process, and, therefore, variety in students' experiences. As discussed above, inquiry is a common but fuzzy term. Although the definitions academics use may contain similar elements (see Table 2.1), the situation in the classroom can be far less consistent. For example, Oppong-Nuako, Shore, Saunders-Stewart, and Gyles (2015) examined the extent to which six high school teachers incorporated inquiry into their instruction and found that even the teachers identified as implementing the "most inquiry" did not necessarily describe their approach to inquiry in the same ways (p. 216). Expectedly, the commonalities decreased even further when compared to "middle inquiry" and "least inquiry" teachers. Similarly, Robinson's and Hall's (2001) examination of seven middle school teachers' approaches to sustained inquiry revealed three patterns of teacher thinking about inquiry: question-driven, resource-driven, and discovery-driven (p. 237). An important element in developing a better understanding of how teachers use questions to situate student inquiry is, first, developing a better understanding of how teachers define inquiry.

Just as students are often considered naturally curious, teachers are often considered natural questioners, but teachers also struggle to develop questions for

inquiry. Rossi and Pace (1998) found that “choosing a persisting question that would guide a unit” (p. 405) was one of the greatest difficulties faced by teachers attempting to implement issue-based instruction because the question needed to meet two important criteria,

The challenge is to develop questions that not only grab student attention, but also open doors that explore meaningful and significant themes that would broaden a student’s worldview. The danger lies either in choosing a question that will not grab student interest or proceeding with one just because it will. (p. 405)

The teachers at the heart of Grant’s and Gradwell’s (2010) investigation of teaching with big ideas also struggled to develop questions that would serve multiple purposes (e.g., facilitate higher levels of thinking, prompt interest, allow for coverage of substantial content). Suggestions that an inquiry question should balance rigor and relevance are prevalent in the literature (see Table 2.3), but as with inquiry, general consensus as to the nature of an inquiry question might not be enough to foster their development and use in classrooms.

Table 2.3

Selected Descriptions of Inquiry Questions

Source	Description
Barr, Barth, & Shermis (1977)	<ul style="list-style-type: none"> • “A Reflective Inquiry problem is a problem because students identify it as such, although they may have to receive help in doing so.” (p. 65) • “The Reflective Inquiry problem is a two-pronged affair: it points outward to objective, empirical phenomena, and it points inward to perceived feelings and values and private outlooks. It is both a social and a personal problem.” (p. 66)

Table 2.3 (continued)

Source	Description
Beyer (1971)	<ul style="list-style-type: none"> • “an unsettled, discordant, or problematic situation that demands some kind of closure” (p. 35) • “cast in terms that have meaning for the inquirer, and it must deal with something that relates to him personally” (p. 37)
C3 Framework (2013)	<ul style="list-style-type: none"> • “intriguing to students and intellectually honest...vigorously explored through the disciplines” (p. 17) • “focus on enduring issues and concerns. They deal with curiosities about how things work; interpretations and applications of disciplinary concepts; and unresolved issues that require students to construct arguments in response.” (p. 23)
Grant & VanSledright (2001)	<ul style="list-style-type: none"> • “helps teachers decide what to teach by connecting facts, concepts, and topics common to the curriculum; helps teachers decide what instructional approaches they might use by providing a framework in which to judge whether an activity or resource contributes to the understandings they hope to develop; and propels and engages learners’ thinking and understanding by being meaty, complex, and open to multiple perspectives and interpretations” (p. 125) • “allow a teacher and learners to come alive together as they explore something of interest to the child and to the adult” (p. 133)
Levstik & Barton (2015)	<ul style="list-style-type: none"> • “grow out of [students’] concerns and interests” (p. 14) • “are worth discussing [and] do not have simple or single answers” (p. 24)

Another element in developing a better understanding of how teachers use questions for inquiry is developing a better understanding of the traits teachers attribute to a question suitable for inquiry. Grant and Gradwell (2010) claimed that research into inquiry-based instruction rarely describe how teachers develop the questions that frame their instruction. Although their book did much to explain how teachers warmed to the idea of

teaching with questions and the factors that influenced their understanding of what it means to teach with questions, there is still little focus on how teachers approach crafting questions. In addition, although documents like the *C3 Framework* (NCSS, 2013) include a question structure for use with inquiry, it remains to be seen if teachers understand questions for the purpose of student inquiry in similar ways. It is clear that questions are a valuable pedagogical tool and that teachers who wish to utilize inquiry-based instruction to its fullest potential recognize the significance of questions, but researchers have yet to thoroughly examine how teachers define and develop questions for the purpose of student inquiry.

Theoretical Framework

This study is influenced by sociocultural theory as well as the concepts of pedagogical content knowledge and reflective practice. The following section briefly describes each element and its contribution to the present study, highlighting both the ways in which they shape my view of questions and my methodological choices.

Sociocultural Theory

Sociocultural theory emphasizes the “reciprocal and relative” (Gredler & Shield, 2008, p. 155) relationships between an individual and her environment. Within sociocultural theory, this study is particularly concerned with mediated action, which focuses on the relationship between the agent and cultural tools (Wertsch, 1998). This study sought to investigate the ways in which teachers’ actions are mediated by the cultural tool of questions. In explaining mediated action, Wertsch (1998) claimed that “mediated action is characterized by an irreducible tension between agent and mediational means” (p. 25) meaning that “[any] form of action is impossible, or at least

very difficult, without a cultural tool and a skilled user of that cultural tool....They can have their impact only when an agent *uses* [emphasis in original] them” (p. 30). In the case of inquiry, the skillful use of questions may impact the trajectory of teacher and student action. In addition, Wertsch claimed,

When trying to develop new cultural tools, the focus naturally tends to be on how they will overcome some perceived problem or restriction inherent in existing forms of mediated action....Even if a new cultural tool frees us from some earlier limitation of perspective, it introduces new ones of its own. (p. 39)

Revising the Kentucky Academic Standards for Social Studies to include particular types of questions can be considered an attempt to introduce new cultural tools designed to improve social studies instruction, but it remains to be seen if those affordances will be realized and what constraints might emerge. Lastly, Wertsch claimed that “by invoking the appropriate cultural tools it is possible for one’s actions to take on a kind of power and authority” (p. 72). Incorporating students’ questions is a way to shift power and authority in the classroom (Aguiar, Mortimer, & Scott, 2010), but the increased use by teachers of questions for the purpose of student inquiry also has the potential to broaden the circles of power and authority within a classroom. Viewing questions as cultural tools, this study sought to investigate the meanings teachers ascribe to and their uses of particular types of questions.

Pedagogical Content Knowledge

Shulman (1987) identified seven categories of knowledge, all of which inform “a teacher’s understanding of what is to be learned and how it is to be taught” (p. 7). Of the seven categories, this study is particularly concerned with pedagogical content knowledge, which Shulman defined as “the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented,

and adapted to the diverse interests and abilities of learners, and presented for instruction” (p. 8). A teacher’s decision to pursue inquiry and to anchor that inquiry with a question is a reflection of her pedagogical content knowledge. Even more so, the types of questions a teacher employs, including the question’s tone, topic, and phrasing, provides insight into how she believes content knowledge is best relayed. Critics of the concept of pedagogical content knowledge (e.g., McEwan & Bull, 1991; Turner-Bissett, 1999) have argued that it is impossible to separate content knowledge from pedagogical content knowledge, claiming that “knowledge is always by someone and for someone, always positioned and positioning, and, consequently, is always already pedagogical” (Segall, 2004, p. 491). For Segall (2004), this is particularly true when considering the texts teachers use to teach particular content, as the scholars whose research, thoughts, and words compose the text have already imbued it with “pedagogical layers” (p. 492) to which the teacher will add. Through this lens, the questions teachers use during inquiry may be considered texts that possess various pedagogical layers, especially if they have been drawn from scholarly sources or selected because they relay themes evident in scholarly works. This study sought to examine teachers’ views of questions as a means to engage students with content. The Question Development Task, in particular, was an attempt to capture teachers’ understanding of what makes a question successful, including opportunities to explore the degree to which teachers consider the “instructional nature of content” (Segall, 2004, p. 501).

Reflective Practice

In describing the behaviors of a professional, Schön (1983) argued that “competent practitioners usually know more than they can say” (p. viii). Consequently,

teachers' "knowing is ordinarily tacit, implicit in [their] patterns of action and in [their] feel for the stuff with which [they] are dealing" (p. 49). In such cases, the depth of a teacher's skill is revealed in her actions, what Schön termed knowing-in-action (p. 50). In addition, a teacher's competence is revealed through her reflection-in-action (p. 54), or her ability to assess and adjust in real time. Studies that focus on reflective practice attempt to "give practitioners reason....by exploring the understandings revealed by the patterns of spontaneous activity that make up their practice" (Schön, 1991, p. 5). This study hoped to unearth the tacit knowledge that informs teachers' questions and investigate how teachers adjust their questions when faced with new standards and expectations. The verbal protocols, in particular, were attempts to examine reflection-in-action by providing an opportunity in which "the practitioner consciously interacts with a problematic situation, converses, and experiments with it" (Richardson, 1990, p. 12).

Summary

Each of the elements described above provides a lens through which I view the present study. Sociocultural theory emphasizes that questions are not simply an instructional tool but a cultural tool whose use by teachers is a reflection of their beliefs about learning and authority. Pedagogical content knowledge situates the usage of questions around the goal of presenting content in effective, engaging ways that are most appropriate for the immediate context. Finally, reflective practice acknowledges the value of examining teacher questioning-in-action as a means to explicate the various forces that influence teachers' views of and uses of questions.

Chapter Three

Methodology

The present study employed a qualitative design to examine how high school social studies teachers understand the role questions play in inquiry. The primary goal of the study was to understand how high school social studies teachers define and develop questions that support inquiry. The study was informed by phenomenological principles. Phenomenology attempts to understand the lived experience as described by the participants (Creswell, 2009) in order to “construct an animating, evocative, description of human actions, behaviors, intentions, and experiences” (van Manen, 1990, p. 19). The study was designed to understand two facets of questions: a) the characteristics teachers associate with inquiry questions and b) teachers’ processes for developing questions. In addition, the present study sought to examine if and how these facets were influenced by a proposed state social studies standards document. Questioning is a behavior commonly attributed to teachers, but much is to be learned about the processes teachers employ when developing and utilizing questions; therefore, the present study not only provides insight into the particular experiences of these individual teachers but also into the more general phenomenon of questions, helping to bring to light “the significant in the taken-for-granted” (van Manen, 1990, p. 8).

The main research question of the study was: How do high school social studies teachers understand the role questions play in inquiry? Supporting research questions included: (1) How do teachers define inquiry? (2) What traits do teachers attribute to questions used for inquiry? (3) How do standards impact teachers’ understanding of

questions used for inquiry? (4) How do teachers approach developing questions used for inquiry?

Rationale

Social studies researchers have long advocated inquiry as the ideal approach to social studies instruction in part because the skills developed through inquiry may relate to the skills citizens must exercise in a democracy (Barr, Barth, & Shermis, 1977; Barton & Levstik, 2004; Saye & Brush, 2004). Questions are the building blocks of inquiry, needed to both spark and sustain inquiry (Swan, Lee, & Grant, 2014). Inquiry not centered on a provocative question will fall flat, for “people learn when they seek answers to the questions that matter to them; their understanding changes only when they become dissatisfied with what they know” (Levstik & Barton, 2015, p. 16). Therefore, for inquiry to succeed in the classroom, the questions must matter to the students.

Ideally, inquiry is situated around students’ own questions. Current scholarship suggests that doing so not only improves student engagement (Barton & Levstik, 2004; Pedrosa de Jesus, Almeida, & Watts, 2004) but also fosters students’ growth as agents of their own learning (Aguilar, Mortimer, & Scott, 2010; Cook-Sather, 2006; Holdsworth, 2000). In addition, there is evidence that opportunities to work with their own questions produce valuable cognitive and civic outcomes that allow students to better understand and act in their world (Croddy & Levine, 2014; Cuccio-Schirripa & Steiner, 2000; Rosenshine, Meister, & Chapman, 1996; Rothstein & Santana, 2013). Centering inquiry on students’ questions does not negate the role of the teacher, however. Students may be naturally curious, but they do not necessarily have the skills to independently ask meaningful questions (Aguilar, Mortimer, & Scott, 2010; Levstik & Barton, 2015).

Teachers play a vital role in developing students' questioning capacity, in part by creating environments in which questions are valued and by modeling their own questioning process (Brooks & Brooks, 1993; Chin & Brown, 2002; Dull & Morrow, 2008; Marbach-Ad & Sokolove, 2000). As suggested above, in certain cases it is neither developmentally appropriate nor pedagogically sound to cede all questioning responsibility to students, meaning teachers regularly collaborate with students or take the lead when developing questions. As a curricular-instructional gatekeeper (Thornton, 2005), a teacher's view of questions will influence her approach to questions. As a result, these views may impact students' development as questioners and their overall learning experience.

Teacher questioning is not a new area of study, as various studies have emphasized the importance of effective teacher questioning during discussion (e.g., Dillon, 1988a; Dull & Morrow, 2008; Oliveira, 2010) and recitation (e.g., Albergaria-Almeida, 2010; Gall, 1984; Nystrand, Gamoran, Kachur, & Prendergast, 1997). Little attention has been paid, however, to teachers' use of questions to spur student inquiry or to the process that teachers implement when developing a question to anchor inquiry (Grant & Gradwell, 2010). For students to develop the skills necessary to craft and investigate their own questions, teachers must model and create space for that work. Considering the emphasis placed on questions within documents like the *College, Career, and Civic Life (C3) Framework for Social Studies Standards* (NCSS, 2013) and the proposed Kentucky Academic Standards for Social Studies (KASSS), we may benefit from an empirical understanding of how teachers conceptualize questions as part of their

instruction. This study attempted to address this gap in research by investigating how teachers define and develop questions for use with inquiry.

Kentucky provides a unique context in which to investigate this phenomenon because it proposed new social studies standards that specifically carve out a place for questions. Framed by an Inquiry Cycle, the first component of which is Questioning, Kentucky's proposed standards suggest that all social studies teachers should be shifting their instruction to an inquiry-based model in which questions play a significant role. Situated within an examination of high school civics teachers' interpretation of standards related to questions, this study examines how teachers understand the relationship between inquiry and questions. By better understanding how teachers approach questions, I hope to reveal factors that influence the presence and success of questions in classrooms as well as move the field toward examining how students experience questions in the classroom.

Research Design

As Yin (2011) explained, qualitative studies attempt to investigate “the meaning of people's lives, under real world conditions” (p. 7) with a particular focus on representing the participants' views, perspectives, and contexts. In addition, qualitative studies draw from multiple sources of evidence in hopes of providing as full and rich a description as possible. More specifically, phenomenological studies seek to provide “insightful descriptions of the way we experience the world pre-reflectively, without taxonomizing, classifying, or abstracting it” (van Manen, 1990, p. 9). This is done through “extensive and prolonged engagement [with a small number of participants] to develop patterns and relationships of meaning” (Creswell, 2009, p. 13). The present

qualitative study was informed by phenomenological principles. Although working with a state standards document that classifies questions in particular ways, my intent was to examine the meanings teachers attribute to those standards and to draw broader conclusions about the relationship between questions and inquiry.

Selection of Participants

Several factors influenced my decision to draw my participants from ninth-grade civics teachers within a single Kentucky school district. I believed I would be better able to look across the teacher-developed questions if they were situated around the same content, therefore, I decided to focus on teachers who are responsible for the same content. I selected civics as the focus content because of the purported relationship between inquiry and civics, specifically inferences that incorporating students' questions into the classroom may democratize the educational experience (Aguiar, Mortimer, & Scott, 2010; Cook-Sather, 2006) and that helping students develop questioning capacity directly impacts their ability to successfully engage in participatory democracy (Croddy & Levine, 2014; Engle & Ochoa, 1988). I selected the ninth-grade civics course because, although a core course, there currently is not an end-of-course of exam for civics courses in Kentucky. Since the vast majority of ninth-graders are enrolled in this course, teachers must design instruction to engage a wide range of students. With the absence of a state exam, however, teachers may feel a greater sense of instructional flexibility. I believed this condition might translate into a greater willingness to incorporate varied instructional ideas, including inquiry and questions, an attitude that was integral to participant selection. To facilitate my ability to look across questions and instructional suggestions, I wanted teachers who were working from the same district maps and curricular

expectations, hence I decided to work with teachers from a single school district. In addition, because of my 10 years of teaching in the selected school district and my more recent work as a University Supervisor for student teachers in the selected school district, I have developed and maintained positive relationships with school administrators and staff that I believed might aid access.

After receiving permission from individual school principals and district personnel, I contacted the Social Studies Department Chair at each of the five public high schools to introduce the study and request a list of faculty who would teach at least one section of the ninth-grade civics course during the 2015-2016 school year. I received names of 25 teachers and contacted each of these teachers directly, providing an overview of the study and asking teachers who were willing to participate to complete a consent form. The 12 teachers who returned a signed consent form received a questionnaire, which I used to guide participant selection (Appendix A). The questionnaire was created using Google Forms and was distributed and completed electronically. The questionnaire was composed of a series of open-ended items designed to assess teachers' attitudes toward questions and inquiry followed by open-ended items related to teaching experience. Considering the phenomenological influences on this study, open-ended items were an appropriate approach to gathering this information because they were less likely to "limit the responses people can give [or] impose on them the researchers' ideas and words" (Nardi, 2006, p. 74).

As qualitative studies are particularly interested in "information-rich cases whose study will illuminate the questions under study" (Patton, 1990, p. 169), questionnaire responses were used to select a purposeful sample of participants. I employed an

intensity sampling strategy in order to select “rich examples of the phenomenon of interest” (Patton, 1990, p. 171) who were most likely to reveal what is possible (Shulman, 1987) when it comes to the use of questions in service of inquiry. I used the questionnaire to identify individuals who expressed positive views of questions and inquiry and who illustrated a commitment to exploring the potential of questions and inquiry. Intensity sampling involves “considerable judgment” (Patton, 1990, p. 172), so there was an element of subjectivity to participant selection. In reviewing questionnaire responses, I gave preference to participants who utilized inquiry in their classrooms, described inquiry as a valuable instructional approach, and attempted to incorporate questions into their instruction. In addition, I gave preference to participants who displayed “reflective awareness” (Shulman, 1986, p.10) as illustrated by their potential to think about and talk about their practice. Evidence of reflective awareness included the extent to which teachers explained their opinions and the logic behind those explanations. Table 3.1 includes sample questionnaire items and their relationship to participant selection.

Table 3.1

Selected Items From Teacher Questionnaire

Questionnaire Item	Relationship to Participant Selection
Teachers are often told to develop inquiry-based instruction. When you think about inquiry, what do you understand that term to mean?	Reveals the teacher’s understanding of inquiry as an instructional strategy.
What kinds of inquiry have you used in your social studies instruction?	Reveals the teacher’s willingness to attempt inquiry with students.

Table 3.1 (continued)

Questionnaire Item	Relationship to Participant Selection
What is a question you have used in class that succeeded in sparking students' interest? Why do you think the question worked so well?	Reveals the characteristics the teacher attributes to a successful question and the teacher's view of questions as a strategy for initiating inquiry.

Review of the questionnaire data led to my selection of six participants. This sample represented approximately 40% of the district's ninth-grade civics teachers as well as four of the five public high schools in the district. Participants' years of teaching experience ranged from one to 16 years. Although experience was not a factor in participant selection, the sample consisted of three teachers with 10 or more years of experience and three teachers with fewer than 10 years of experience. Table 3.2 lists the six participants and their years of teaching experience.

Table 3.2

Participants

Name	Years of Teaching Experience	Years Teaching the Ninth-Grade Civics Course
Agatha	16	14
Calvin	10	3
Elizabeth	1	1
Molly	10	2
Quentin	6	1
Ryn	2	2

Note. All teachers are identified by self-selected pseudonyms.

It is important to acknowledge my familiarity with five of the participants prior to this study. Because I taught for 10 years in the selected school district and have spent the past several years working with a teacher preparation program that regularly places teachers in the selected district, it is not surprising that I had encountered several of the

participants in my professional life. Three of the participants were former colleagues, though at different times in my career and for different lengths of time. I met two of the participants while they were enrolled in the teacher preparation program. Knowing that familiarity with participants was likely, I took several steps to prevent professional relationships from unduly influencing participant selection. First, I extended the opportunity to participate in the study to all ninth-grade civics teachers in the district and utilized the same language when communicating to ensure consistency in tone and information. Second, I removed all identifying information before reviewing the questionnaires and selected my six participants before revealing the names of the teachers. Based on these precautions, I do not believe my professional relationship with these participants was harmful to the study. In many ways, our familiarity may have put them at ease, allowing for richer conversations.

Procedures

Guided by phenomenological principles of attempting to understand “social phenomena from the actors’ own perspectives, [describe] the world as experienced by the subjects, and with the assumption that the important reality is what people perceive it to be” (Kvale, 1996, p. 52), the majority of the data for this study were generated through interviews and verbal reports. Interviews reveal the contexts that influence people’s behaviors, which assist in understanding the meaning of those behaviors (Seidman, 2006). This context is particularly important when working with teachers because teaching is a complex, layered profession, much of which is not easily seen. Interviewing can shed light on the many factors that influence a teacher’s choices. Verbal reports are beneficial when attempting to better understand how a person makes decisions, as they

reveal “what features of a problem the people attend to, what factors influence their decisions about problem-solving steps to take, and what different strategies they have at their disposal” (McGilly, 1994, p. 8). Drawing from Seidman’s (2006) structure for an in-depth phenomenological interview, I implemented a three-interview sequence, each of which included a verbal report component. Table 3.3 details the focus of each interview and how each interview connected to my research questions.

Table 3.3

Three-Interview Sequence

Interview	Focus of Interview	Focus of Verbal Report	Connection to Research Questions
1	professional background; view of and experience with inquiry and questions	talk aloud in response to a series of quotes about questions	Supporting Questions 1 and 2
2	possibilities and challenges of the types of questions outlined in the proposed state standards	talk aloud in response to state social studies standards that relate to questions	Supporting Questions 2 and 3
3	question development process; interactions between standards, views of inquiry, and views of questions; desired supports as standards are implemented	talk through the Question Development Task	Supporting Questions 1, 2, 3, and 4

I met with each participant on a monthly basis in a location and at a time most convenient to the participant. Interviews were conducted utilizing a semi-structured interview protocol (Glesne, 2011). Each interview was audio-recorded and lasted approximately an hour. Each round of interviews was reviewed prior to the beginning of the next round so

that previously generated data could influence the direction of future interviews (Rubin & Rubin, 1995, p. 226). All interviews were transcribed at the conclusion of the data collection window. Over the course of the interviews, data were generated through two additional tasks. Between Interview 2 and Interview 3, teachers completed a Question Development Task. After Interview 3, teachers completed a Question Evaluation Task.

Interview 1: Putting the experience in context. According to Seidman (2006), the first interview should put “the participants’ experience in context by asking him or her to tell as much about him or herself in light of the topic up to the present time” (p. 17). Using teachers’ responses on the questionnaire as a catalyst, the first interview focused on the participants’ professional background as well as the participants’ general views of and experiences with inquiry and questions (Appendix B). To further facilitate this conversation, teachers participated in a text-based talk-aloud in response to three quotes about questions (see Table 3.4). Teachers were directed to read the quotes and verbalize whatever thoughts went through their heads. As recommended by the literature, I provided concise directions, presented the quotes individually, and did not interrupt teachers as they proceeded through the verbal report (Ericsson & Simon, 1993).

Table 3.4

Verbal Report Prompts: Question Quotes

Quotation	Reason for Inclusion
“The quality of the question is a crucial issue and simply encouraging students to ask questions on a regular basis does not result in enhanced learning” (Aguiar, Mortimer, & Scott, 2010, p. 175).	Prompts the teacher to consider if certain types of questions are more valuable to learning than others.

Table 3.4 (continued)

Quotation	Reason for Inclusion
<p>"It is easy to ask trivial questions or to lead the child to ask trivial questions. It is also easy to ask impossibly difficult questions. The trick is to find the medium questions that can be answered and that take you somewhere" (David Page as quoted in Bruner, 1977, p. 40).</p>	<p>Prompts the teacher to consider the process of developing questions.</p>
<p>"Teaching children to ask the questions we think important presumes that we know best which questions will help each child learn. If we take over all or most of the questioning, we miss out on learning with our students, and we deny them the experiences they need to hone their questioning ability. If students appear in need of instruction on questioning, it is probably because their natural inquisitiveness has been depressed through current schooling practices" (Commeyras, 1995, p. 105).</p>	<p>Prompts the teacher to consider the role of teachers in fostering students' questioning capacity.</p>

Interview 2: Details of the lived experience. Seidman (2006) explained that the second interview should "concentrate on the concrete details of the participants' present lived experience in the topic area" (p. 18); therefore, the second interview focused on the participants' interpretation of standards related to questions. First, teachers participated in a text-based talk-aloud in response to the actual standards (see Table 3.5). Teachers were provided with a copy of specific standards from the Kentucky Academic Standards for Social Studies (KASSS) that relate to questions and were instructed to read the standards aloud and verbalize whatever thoughts went through their heads. As with the verbal report during Interview 1, I provided concise directions, presented each standard individually, and did not interrupt teachers as they proceeded through the verbal report (Ericsson & Simon, 1993).

Table 3.5

Verbal Report 2 Prompts: Selected Standards from KASSS

Standards
Students will independently and collaboratively develop compelling questions that promote inquiry around key disciplinary concepts and embedded enduring issues.
Students will independently and collaboratively develop supporting questions that identify facts, concepts and research interpretations associated with a key disciplinary concept.

The subsequent interview served as an opportunity to pose retrospective probes that prompted descriptions and explanations, which are discouraged during the actual verbal report (Young, 2005). In addition, the interview focused on perceived possibilities and challenges associated with the type of questions outlined in the standards (Appendix C).

Question development task. At the conclusion of Interview 2, I asked participants to complete the Question Development Task prior to the final interview. Teachers were instructed to craft a compelling question and determine how they would use that question instructionally. The term “compelling question” was used because it aligned with KASSS terminology, and teachers were asked to consider their understanding of that term as discussed during the interview. All participants were asked to develop a question that would be appropriate for an inquiry related to the Constitution. This topic was selected because it was listed on each teacher’s questionnaire as a topic they teach in the ninth-grade civics course. By allowing teachers to work with content with which they were familiar, teachers hopefully felt more comfortable with the task. Serendipitously, several of the teachers were in the midst of an instructional unit during which they teach the Constitution and may have acknowledged some personal benefit to the task. Because the questioning phenomenon of interest to this study does not typically occur within a

controlled environment, teachers were not required to complete the Question Development Task in front of me or as a timed performance task. Instead, teachers were asked to approach the Question Development Task in ways that most accurately reflected their natural process. Teachers were asked to summarize their process on a form that I provided. A blank Question Development Task is provided in Appendix D, and a sample completed Question Development Task is provided in Appendix E.

Interview 3: Reflecting on the meaning of the experience. Seidman (2006) proposed that the final interview should “reflect on the meaning of their experience” (p. 18). van Manen (1990) described phenomenological reflection as “not introspective but retrospective....a reflection on experience that is already passed or lived through” (p. 10). Therefore, the third interview focused primarily on the participants’ experiences with the Question Development Task (Appendix F). Using their completed form as a reference point, participants talked through their question development process, thereby reflecting on how they generated their question and determined instructional uses for their question. As with the previous verbal reports, I provided concise directions and did not interrupt teachers during the verbal report (Ericsson & Simon, 1993). Once again, I followed the verbal report with retrospective probes that prompted descriptions and explanations, which are discouraged during the actual verbal report (Young, 2005).

Prior to the verbal report, teachers viewed the standards discussed during Interview 2 within the context of the Inquiry Cycle (see Figure 3.1) and discussed the impact, if any, the cycle had on their views of inquiry and inquiry questions. Following the verbal report, teachers discussed the impact of the Question Development Task on their views of the selected standards, questions, and inquiry. Additionally, we discussed

advice they would give colleagues and students for developing an inquiry question as well as supports they believe teachers will need as KASSS is implemented.

Practices in the Inquiry Cycle			
<p>Questioning Students will independently and collaboratively:</p> <ol style="list-style-type: none"> 1. Develop compelling questions that promote inquiry around key disciplinary concepts and embedded enduring issues. 2. Develop supporting questions that identify facts, concepts and research interpretations associated with a key disciplinary concept. 	<p>Evaluating Sources Students will independently and collaboratively:</p> <ol style="list-style-type: none"> 3. Determine the types of sources that will assist in answering compelling and supporting questions. 4. Gather relevant information from multiple sources from a wide range of perspectives and evaluate for credibility. 5. Identify and utilize evidence to seek solutions to questions. 	<p>Communicating Students will independently and collaboratively:</p> <ol style="list-style-type: none"> 6. Develop and create claims and counterclaims using appropriate evidence to construct strengths and weaknesses 7. Construct viable arguments, relevant explanations and/or public demonstrations that convey ideas and perspectives to a wide array of appropriate audiences. 8. Critique the arguments and explanations of others paying particular attention to credibility and relevance of information. 	<p>Taking Action Students will independently and collaboratively:</p> <ol style="list-style-type: none"> 9. Address options of individuals and groups to identify and apply a range of strategies and complex reasoning to take public action or propose a solution. 10. Engage in disciplinary thinking used by social scientists (<i>historians, economists, political scientists and geographers</i>) independently and proficiently resulting in civic readiness.

Figure 3.1. Practices of the Inquiry Cycle. Adapted from Kentucky Academic Standards for Social Studies (KDE, 2015b, p. 6)

Question evaluation task. At the conclusion of the third round of interviews, I asked each participant to complete a Question Evaluation Task. This provided an additional opportunity for teachers to consider the key traits of inquiry questions, which could be compared to information gathered during the interviews. Each participant received a personalized document that included the questions developed by the other participants. Teachers were asked to review the questions, determine whether or not they considered each question compelling, and explain their reasoning. The documents were created using Google Forms and were distributed and completed electronically. Results of a participant’s completed Question Evaluation Task are provided in Appendix G.

Methods of Data Analysis

Phenomenological studies attempt to “grasp the essential meaning of something” (van Manen, 1990, p. 77); therefore, I employed a common approach to qualitative studies by approaching the data “inductively building from particulars to general themes” (Creswell, 2009, p. 4). I followed a five-phase cycle of analysis: compiling,

disassembling, reassembling, interpreting, and concluding (Yin, 2011). Interviews were transcribed and examined in tandem with field notes taken during the verbal reports and materials generated by the participants (e.g., Question Development Task). I utilized holistic and selective approaches to identify thematic aspects (van Manen, 1990, p. 73). Data were examined within and across interviews, participants, and themes (Rubin & Rubin, 1995). I examined the data generated by a single participant and identified themes. I then crafted thematic memos that allowed me to better articulate the properties of each theme and why I included data within that theme (Seidman, 2006). I repeated this process with each participant's data, revising thematic memos and creating new thematic memos along the way. I continuously reviewed themes to distinguish incidental themes from essential themes as I attempted to "discover aspects of qualities that make a phenomenon what it is and without which the phenomenon could not be what it is" (van Manen, 1990, p. 107). Throughout the process, I wrote researcher memos that captured my reflections, questions, and research decisions (Glesne, 2011).

Validity. Rubin and Rubin (1995) explained that qualitative works address issues of validity by "closely reflect[ing] the world being described," which can be accomplished through "transparency, consistency-coherence, and communicability" (p. 85). Various steps were taken to strengthen the validity of the present study. Over the course of four months, data were generated through multiple sources and with multiple participants, allowing for triangulation and the formulation of rich descriptions of the participants' lived experiences (McMillan & Schumacher, 2010). To ensure face validity, I asked a high school social studies teacher not involved in the study to review the questionnaire, interview protocols, and verbal report protocols (Nardi, 2006). The use

of open-ended questionnaire items as well as audio-recorded interviews allowed me to collect verbatim accounts in order to preserve participants' language. In addition, by using the questionnaire and previous interviews to inform future conversations, including asking teachers to review summaries of key discussion points, participants had opportunities to clarify my emerging interpretations (Kvale, 1996). Lastly, I continuously looked for negative or discrepant information that challenged and, ultimately, refined my emerging interpretations.

Ethical Issues

The proposed study adhered to all of the policies and procedures established by the university's Institutional Review Board (IRB) for the protection of human subjects. The present study presented no obvious risks to the teachers involved; however, steps were taken to ensure that teachers were not harmed. Consent forms were required before teachers were able to volunteer for the study. Furthermore, teachers were instructed that their participation was voluntary, that they would in no way receive any compensation or preferential treatment for volunteering, and that they would be able to stop the study at any time. All audio recordings and transcripts were kept on my password-protected laptop as well as my password-protected DropBox account. Consent forms, printed transcripts, and materials generated by the teachers (e.g., Question Development Task) were locked in a filing cabinet in my office. Teachers were identified only through pseudonyms in the reporting of this study, and all identifiable information was removed from any other data.

Limitations

Qualitative research has been criticized as producing untrustworthy research findings; however, various steps can be taken to strengthen the validity of a qualitative study (Yin, 2011). For example, the present study employed multimethod strategies, verbatim accounts, mechanically recorded data, member checking, and actively searching for discrepant data to better ensure research design validity (McMillan & Schumacher, 2010). Qualitative studies have also been criticized for being so focused that conclusions cannot be generalized beyond the sample; however, Yin (2011) argued that “understanding the nuances and patterns of social behavior only results from studying specific situations and people” (p. 98). Phenomenology, in particular, attempts to balance interest in the unique with interest in the universal. As van Manen (1990) explained, phenomenology is the study of essences, which can “only be intuited or grasped through the study of the particulars or instances as they are encountered in lived experience” (p. 10). Although the present study focused on a small group of teachers of a particular subject and their experiences with a particular state’s standards, I was able to draw analytic generalizations (Yin, 2011) regarding teachers’ approaches to question development and views of questions used for inquiry. Some consider phenomenological studies to be limited because they do not lead to empirical generalizations or solve problems (van Manen, 1990). Instead, phenomenological studies ask “meaning questions” that may lead individuals “to act more thoughtfully and more tactfully in certain situations” (van Manen, 1990, p. 23). The present study does not solve the challenges of inquiry or of policy implementation, but it hopefully provides information that may lead to more thoughtful action by teachers, administrators, and policy makers.

Finally, some consider interview studies to be limited because the “descriptive claims are based on what people say in interviews rather than what they actually do or say in naturally occurring circumstances” (Walford, 2001, p. 85). This study attempted to pair the strengths of interviewing with verbal reports to better capture how participants describe their views and their actions.

Conclusion

The present study focused on how teachers define and develop questions for use with inquiry. Data included teacher questionnaires, in-depth interviews, field notes collected during teacher verbal reports, completed Question Development Tasks, and completed Question Evaluation Tasks. I used holistic and thematic approaches to analysis as well as constant-comparison to identify essential themes that emerged from the data as I worked toward describing the essence of teachers’ experiences with questions used for inquiry. My goal was for my conclusions to inform future research into teacher and student questions with the greater goal of influencing teacher practice in ways that make questions, particularly student-developed questions, more central to social studies instruction.

Chapter Four

Findings

In this study, I employed a qualitative design to examine how high school social studies teachers understand the role questions play in inquiry. Because the study was influenced by phenomenological principles, specific definitions of inquiry or inquiry questions were not employed; instead I sought to better understand how these participants interpreted those concepts. Participants did examine the proposed Kentucky Academic Standards for Social Studies (KASSS), which includes a particular approach to inquiry. This approach to inquiry included in KASSS is described in Chapter One and illustrated in Figure 3.1. How teachers interpreted terminology from the document (e.g., compelling question, supporting question) was significant to the study.

The primary purpose of the study was to understand how high school social studies teachers define and develop questions that support student inquiry. The main research question for the present study was: How do high school social studies teachers understand the role questions play in inquiry? Supporting questions included: (1) How do teachers define inquiry? (2) What traits do teachers attribute to questions used for inquiry? (3) How do standards impact teachers' understanding of questions used for inquiry? (4) How do teachers approach developing question used for inquiry?

I approached the data inductively, using holistic and selective analysis to identify themes. Data were examined within and across interviews, participants, and themes to better distinguish essential themes from incidental themes. In this chapter, I present the results of my data analysis. Drawing from data generated by the questionnaire, interview

transcripts, field notes from the verbal report exercises, the Question Development Task, and the Question Evaluation Task, the findings are grouped into four themes:

1. Teachers thought questioning was central to inquiry and an important civic skill.
2. Teachers identified student relevance and complexity as key attributes of compelling questions.
3. The key attributes of student relevance and complexity influenced teachers' question development processes.
4. Teachers' willingness to use compelling questions was impacted by personal experience.

Questions Considered Important to Inquiry and Citizenship

Teachers' views of inquiry and citizenship informed their understandings of the purpose of questions. Teachers primarily understood inquiry as a student-centered approach to instruction but also identified inquiry as a method for teaching important civic skills. This view of inquiry informed teachers' characterization of questioning as both an essential inquiry skill and an important civic practice. Teachers suggested that KASSS aligned with their general views of inquiry while also clarifying the process of inquiry and providing useful terminology.

Defining Inquiry

Because teachers' discussions of inquiry, questions, and citizenship often intersected, to better understand teachers' perceptions of inquiry questions, it was necessary to establish their views of inquiry. Teachers' perceptions were initially addressed on the questionnaire and expanded upon during subsequent interviews.

Teachers expressed familiarity with inquiry, for instance, several mentioned encountering the term in their teacher preparation programs, but they did not provide identical understandings of the practice. Quentin anticipated this outcome, “It’s been a buzzword for a long time. People always talk about inquiry-based instruction, but nobody really knows what it is.” The primary commonality across the teachers’ understandings of inquiry was a belief that inquiry enhances the students’ role in the learning process. When responding to the questionnaire item that asked teachers to explain what inquiry-based instruction meant to them, all but one explicitly addressed the students’ role (See Table 4.1).

Table 4.1:

Definitions of Inquiry-Based Instruction

Participant	Definition
Agatha	Instruction that has units that are developed to allow learners to show growth and understanding of a topic or subject. These units will encourage learners to apply strategies and use independent thinking skills to gain knowledge even beyond the topic or scope of the unit.
Calvin	A student process. The process of helping students understand history through asking questions and formulating their own opinions of how a culture came to be that way or why culture changes over time. Inquiry is more of finding out how [students] relate and interpret what they are given and what conclusions they can draw from that next.
Elizabeth	A way for students to take the content to a higher level of understanding. Inquiry helps students to use the content as a tool to understand the world around them. Inquiry means questioning.
Molly	Using questioning to guide student learning.
Quentin	A student led process that allows for the investigation and development of a solution to a problem or question. Through inquiry students construct their own knowledge.

Table 4.1 (continued)

Participant	Definition
Ryn	Students should be learning regular social studies content through discovery, asking big idea questions and then researching to find the answers.

Teachers used language like “independent thinking skills” (Agatha), “student process” (Calvin), and “helps students to use” (Elizabeth) to highlight the centrality of students to inquiry. This view of inquiry was reinforced during the interviews. For example, Calvin again emphasized that inquiry pushes students to consider connections and impacts for themselves,

I could give them the answers; anybody could give the kids answers...but for me, the kids need to come to their own understanding....It’s looking at that saying, “You have a job to do. You need to look at that. What does that mean to you?”

Molly, whose questionnaire response focused less on student action, did mention the central place of students during our first interview, describing inquiry as when “you pose a question to the kids, and intellectually they work through it.” Although teachers’ definitions of inquiry emphasized the role of students, Molly’s comment is evidence of a belief that teachers also have an important role to play in inquiry, particularly by structuring the investigation.

To gain further insight into how teachers defined inquiry, during the first interview, teachers explained a time when inquiry-based instruction worked well for their students (see Table 4.2). Teachers’ examples ranged from a close reading of a text to a research project. Their examples tended to focus on digging into specific sources, but other categories, such as synthesizing ideas and comparing and contrasting also emerged.

Table 4.2

Examples of Inquiry-Based Instruction

Participant	Example
Agatha	Within the context of an immigration unit, students completed a research project on their own family history.
Calvin	Students received a provision of the Magna Carta, brainstormed what they thought it meant, reviewed an annotation slip, and then determined how they would explain it to others.
Elizabeth	Students used pictures of a World War II soldier and different objects to draw conclusions about the soldier (e.g., who is he, where has he been).
Molly	The teacher used questions, which progressed from concrete to more contextual in nature, to help students interpret the symbols and meaning of a painting (e.g. <i>The Arnolfini Wedding</i>).
Quentin	Students reviewed Reconstruction Plans and determined why the groups weren't seeing "eye to eye".
Ryn	Students completed a webquest about a specific Civil Rights event and then shared their events before answering the question "What does Civil Rights look like?"

The examples provided tended to reflect what each teacher emphasized in his or her definition. For example, Calvin primarily focused on students' interpretation of information, claiming that students engaged in inquiry when they "got information of a historical situation and broke it down" as they tried to figure out "What does this mean? How does this relate to me or our time?" Molly's explanation that inquiry occurred when teachers used "questioning to guide student learning" was clearly reflected in her employment of this strategy to help students better understand a visual image. These examples further emphasized teachers' belief that they have an important role to play in structuring inquiry, as each teacher provided a focus for the inquiry and, in some cases, specific resources and steps for students. Teachers' definitions of inquiry remained fairly

consistent throughout the study, though some, as will be discussed later, believed the Inquiry Cycle included in KASSS clarified or refined their understandings.

Discussions of the purpose of social studies also revealed teachers' views of inquiry. When asked about the purpose of social studies, teachers frequently mentioned the need to prepare students for active citizenship, and their descriptions of civic behaviors often included skills that are associated with inquiry (e.g., critically analyze information presented by the media). Similarly, when teachers reflected on the value of inquiry, they often connected back to the civic purposes of social studies. Agatha explained a recent project that was inspired by students' frustrations with the crowded lunch room. After hearing students' concerns, Agatha developed an assignment for which students would survey their peers, generate possible solutions, and present those solutions at a Site-Based Decision Making Council meeting. In this instance, students' engaged in inquiry for the primary purpose of inducing change. Although not providing a specific example, Molly mentioned that inquiry directly relates to her goals of social studies, seeing it as the way to "get people to buy back into social studies....because being able to create that environment where students are questioning and really looking at the world around them will make it where people see the validity of social studies." For Ryn, inquiry makes students more capable of the open dialogue necessary for democracy,

Inquiry skills are important no matter what you do in life. It makes you more successful, because in my personal view of the world and how people learn, inquiry is the basis of how you learn. I think you can't do inquiry unless you understand that people have different ideas and there is not just one right answer.

Teachers held positive views of inquiry because of its potential to strengthen students' academic and civic skills, often seeing these as mutually reinforcing. In certain cases, the facets of inquiry emphasized by a teacher were quite similar to the aspects of citizenship

identified by the teacher as particularly important. For example, Molly's view of inquiry focused on using questions to guide student learning, and she identified being able to interrogate information as a vital civic skill. Teachers hoped inquiry would lead students to not just learn content but also use that content in personally relevant ways with lasting impacts. Although teachers' articulated a belief in the ability of inquiry to build students' civic dispositions, this relationship was not apparent in teachers' concrete examples of inquiry, minus the focus on content that was somewhat civic in nature (e.g., Calvin's use of the Magna Carta).

Although there appeared to be consistency in how individual teachers defined and implemented inquiry, neither their definitions nor their examples were particularly sophisticated. The under-developed nature of their understandings became more apparent as teachers were pressed to expand upon the information provided on the questionnaire. For example, Quentin explained that his definition derived from a definition provided by a professor in a graduate course he had recently completed but that he still struggled to understand what inquiry looked like in a social studies classroom. Additionally, even though teachers specifically emphasized the role of students in their definitions, the centrality of students to the inquiry process seemed to dissipate when explaining how they approached inquiry in their classrooms, as teachers tended to specify the focus of the inquiry as well as resources and desired outcomes. It is not necessarily surprising that teachers held different conceptions of inquiry or that they approached inquiry in unique ways, but it appears these teachers lack confidence and coherence in their understandings.

Questions and Inquiry

Teachers considered questions as central to initiating and sustaining inquiry. As Elizabeth explained, if the initiating question is not well formed, the “inquiry will fall flat.” Molly noted that initiating questions created student “buy-in” and established parameters for the inquiry. Ryn suggested that they provided focus, and Calvin commented that they got the “inquiry rolling.” Agatha identified questions as the “heart of inquiry” because a question “opens students’ thinking.” Molly and Ryn connected this process to what social scientists do. Molly explained,

I feel like part of engaging with the content as an academic, as a professional, is naturally thinking about it in terms of questions...I feel like questioning is how social scientists [think]. The historian isn’t just “I’m going to say these facts today.” There are usually questions that spark, that create their academic research.

These teachers believed it made pedagogical and disciplinary sense to begin inquiry with a question.

From teachers’ perspectives, questions also sustained an inquiry. They described their own use of questions as guideposts to support students through an inquiry and as a method of formative assessment. Ryn explained that questions ensure that students “know where to go so [they] don’t get lost.” Quentin emphasized questions as a way to prod students in particular directions, “The questions are sometimes leading for a purpose, or maybe there is a destination I want them to get to.” Calvin highlighted their assessment value, “Questioning is a way that I [check] that they’re understanding and making a connection to the material...Are you really getting it, or are you just looking at the surface, or are you getting deeper?” Teachers also hoped that students would ask questions of themselves and each other as they engaged in inquiry. Agatha identified

“Where do I want to go? Why do I want to know this? Where is it going to lead me? Why did it lead me here?” as valuable questions for students to ask during inquiry.

Although teachers emphasized the importance of questions to initiating an inquiry, when discussing their actual use of questions within the context of student inquiry, teachers were more apt to provide examples of questions that sustain inquiry. This may be a result of teachers’ limited experience with using questions to anchor inquiry but may also be a reflection of how teachers tended to use questions outside the context of student inquiry (e.g., gauge what students already know, help students make sense of a difficult text, lead students toward a particular understanding).

Questions and Citizenship

As discussed above, teachers believed strengthening students’ inquiry skills was akin to strengthening their civic skills. The same applied when focusing specifically on the skill of questioning. Teachers characterized questioning as essential to inquiry and as a valued civic practice. A significant reason teachers wished to utilize questions, especially in the context of inquiry, was the hope that students would strengthen their ability and desire to ask questions outside of class. Calvin noted that intellectual curiosity has civic benefits, as a penchant for questioning prevents students from “taking things at face value.” Several shared this sentiment, including Molly, who expressed her desire to “teach [students] to question the world around them,” and Elizabeth, who directly stated her belief that “questioning the world around you is part of being a good citizen because students who ask questions are more likely to consider alternative perspectives, a trait she considered essential for good citizenship. Agatha agreed,

emphasizing that students “live in a global world; they won’t be able to engage effectively if they can’t consider other perspectives.”

For several teachers, questions were not just key to critical thinking but were also essential to civic action. As Molly explained, “part of having civic competence, in the first place, is actually having the desire to be civically engaged and wanting to be involved in your community....the questions that teachers use [could] foster that caring.” Agatha agreed, “In order to ask questions you have to be paying attention....I think that teaching students...the art of questioning is also teaching them the art of engaging, and you cannot make a community better if you don’t have engaged people.” More specifically, Calvin believed that asking questions helps citizens think about what is going on in their world, how they feel about those events, and what they can do in response: “You should always ask yourself, ‘How am I involved with this? How can I make a change?’” As discussed above, even though teachers articulated a belief in the relationship between inquiry and citizenship, their provided examples did not effectively highlight this relationship. Similarly, beyond Agatha’s description of the crowded lunchroom assignment, teachers did not provide concrete examples of opportunities they have provided students to use questions as a way to induce civic action.

Influence of KASSS

As will be addressed throughout this chapter, even though our conversations about inquiry and questions began before specifically discussing the selections from the proposed social studies standards document (see Figure 3.1), as the study progressed it became clear that KASSS had potential to shape teachers’ understandings of these concepts.

Teachers reported limited familiarity with KASSS. All of the teachers were aware of the document, and most had at least given it a cursory glance, but none reported reading the standards document closely. Agatha reported the least familiarity, saying KASSS had been mentioned during trainings for the new teacher evaluation system, but it had not been discussed at department or Professional Learning Community (PLC) meetings. Quentin said he was aware standards were coming, knew they were inquiry-based, and had scanned the document, but his colleagues and he figured they would “cross that bridge when they come to it.” Elizabeth and Ryn felt slightly more familiar with KASSS because they had both been introduced to the *C3 Framework* (NCSS, 2013) during their teacher preparation program; still, conversations within their departments were rare. Molly is involved in a regional network that is examining the standards, but she said she joined the group late and does not feel like she really understands the nuances of the document; however, she is currently enrolled in a graduate course that is focused on inquiry. Calvin said KASSS was discussed at department meetings and PLC meetings and that her colleagues were starting to think about how their instruction might be impacted.

Even though teachers said they were not overly familiar with KASSS, when teachers examined excerpts from KASSS, they reacted positively. Several teachers mentioned that the document seemed to align with their views of inquiry and reflected what they did and/or aspired to do in the classroom. Although teachers did not consider the ideas within KASSS particularly novel, they did find value in the document, saying it illuminated the process of inquiry and provided useful terminology.

Clarity. Although teachers said KASSS reflected their general views of inquiry, they reported that the document clarified the process of inquiry. These comments were most frequent when teachers examined the questioning standards within the context of the Inquiry Cycle (see Figure 3.1). Ryn particularly appreciated the Inquiry Cycle,

It gives a better map of where you go once you ask a question...If you have these steps laid out, it makes it easier for me, as a teacher, to know, once you get a question, what you have to do with it.

Agatha also mentioned that she would reference the Inquiry Cycle when planning instruction, but she believed the Inquiry Cycle would benefit students as well, “It defines a skill set that my kids are going to need to help them answer the question.” Elizabeth found the formatting of the Inquiry Cycle helpful in clarifying the inquiry process, “I like how they’re numbered too, like 1 2 3 4 5, because they’re like steps in my mind... I feel like these are steps [students] would do in this order to get to the end.” Both Agatha and Elizabeth mentioned providing the Inquiry Cycle to students and using it as a rubric to assess students engaged in inquiry.

Terminology. During the second interview, teachers were asked about several terms included in the KASSS questioning standards (see Table 3.5): *compelling question*, *key disciplinary concept*, *embedded enduring issue*, *supporting question*, and *collaboratively*. Teachers’ interpretations of these terms were fairly consistent, though not overly precise. As discussed below, teachers associated *compelling question* with the traits of student relevance and complexity, though the idea of complexity was emphasized more after teachers’ viewed the entire Inquiry Cycle. Teachers understood *key disciplinary concept* as the foundational content: “the big things you want students to know” (Molly), “focus of study” (Agatha), “content standards” (Quentin). Teachers

viewed *embedded enduring issue* as a recurrent theme: “things we’re still grappling with today” (Molly), “are always going to be issues in social studies” (Agatha), “tie the content to the students’ lives” (Ryn). Calvin used the Constitution to distinguish between these two terms,

As far as the disciplinary concept, the Constitution is a document. It’s a primary resource. It was created during this time by these people to fix the Articles of Confederation....There are six principles; there are six purposes. As far as enduring issue, the Constitution is always what drives things that we’re looking at today....How am I, the individual, how am I affected by this Constitution on a regular basis?

Teachers related *supporting question* to evidence: “show what you know” (Calvin), “specific content you want to cover” (Molly), “the information that you need to be getting” (Quentin). Teachers interpreted *collaboratively* as students working together or students working with the teacher.

Teachers suggested that compelling questions and supporting questions are also types of questions citizens do and should ask. Broadly, Ryn mentioned that citizens use these kinds of questions when they are confronted with a problem and have to find an answer. Agatha envisioned their usefulness during a town hall meeting, “I think of an adult sitting in a town hall meeting and talking to a councilman and saying, ‘Okay, what I hear you saying is this. How does that fit with what we’re trying to do here?’” Quentin and Ryn both mentioned the usefulness of these questions when trying to determine who to vote for in an election, something they said they were doing in their own civic lives, as these interviews coincided with Kentucky’s state-wide elections. Because questions can play such an important role in civic life, Ryn believed it was especially important to include them in social studies instruction,

I think most citizens don't really question as much as they should, but I think that if you start teaching it at school that would change...[these] are the same sort of questions that people should be asking about the government and how it works.

Teachers did not suggest that all civic action required compelling or supporting questions, but they did contend that curiosity, often taking the form of questions, was essential to identifying, investigating, and addressing civic issues.

Prior to viewing the KASSS questioning standards, teachers identified the two roles that questions play in inquiry – initiating and sustaining. While discussing the two types of questions included in KASSS, teachers associated *compelling questions* with initiating inquiry and *supporting questions* with advancing inquiry. For example, Ryn explained that a compelling question would frame a multi-day lesson or a unit, whereas supporting questions would be “the little questions, the ones that help build the answer to the compelling question”. Although teachers believed both types of questions were essential to successful inquiry, this study was primarily concerned with questions that prompt inquiry, identified in KASSS as a compelling question. For the sake of clarity, the remainder of this chapter will use the term compelling question when discussing a question that initiates inquiry.

Summary

Teachers agreed that inquiry elevates the students' role in learning. Additionally, teachers agreed that inquiry helps fulfill the civic mission of schooling by introducing students to valuable civic skills, including questioning. Teachers also acknowledged that questions play an important role in inquiry, both by initiating inquiry and sustaining inquiry. Teachers communicated that KASSS aligned with their views of inquiry while also clarifying the process of inquiry and providing useful terminology. Teachers

interpreted the standards in similar ways and likened the two types of questions outlined in the standards to the kinds of questions students should encounter during inquiry and ask in their civic lives.

Relevance and Complexity as Key Question Attributes

Over the course of the study, two traits emerged as essential to a compelling question: student relevance and complexity. Although teachers approached these two characteristics in varying ways, when synthesized, their comments described a question that appeals to students and can support a sustained investigation that draws upon various inquiry practices. Despite consistently identifying these two attributes, teachers acknowledged that determining whether or not a question meets these criteria is a rather subjective process.

Student Relevance

Teachers explained that student relevance should be a primary concern whenever making instructional decisions but found it particularly important for inquiry because the question must keep students' attention throughout the investigation. Elizabeth emphasized this point, "You need to find something that they care about because otherwise it's just a waste of your time." Teachers said a question students found relevant would spark their interest, make them curious, and possibly tap into their lived experiences. Beyond content, teachers said that a compelling question's wording must also appeal to students. Several teachers believed that compelling questions should be clear, concise, and crafted with student-friendly language.

When teachers were asked to explain why the questions they created for the Question Development Task (see Table 4.3) were compelling, they mentioned this idea of student relevance.

Table 4.3

Question Development Task

Participant	Compelling Question
Agatha	How did the exclusion of minority voices at the Constitutional Convention shape, alter, or change the Constitution itself as well as events in history?
Calvin	As early citizens, our American ancestors entered into a social contract with our Founding Fathers while creating the Constitution. What is a more important charge to the government, to protect individual rights or maintain order?
Elizabeth	Who did the founders mean by “we the people”? Did they really mean all people or just some?
Molly	Are great men or women chosen to be president?
Quentin	Describe how the United States would look without a Bill of Rights. How would you as a citizen be affected?
Ryn	Does the Constitution protect people from the government?

Elizabeth believed her question was “interesting” and thought her students would enjoy the question because “they love fairness and being equal and this idea of everything being fair, and so I think they could really get into it, and I envision that they would have a lot of discussion and arguments about it.” Molly also believed her students would easily engage with her question, “I could see them getting passionate about what it means to be great.” Agatha and Quentin, who both chose to implement their questions, conveyed that their students responded enthusiastically. Quentin recalled, “The kids were excited to answer it. They were into it. They wanted to answer the question, and it’s something that applied to them; it was applicable to them.”

Influence of KASSS. Although teachers mentioned the importance of student relevance prior to examining the KASSS questioning standards, some teachers noted the value of including *compelling* within the standard. Molly stressed that using *compelling* was significant because it insinuated a different type of question,

The compelling part is the difference because I think [without it] you're going to get too many [teachers saying] "kids need to know the economic, social, political," and then that's what the question is going to be. I don't even know if I can explain why that doesn't lead to the same thing that a compelling question does, but I think using the word compelling is a game changer.

When discussing how she would explain compelling questions to her colleagues, Molly continued to emphasize how the language of this standard suggests a new approach to social studies instruction,

They must really make sure they are connecting with their students and that they can really say whether or not a question would be relevant to their students or not. I think that's just a shift in how maybe social studies is taught. As test scores come back and teachers say "I understand the kids didn't do so well." Did they really make the content relevant to their students? Are they able to connect the then and the now with the question? I feel like just really knowing your kids is the essential component of the compelling question. Because I feel like anybody can make a good content question, but it is a question about whether or not your kids are really going to care about it.

Elizabeth agreed that simply using questions in the classroom would not satisfy this standard. Instead, teachers must utilize questions that "show the students that you're thinking of them in your design." She continued,

If the question was truly, like what we discussed as compelling, then I think [things would change]...I think it's going to make your class more interesting, and if your students are interested then they're going to be more engaged, and they're going to be more active learners....If you have their attention, if you have their interest in something, then they're going to be truly learning and maybe not so passive.

As discussed below, Molly and Elizabeth, who spoke most clearly about this point, were also most focused on this trait while completing the Question Development Task.

Complexity

Teachers also emphasized that a compelling question should prompt students to engage with disciplinary content and skills in prolonged and substantive ways, what I have titled complexity. Teachers identified three facets of complexity. One element was the focus of the question. For example, it may reflect an enduring issue that we still deal with today or, as Ryn explained, “look overall at a big theme or a time in history and ask about its importance or its significance....ask about an important issue or challenge or argument that’s in the world.” A second element of complexity was the practices that must be employed to arrive at an answer. Teachers emphasized that a compelling question necessitates intentional research, use of multiple sources, consideration of different perspectives, application of content knowledge, and further questioning. Generally speaking, teachers believed compelling questions should require students to dig deeply and demonstrate higher order thinking, and, as Molly explained, “hit all of these different parts of the [Inquiry] Cycle.” Lastly, teachers focused on the kind of response that a compelling question prompts. Teachers said a compelling question typically results in an argument, for which there are multiple valid answers. According to Elizabeth, “a compelling question needs to have more than just one set answer as well, and the answer could be totally different for you than it could be for me.” Teachers also expected students to produce extended responses and to utilize modern and historical examples as evidence. Because compelling questions present complex material, require complex processes, and evoke complex answers, they take time, a conclusion Calvin relayed, “I don’t think compelling questions come with easy answers. I don’t think they come with quick answers.”

Even more than student relevance, when teachers explained why the questions they created for the Question Development Task (see Table 4.3) were compelling, they referenced complexity. Elizabeth, Molly, and Ryn mentioned their questions could be answered in multiple ways. Specifically, Molly thought her question was “something that kids could really argue and they can argue it very well...I feel like it is something that students can literally go either way with, and they could be correct. They could go modern. They could go historical.” Calvin, Elizabeth, and Quentin believed their questions required students to utilize various resources. Agatha and Quentin emphasized that their questions directed students to think beyond themselves. Ryn believed her question was large enough in scope that students were required “to really think about it and dig into it.” Calvin’s justification for the compelling nature of her question brought many of these factors together,

When I wrote it I sat and thought about it myself. I really thought “Wow, now that’s something I can make more questions from.” And then I looked at my desk and the table and saw everything, and I said “I used all this to get to this point.” How awesome is it going to be to see the kids doing that? Pulling this and pulling that and trying to put it all together and having that conversation with each other to come up with a really thick answer.

Calvin believed she had achieved a compelling question because of the complex thinking utilized while formulating that question.

Influence of KASSS. Again, even though teachers mentioned the importance of complexity prior to viewing the KASSS questioning standards, as discussed above, viewing the Inquiry Cycle did influence how teachers understood inquiry and questions. Because teachers associated the use of specific inquiry practices with complexity, it is important to note that the most significant difference among teachers’ interpretations of the standards was with the final practice of the Inquiry Cycle – Taking Action (see Figure

3.1). After viewing the entire Inquiry Cycle, several of the teachers commented that a compelling question must take a student through the entire cycle, including Taking Action, or that the Inquiry Cycle designated Taking Action as the end goal of inquiry. I prompted teachers who made such comments to expand upon their understanding of Taking Action. Agatha linked Taking Action to academic behaviors,

I think it's the "what do I need to do"... To me what the action piece is for questions is "okay, here's the question I have got to answer, and it's really, really hard, but here are some actual things I can do to get me to that answer."

Elizabeth also focused on academic behaviors, but instead of how students reach an answer, she believed Taking Action was how students "show what they know." She did attempt to connect academic behaviors to civic action,

I think Taking Action is students' participating, and the participation piece that I've talked about is getting them to participate in class, getting them to participate in this inquiry, and then getting them to show that same participation in their life outside of high school.

Quentin's explanation initially took a more civic bent, but he eventually tempered that understanding,

I think Action is where they apply what they've constructed....Based on this, it says "take public action to propose a solution" so simply proposing a solution to a problem would be Taking Action. Even if it's just in the classroom setting....That potentially could spill over...it could lead to civic readiness.

Ryn read that same phrase very differently, "Where it says 'to take action or propose a solution' they actually have to do something and not just talk about it or write an essay about it. They have to actually go do something outside of the classroom." Molly also argued that Taking Action went beyond traditional academic behaviors, "Can they do something with it? I feel like the sources, the claiming part, are natural and are already happening in teaching and learning, but I feel like take informed action, they really do

something with that.” Similar to the inclusion of the term compelling, teachers suggested that the decision to include the phrase Taking Action in KASSS insinuated that teachers should be using questions differently than they have in the past; however, whereas teachers agreed that compelling meant a question must appeal to students, there was not consensus among these teachers as to the kind of action a question should lead students to take. Teachers did not view the complete Inquiry Cycle until after completing the Question Development Task, so teachers did not necessarily factor in Taking Action when considering the complexity of their questions; however, as discussed below, several teachers suggested that their questions may have been different if they had seen the Inquiry Cycle prior to its development.

Both Attributes Were Essential

For many teachers, the combination of student relevance and complexity was unique to a compelling question. A question without complexity might be useful to quickly assess students’ knowledge or gauge their opinion on a controversial topic, but it would not lead students to think deeply. A question without student interest might prompt an extended essay that called for substantial content knowledge, but it would not engage students in the learning process or produce lasting results. Elizabeth captured this relationship as she attempted to tease out the difference between a question that is compelling and a compelling question,

I think I’ve used [questions that are] compelling, but I don’t think I’ve used a compelling question....I will ask questions that compel or strike their interest. We were talking about immigration, and I asked them people’s viewpoints on immigration....Those questions compel them because there are a lot of different ideas and viewpoints about it, and they were really interested in that, but that’s not a compelling question....I think [a compelling question] needs to be able to take students more than just one class or one moment to answer. It’s something they

need to think about and something they need to look into a lot of different sources from probably many different days of lessons to get that answer.

Whereas Elizabeth believed she needed to infuse her current questions with more complexity in order to achieve compelling questions, Molly believed she needed to focus more on the student relevance element,

Before I started doing all this, [my questions were] much more checking for understanding.... While I knew where I wanted kids to go, there wasn't necessarily a question that guided all of that, unless it was a lame one like, "By the end of this unit, you'll be able to answer the social, political, and economic factors of whatever you're studying." So I feel like these are much more different; they're more student-friendly, but not even just student-friendly. They're much more intellectually engaging because there's that "so what" to the question as opposed to that "social, political, economic" question.

Additionally, teachers conveyed that the inclusion of these two traits increased the functionality of compelling questions as a curricular tool. Elizabeth believed compelling questions provided opportunities for students' to voice their opinions while "still hav[ing] my students learn the things that they need to learn." Ryn agreed, suggesting that as students investigate a compelling question,

They're going to be dealing with all that stuff that they think is really interesting, but in order to understand it, they're going to have to get that other content, and they may not be thinking about it as such a burden because they're using that to understand things that they're interested in.

Teachers seemed to identify and appreciate the potential of compelling questions to assist them in balancing their obligations to curricular requirements and students' needs.

It is important to note that even though all of the teachers emphasized that a compelling question must feel relevant to students, for most, their descriptions of compelling questions were increasingly influenced by complexity as the study progressed. This point is well reflected in a comparison of the sample questions teachers

provided on the questionnaire to those developed for the Question Development Task (see Table 4.4)

Table 4.4

Question Comparison

Participant	Questionnaire	Question Development Task
Agatha	Why would people from other countries view the United States in a negative light?	How did the exclusion of minority voices at the Constitutional Convention shape, alter, or change the Constitution itself as well as events in history?
Calvin	How much do you trust the government?	As early citizens, our American ancestors entered into a social contract with our Founding Fathers while creating the Constitution. What is a more important charge to the government, to protect individual rights or maintain order?
Elizabeth	How would you have behaved under Hitler’s rule?	Who did the founders mean by “we the people”? Did they really mean all people or just some?
Molly	What should Nora [a character in <i>A Doll’s House</i>] have done at the end of the play?	Are great men or women chosen to be president?
Quentin	What should the role of government be in environmental safety and protection?	Describe how the United States would look without a Bill of Rights. How would you as a citizen be affected?
Ryn	Should there be term limits for congressmen?	Does the Constitution protect people from the government?

The questionnaire asked teachers to provide a question that had “succeeded in sparking student interest.” The Question Development Task asked teachers to develop a compelling question they believed would be appropriate for an inquiry related to the

Constitution. Looking across these questions, those provided on the questionnaire seem to be narrower in scope, more succinct, and more clearly designed to appeal to students. In essence, they seem to err more on the side of student relevance. Those created for the Question Development Task tend to be longer, include more content vocabulary, and sound like traditional teacher questions. They seem to err more on the side of complexity. Nonetheless, as discussed above, when describing why they believed their newly-developed question was compelling, each teacher suggested it would appeal to their students.

The Subjective Nature of Compelling Questions

One reason teachers may have emphasized complexity in their definitions of compelling questions is because they seemed more comfortable with that trait, suggesting that complexity is easier to measure than relevance. When describing relevance, teachers tended to use more affective phrasing: “something that makes you want to keep looking at it or keep doing it” (Agatha), “grabs you, makes you stop” (Calvin), “grabs your attention” (Elizabeth), “something people care about” (Molly), “make you say ‘Oh, I’ve got to find out more about this’” (Quentin), “you can’t help yourself; you really need to know more about it” (Ryn). Ryn went further and specifically associated emotion with compelling questions, “I think that it’s more like you just have to feel that it’s compelling. You have to feel that need to answer it, to figure it out.”

This affective understanding influenced teachers’ views that whether or not a question should be considered compelling is a personal decision. Calvin suggested, “a compelling question is something a student has to connect with and use personal experience, their schema.” More directly, Ryn commented, “I think whether or not a

question is compelling is a very personal, individual preference.” Therefore, what compels a teacher might not compel a student. What compels students in one class might not compel students from another class. Their awareness of subjectivity did not deter teachers from thinking they could develop compelling questions that would appeal to their students, but they did suggest that developing a compelling question with colleagues or with students might increase the likelihood of success.

The subjectivity of compelling questions was evident in teachers’ responses to the Question Evaluation Task. Each teacher viewed the compelling questions generated by the other five participants and was asked to explain whether or not they considered each question compelling. Table 4.5 displays the teachers’ assessments of each question.

Table 4.5

Question Evaluation Task

Compelling Question	Yes	No
How did the exclusion of minority voices at the Constitutional Convention shape, alter, or change the Constitution itself as well as events in history?	<i>Agatha</i> <i>Calvin</i> <i>Quentin</i> <i>Ryn</i>	<i>Elizabeth</i> <i>Molly</i>
As early citizens, our American ancestors entered into a social contract with our Founding Fathers while creating the Constitution. What is a more important charge to the government, to protect individual rights or maintain order?	<i>Calvin</i>	<i>Agatha</i> <i>Elizabeth</i> <i>Molly</i> <i>Quentin</i> <i>Ryn</i>
Who did the founders mean by “we the people”? Did they really mean all people or just some?	<i>Agatha</i> <i>Elizabeth</i> <i>Quentin</i> <i>Ryn</i>	<i>Calvin</i> <i>Molly</i>

Note. The name of the teacher who developed each question is italicized.

Table 4.5 (continued)

Compelling Question	Yes	No
Are great men or women chosen to be president?	Elizabeth <i>Molly</i>	Agatha Calvin Quentin Ryn
Describe how the United States would look without a Bill of Rights. How would you as a citizen be affected?	Agatha Calvin Elizabeth <i>Quentin</i>	Molly Ryn
Does the Constitution protect people from the government?	Molly <i>Ryn</i>	Agatha Calvin Elizabeth Quentin

Note. The name of the teacher who developed each question is italicized.

Teachers held very different opinions. None of the questions were deemed compelling by all of the teachers. None but Calvin deemed her question compelling, citing reasoning that it was too long, too confusing, or not kid-friendly. Molly and Calvin disagreed on all but one question, a reflection of their reliance on different criteria. Molly tended to focus on student relevance, whereas Calvin tended to focus on complexity. Even with the one question on which they responded similarly, “Who did the founders mean by ‘we the people’? Did they really mean all people or just some?” Molly’s criticism focused on wording whereas Calvin’s criticism was that it seemed like an “easy answer” question. There were also circumstances when teachers focused on the same trait but viewed questions differently. For example, Molly said the question “Does the Constitution protect people from the government” was engaging and thought-provoking and could be answered many ways. Alternatively, Agatha characterized it as a yes/no question that did not force students to think deeply or apply knowledge. Several of the teachers considered how well the question would work in their particular contexts, factoring in both students’

interests and academic habits. Ryn was the most tentative in her ratings, often liking the topic but expressing concerns about its wording or implementation. Her equivocation makes sense considering her statements about the personal nature of compelling questions.

Summary

Teachers identified student relevance and complexity as key attributes of compelling questions because they prompted inquiries that would both appeal to students and address important disciplinary content and skills. KASSS seemed to reaffirm and refine how teachers considered these attributes. Although broadly agreeing on the importance of these two traits, teachers applied them quite differently, thereby highlighting the subjective nature of compelling questions.

Question Attributes Influenced Question Development

The attributes teachers identified as essential to compelling questions also influenced how they developed compelling questions. Teachers' question development processes were initiated by consideration of student relevance or complexity. Although they began at different points, ultimately, each teacher considered both elements as they crafted their question. Teachers also commented that the unique nature of compelling questions influenced their process, leading them to spend more time and consider more factors along the way.

Beginning With Student Relevance

Outside of inquiry, teachers mentioned that student relevance influenced their instructional planning. As discussed above, student relevance was identified by teachers as a major reason why the questions provided on the questionnaire succeeded in sparking

students' interests. Agatha's account of the origin of her question, "Why would people from other countries view the United States in a negative light?" is a particularly poignant example of how listening to students can inspire powerful and timeless questions,

It was in a 10th grade World History collaboration class the day after 9-11. One of the girls came in, and she said "Three questions Ms. J. [Agatha's colleague]. Who is Osama bin Laden? Where the hell is Afghanistan? And why are there people in, hang on I wrote it down," and she pulled out a napkin, and she said, "Why are there people in Syria, Libya, and Palestine dancing because Americans died, because I wouldn't be dancing if anybody died in their countries?" And I looked at Ms. J., and she goes, "Well we probably need to plan a lesson." And I said, "Well I know who Osama bin Laden is," and she goes, "I can tell them where Afghanistan is," but we're really not sure about this whole dancing in the streets. We need to do some more inquiry. So it was this idea of, "We really don't always get it right, and the world doesn't view us the same way that we do." And with ninth -graders [the group with whom she has used this question ever since] that is the most important thing in the world. They are trying to find their place in the world.

The Question Development Task was a more manufactured exercise, so teachers were unable to draw from the type of experience Agatha relayed; however, that did not prevent teachers from utilizing student relevance as their starting point.

Two teachers began the question development process by considering student relevance and then moved toward complexity. An initial step was finding out what interested students. As a first-year teacher, Elizabeth had limited experience, so she reflected on lessons she had taught thus far and tried to identify what students seemed to really care about. She honed in on equality and fairness, "It's something we come back to almost once or twice a week with them. They love talking about that." Elizabeth identified "what my students care about" as the greatest influence on her choices as she went through the development process, and this is clear in not only the topic she selected but also her attention to clarity, "I struggled with the wording of it and making sure that

the wording is kid-friendly, that it's straight-forward and not too complex for them to understand.”

Molly began by trying to identify what was interesting about the Constitution, which was not an easy task for her,

What I found was that it was really hard for me to make a compelling question out of just a straight document. What's compelling about the Constitution? It's not that the Constitution isn't compelling. The Constitution is a compelling document, but you study it so much in a very basic way.

To move forward, she turned her gaze inward and thought about what intrigued her and talked with colleagues, one of whom shared an article about greatness,

So when he mentioned that to me, I was like “Oh, that's a really interesting idea to talk about,” and that's what got my gears in my brain rolling about how I could do it in my class. It was difficult to get started but, as soon as my curiosity got piqued, I knew that I could make it so that it was tangible for my students to understand and be interested in.

As with Elizabeth, the greatest influence on Molly's process was “the caring factor.

Would my students and I care?” At the same time, Molly also considered elements of complexity, such as did the question have multiple viable answers and did it produce an evidence-based argument instead of a prediction.

Beginning With Complexity

The other four teachers started with complexity and worked toward student relevance, what they likened to backwards-planning. They began by determining appropriate content. Ryn listed the topics she typically covers in her Constitution unit, and Quentin referred to the applicable unit objectives generated by his PLC. Calvin looked at the current state social studies standards and data from last year's exams and identified topics on which students under-performed. She also prioritized the document itself, “I wanted [students] in that primary resource...[to] come back to these basics and

see how it all fits together.” Similarly, Agatha reflected on the holes in her typical instruction and saw this as an opportunity “for [students] to get familiar with the Constitution.” Additionally, these teachers considered if the question was debatable, related to key themes from the course, and lent itself to historical and modern evidence.

Like Elizabeth and Molly, three of these teachers mentioned that students had the biggest influence on their choices, but they cast their concern with student relevance in the light of curricular demands. After identifying relevant unit objectives, Quentin thought, “This is what I want them to accomplish, this what I want them to learn about, how can I make this – What question do I have to meet this objective....How can I get kids engaged in the content?” Calvin wondered, “What am I going to do to make them want to learn this?” Ryn looked for ways to “teach the things they don’t really necessarily like but need to know.” Despite earlier comments that student relevance is key to a compelling question, Agatha said her question development process was actually driven more by her own interests, though she believed her students shared these interests,

Rebecca: As you were developing the question, what had the greatest influence on the choices you made as you were going through the process?

Agatha: My personal interest. Yeah, it’s all about me....But I think that the ideals that they hold are very much a reflection of ideals that I think are important and necessary. So in that regard, I don’t necessarily think the question missed....I just thought from the beginning, “Oh my gosh. I’ve always wanted to answer this question and my kids will love this.”

Despite each of the six teachers stating that students were the driving factor in their question development process, teachers’ starting places did seem to impact the end results. Most notably, the teachers who began with complexity tended to utilize more complicated syntax and crafted questions that often included more than one task for students.

Question Development Was a Deliberate Process

Whether or not teachers started with student relevance or complexity in mind, they all mentioned that their approach to developing this question was more deliberate than their normal process. Some of that was certainly due to the fact that this was an assigned task that was accompanied by a reflection document, but teachers also believed compelling questions required a different approach. Molly reflected,

It's very different in the sense that this is something that is much more methodical...I'm not very purposeful in my questioning, so something like this, when you're sitting back and you're like "Okay, what question is going to spark everything?" I was much more purposeful in that.

Teachers dedicated more time and resources to the development process than they typically do. Calvin noted, "I literally sat at a table and had all this stuff laid out in front of me and just kept pulling and putting stuff together and making notes and scribbles...It took me two hours to make one question. That's crazy." Teachers constantly asked themselves questions as they refined their compelling questions, which often reflected the two essential attributes: What is my end for the kids? Do I want to answer this question? How does this reflect an enduring issue in the field? How is this going to go over in my classroom? Teachers also thought about what students would experience while investigating the question, including the materials students would need and whether or not they were capable of providing necessary resources. To some degree, teachers also thought about possible answers to their questions, but their anticipated responses were poorly articulated and often reflected a narrow desired answer instead of a range of plausible answers. For example, when I asked Calvin, who reported consulting various resources during the two hours she dedicated to constructing her question about the social contract, what arguments she would hope to hear from students, she responded,

[Arguments] about how the Constitution says you have the right to bear arms, but you can't just walk up and shoot somebody because they look threatening to you. That's the type of thing I want to hear, "Yes, it says this, but." I want to hear that responsibility part coming into play, "That's why we have laws; that's why we have order." That's coming to the understanding, "You're going to protect me, and to do that, I'm not going to walk up and do something to someone, even though I have the right to have this." That kind of thing.

It seems that even though Calvin's question allows for multiple responses, she desired all students to come to the same understanding. Additionally, Calvin's desired response seems to drift away from the question's focus on the role of government and more toward the role of the individual, which may be a product of her view of inquiry as a method for students to connect with and personalize content. It is possible that taking more time to flesh out possible answers to their questions would provide teachers with valuable feedback during the question development process.

For teachers who chose to implement a compelling question, the revision process continued. When Agatha posed her question to students and did not receive her desired response, she "thought about what would be the best way to ask it. I don't think I've ever changed a question that I've asked my kids before, I think I've just been 'it worked or didn't, we'll go on.'" Molly experienced something similar, which she believed allowed her to model this important element of question development,

I asked a question and I wasn't getting responses that I wanted, and then I had to pause, and I said, "Okay, let me rephrase the question to kind of go more where I want to go." And I even took like my own personal wait time, and I have a pretty crazy class, full of good people but they're crazy. They all hung in there with me, waiting for me to get the question and then revise it... What I found yesterday was I took the time in the class to take a step back and say, "Okay", and I even told the kids I said, "Okay, well I need to revise my question. How do I say this?" And then, I took maybe two seconds, and then I found the better question. I think even that process alone of showing the kids - well you asked a question once, the responses aren't going where you want them to go. Taking the wait time to say, "Okay, well, I need to revise that," is an important process as well because one, it showed that I was listening to what they were talking about, but then two, it

showed them that questions are not perfect the first time. It doesn't get the right kind of response you want the first time, so you have to go back and redo that. So I think that was an important step of modeling.

Developing a compelling question was a challenging task for teachers. They struggled to identify core issues on which to base the question, draft a question that students would understand, and effectively tie a question to desired content and skills. Because teachers were thinking deeply about the desired outcomes of their questions, they took substantial time on the front end crafting a solid question. Agatha's and Molly's experiences revealed that revision may continue even after a question is posed to students. As discussed above, considering teachers' acknowledgement of the subjective nature of compelling questions, the constant evolution of a compelling question may be a situation teachers must come to expect rather than one teachers attempt to prevent.

Influence of KASSS

After completing the Question Development Task, teachers re-examined the KASSS questioning standards, this time within the context of the Inquiry Cycle. When asked if they would approach the question development process differently in the future, some participants specifically mentioned utilizing the Inquiry Cycle. For example, Agatha, who chose to implement her question, believed she would have developed a stronger question if she had considered the Inquiry Cycle because she would have been more conscious of what a compelling question requires of students and the experiences she needs to provide along the way. In the future, Agatha said she would keep a copy of the Inquiry Cycle at hand, "This is a good tool for me, like a teaching aid. It is a resource....It puts a framework up for me to help my kids get where I need them to be." Ryn explained that she would begin the process in a completely different way,

I think instead of focusing so much on the topics that I had to cover and the things the students have liked in the past, I would focus more on how it would fit into this Inquiry Cycle. For it to be a real compelling question it would have to be able to carry through all four of those [stages]. That's something I really didn't consider when I was looking at it before.

Teachers were not asked to revise their compelling questions after viewing the Inquiry Cycle, so the degree to which teachers would have altered their questions is unknown. Nonetheless, referencing the Inquiry Cycle in any way would be another example of teachers' deliberate approach to question development.

Summary

The essential traits of student relevance and complexity guided teachers as they developed compelling questions. Some teachers started with student relevance and worked toward complexity, while others started with complexity and worked toward student relevance. Most of the teachers said student relevance most influenced their decisions, but they did not address student relevance in similar ways. Each teacher acknowledged that their approach to developing a compelling question was significantly different from how they typically create questions for class, prompting them to be more reflective about the wording, content, and intention of the question.

Experience Influenced Comfort With Questions

The positive views of inquiry and questions teachers expressed on the questionnaire carried through the interviews; however, teachers remained cautious about using compelling questions with their students. Teachers also emphasized the degree to which developing a compelling question shaped their understanding of such questions. Teachers who chose to implement a compelling question found that event even more

influential. These experiences also influenced the support teachers believed all teachers will need to effectively implement the proposed standards.

Constraints on Inquiry

Teachers spoke positively and powerfully about the potential of inquiry and questions to advance the civic purposes of social studies and students' overall academic experience; however, they were admittedly hesitant to utilize these approaches. In other words, it was much easier for teachers to uphold inquiry as an ideal than to implement it in their own classrooms.

Not surprisingly, several of the teachers identified time as a challenge to inquiry. Teachers mentioned that this challenge was exacerbated by content coverage pressures, especially if teachers believed they must lead students toward certain understandings. As Agatha mentioned, if students have more control over their learning, it is possible they may go in a direction that is unexpected, unintended, or not particularly useful. Ryn noted the responsibility of ninth-grade civics teachers to “help build [students] up for the U.S. history [end-of-course exam]” taken in 11th grade, which provided an additional layer of pressure to cover particular content in particular ways. Additionally, teachers mentioned that students were unfamiliar with the skills necessary for inquiry because they encountered inquiry so rarely in school. These constraints made teachers even more uncomfortable with inquiry because they lacked confidence in the processes students would employ and products students would create.

Although unsure of all students' competence with inquiry, teachers particularly doubted that struggling students would thrive in an inquiry-based environment, in part

because they believed these students lacked the content knowledge and academic skills necessary to do inquiry. Quentin explained,

I've had more success with inquiry-based instruction with advanced students. I've tried it in collab[oration] classes and low level general classes, and in my opinion they don't have the skills necessary to reach their own conclusions and to participate in that sort of setting. It works really well with upper level students, but like I said, the collab[oration] kids, lower cognitively-functioning kids, it's a process. They're used to being able to just copy something down or circle a question. It's difficult for them to think abstractly.

Molly believed all students could do inquiry, but she questioned her own ability to support diverse learners,

I have some kids who will shut down, I have other kids who won't buy in, and then I have those kids who will take it and run. So I guess my big barrier in a class that needs way more support from me is how do I provide that support? I mean, it's essentially a scaffolding question that people have had for thousands of years. How do you scaffold enough to push and support at the same time.

Throughout the interviews, teachers' enthusiasm for inquiry was tempered by what they identified as the realities of the classroom.

Constraints on Questions

Teachers' concerns were not limited to students' abilities to conduct an inquiry but extended to students' abilities to formulate a compelling question. This concern is especially notable because the KASSS questioning standards begin with the phrase "students will independently." Several of the teachers highlighted this phrase during the talk-aloud portion of Interview 2, typically with a tone of trepidation. For example, Elizabeth's first comment after reading the compelling question standard was "The part about them doing it on their own is scary to me." Several of the participants exhibited a tension between the ideas of questioning being natural for students and questioning being a learned skill.

Students naturally question. At some point during the study, each participant at least insinuated that students are naturally curious and capable of asking questions. Ryn commented that her elementary years, during which she was home-schooled, were dominated by opportunities to investigate her own questions. This experience influenced the role she believes students' questions should play in a classroom, "The questions that they have are just as important as any I can come up with because that's how they learn, and that's their process." Elizabeth conveyed that her students are always asking questions and believed that students "know what questions are best for them."

Students' questioning is suppressed. More common was a view that questioning is natural but not encouraged; therefore, any innate curiosity has dried up in students by the time they reach high school. Ryn, who spoke so positively about her own schooling experiences, commented,

I think young children do this naturally. They're always asking "why, why, why" trying to figure out more about how the world works, and then somewhere in between little kids asking questions and freshmen in high school, it got lost, and they don't remember how to do it anymore.

Calvin agreed, "[students] are naturally inquisitive, and we tell them to sit down and be quiet and take notes, and it really shouldn't be that way because we as adults aren't that way." Agatha expressed concern that her own enthusiasm for the material might actually discourage her students' questions,

It's really, really, really hard for me to not have opinions about things that I really care about, and that I'm passionate about and that I'm engaged in. I'm so fearful all the time that I have got these really bright, amazing, kids who aren't sharing and asking their questions because they're so afraid they're the wrong questions.

Several teachers mentioned their own complicity in suppressing students' questioning, often saying they were uncomfortable extending that much control to students.

Students must be taught to question. Despite suggestions that questioning is natural to students, all of the teachers characterized questioning for inquiry as a unique process of questioning that had to be learned and honed. This stance was primarily predicated on the belief that prior knowledge is a pre-requisite for developing a compelling question. Quentin conveyed this opinion most clearly and consistently, mentioning it more than once during each interview. Table 4.6 provides a representative excerpt from each interview.

Table 4.6

Quentin Excerpts: Questions and Content Knowledge

Interview	Excerpt
1	I've honestly never even thought about having students do their own question or inquiry before. I don't even know how I would approach that, honestly.... I've never even really thought about that before, having completely student led inquiry, giving them a topic and having them come up with it. I tend to shy away from giving kids that much control because that terrifies me because I'm afraid of what I'd get back. I tend to use inquiry when I'm still in control, but I've never really thought about giving kids that much freedom when it comes to investigation.
2	It's hard, for me as a teacher, it's hard to trust students to develop questions that are inquiry based and that would fit this concept, because most of my kids when I ask them to develop questions for something, it's always like yes or no question.
3	How do they develop a question if they don't understand the impact? Or how do they develop a question if they have no clue -- that's what I struggled with, with the student development. How do they develop a question if they literally have no idea about the topic? Teachers struggle to get compelling questions with Master's degrees, how do we expect high schoolers that have no concept outside their own little bubble? How are they going to develop a compelling question?

Through these and other comments, Quentin expressed his belief that students do not know enough to ask compelling questions. Quentin admitted that he had not provided students with opportunities to develop compelling questions in the past and was unsure

“how to even begin giving them that,” but he believed his hesitancy was justified by the types of questions students tended to produce and his belief that questions are usually a product of, not a path to, knowledge. Quentin was far from alone in his concern. Despite an expressed belief that students know what questions they need to ask, Elizabeth was not confident that students could develop compelling questions on their own. Agatha felt “overwhelmed” that the standards expected students to ask these kinds of questions. Ryn, despite her own experiences, explained that “questioning is not something that comes naturally, especially to a lot of high school kids.” Molly stated that students don’t naturally ask high quality questions, in part, because they have not been taught how to do it and “aren’t used to questioning the world around them.” Calvin agreed, suggesting that even if it is not difficult for students to come up with questions, it is difficult for students to develop a question appropriate for inquiry. Teachers were hopeful, however, that with time and practice, students would become capable questioners. Molly explained,

If you give them the proper structures and support, it will get there. But it’s just like riding a bike; it’s not going to be perfect the first time. It’ll probably be a hot mess the first time. But once you get kids to buy-in, and you give them the support to ask these questions, the learning will be more authentic and better and result faster and more in-depth because they would be involved in designing their own learning in a way.

A number of teachers mentioned their hesitancy toward compelling questions, particularly students’ development of compelling questions, would fade with time because they hoped KASSS would lead elementary and middle school teachers to familiarize students with inquiry, which they believed meant students would enter high school better prepared to engage in inquiry.

Learning by Doing

Although teachers appreciated opportunities to read and discuss the proposed standards, they believed the Question Development Task was a particularly helpful step in their own professional learning. Several of the teachers said they learned about themselves as questioners because they had to think more intentionally about their instruction and how they used questions in class. Calvin explained,

I liked the process, and it challenged me. It challenged me to sit down and think about how my students are going to use different things and think different ways. I really liked that process of sitting down and challenging myself because I was really thinking about the kids and how is this going to look in the classroom.

Teachers also asserted that by learning about themselves as questioners, they were more capable of supporting their students' development as questioners. Molly said,

Understanding how my brain understands something helps me explain things to students...My understanding the process and knowing what makes that process – I just see that the issues that I have help me explain it better...So I feel understanding my process will make it so I can easily teach the compelling question [process to students].

In particular, teachers believed they learned the importance of scaffolding their students' question development. Some, including Elizabeth, mentioned providing students with a copy of the Inquiry Cycle,

I would like for them to keep in mind these standards, keep in mind these are all the different things you're going to have to do with your compelling question, so it has to be good. It has to be complex or meaty.

Molly initially emphasized the importance of “a hook” during our first interview, but her own question development experience solidified her belief that a stimulus is an important scaffold as students create questions. Initially struggling to find something “compelling about the Constitution,” Molly's interest was piqued when a colleague shared an excerpt from James Bryce's (1888/1995) explanation of why great men are not elected president

(p. 69-75). This written text served as a stimulus for her question, but Molly was particularly excited about using images to stimulate her students' questions, "If you give them a picture, and I'm thinking of that lesson [from *Teaching the C3 Framework* (Swan, Lee, Mueller, & Day, 2014)], the picture where everybody else is saluting, and then that one guy isn't. That's a great place to start off with your questioning."

Over the course of the study, three teachers chose to utilize a compelling question in class. Although they walked away with different lessons, each recognized the experience as a valuable professional learning opportunity.

Quentin: "Makes me feel a little more comfortable letting go". Quentin chose to implement the question he crafted through the Question Development Task, "Describe how the United States would look without a Bill of Rights. How would you as a citizen be affected?" Quentin explained that beyond framing the lesson with this question, his instruction was not drastically different from his normal classroom routine. He provided students with a list of scenarios that pertained to the compelling question (e.g., Think if you are arrested and there is no Bill of Rights. What would happen?). Students selected a scenario, consulted the Bill of Rights, conducted additional research, formulated a response, and rotated through multiple partners to share their conclusions. Quentin concluded class with a brief whole-class discussion about the compelling question.

Quentin was pleased with the outcome of the lesson, particularly because "the kids were excited to answer it. They were into it. They wanted to answer the question." Quentin believed his use of a compelling question, one that reflected both student relevance and complexity, was central to the lesson's success,

If I had just said "Why is the Bill of Rights so important?" they would have just said, "Because it protects our rights." That's their answer....It's a very simple

answer. It doesn't require them to do any type of research. It doesn't require them to come up with any type of solution. "Is the Bill of Rights important?" "Yes." There you go. It's pretty basic. But with "Describe how the United States would look without the Bill of Rights" they would have to know what those Amendments are to answer that. And then, "How would you, as a citizen, be affected?" ...I think adding the scenarios force[d] them to expand.

Although Quentin mentioned the importance of student relevance, throughout the study he emphasized the complexity element of a compelling question. He thought a question's success was determined not just by the interest it sparked in students but also by the degree to which it demanded students use specific evidence. That opinion is reflected in Quentin's comments above. True, he wanted to appeal to students, hence the scenarios, but he was more concerned with provoking extended answers from students.

This experience did not alleviate Quentin's concerns that inquiry prompted by compelling questions might not be suitable for all students, "Some of my kids who don't read well did not do well. They didn't take much away from this, and that's one of the criticisms I had of it." He also believed that by allowing students to choose the scenario they found most interesting, important content was overlooked, "There were a couple of things that we didn't address...and kids didn't get to hear because nobody really talked about assembly or press." Those reservations aside, Quentin stated that the most important lesson was realizing inquiry can be used as a way to introduce content instead of only after students have become familiar with the content,

The kids did pretty well with it. They liked it. It was successful enough to where it makes me feel a little more comfortable letting go a little bit, and maybe thinking "Okay, maybe they don't have to know everything before we can do an activity like this"....Last year, I would have taught the Bill of Rights...and maybe have done this as an activity at the end, like a summative activity, instead of a "we're going to learn the Bill of Rights through this" activity.

Considering how frequently Quentin spoke about the relationship between content knowledge and one's ability to ask a compelling question, this conclusion is significant because of his apparent willingness to see compelling questions as a potential avenue for introducing content.

Agatha: “It does require some thought and some strategy”. Agatha also implemented the question she crafted through the Question Development Task, “How did the exclusion of minority voices at the Constitutional Convention shape, alter, or change the Constitution itself as well as events in history?” Agatha said she approached this content very differently than she had in the past. In fact, she spent several days on the compelling question, making alterations to her instruction when students did not perform as expected. Initially, Agatha grouped the students, who then selected a historical perspective (e.g., women, slaves, Quakers, free blacks, American Indians) from which to answer the question. As students conducted research, Agatha saw that students could identify elements of the Constitution that may or may not have been included if their assigned group had been present, but Agatha did not sense that students were “us[ing] any evidence to support their claims” or thinking beyond the Constitution itself. Agatha decided students were not moving in her desired direction, so she changed strategy. The next day, she provided groups with reference cards about different events since the Constitution (e.g., Civil War, Great Depression, Vietnam) but still believed students were off the mark. Finally, on the last day, Agatha directed students to “Ask yourself three questions that you need to know to answer the bigger question.” Agatha contended this last approach moved students in a better direction, but “we just didn’t have the time to give them....At some point, we just had to go on to the political process.”

Agatha had mixed feelings about the inquiry, “Have you ever had something that kind of worked, but you are not really sure how to back it up and approach it differently?” She identified students’ enthusiasm during the inquiry as the greatest strength and students’ inability to utilize specific evidence, particularly from the Constitution, as its greatest weakness,

They did a great job of looking at it through a social lens of what a group of women would bring to the table in this discussion, or a group of men. But what I could never get them to do was go back to the Constitution and find things in the Constitution that either already supported that, and just weren’t being acted on, or didn’t support it. They didn’t meld the two questions.

Interestingly, even though Agatha mentioned multiple times that “students liked the question,” when asked to explain why, she referred mainly to students’ willingness to comply and the low stakes of the assignment rather than interest. As discussed above, Agatha found this question personally motivating, and she definitely had a path in mind that she hoped students would follow. When her vision did not come to fruition, she identified “they are just not sophisticated enough at research” as a concern, but she also acknowledged that her question may have been part of the problem,

I think that they really were looking at “How would a woman want the Constitution to look?” when I was asking “How would the outcome of what we got be different because a woman was there.” And I didn’t do a good job of asking that....[It needed to be] clear to the reader, easy to understand.

Despite the shortcomings, Agatha found tremendous value in the experience, “I don’t think I’ve ever changed a question that I’ve asked my kids before. I think I’ve just been ‘it worked or didn’t, we’ll go on.’ This time, I really...wanted to see if we could get there.” In fact, this experience led Agatha to revise her subsequent unit to incorporate more question-based instruction.

Agatha asserted this experience “reinforced what I already thought, that questioning is really important,” but she believed it also emphasized that the question is not the sole factor in an inquiry’s success. Students’ prior knowledge, students’ skill level, preceding instruction, and scaffolding all influenced the outcome; therefore, Agatha concluded they should also influence question development,

I realized after giving them the first question that I should have done a better job with “What do they need to know first?” [I need to consider] what I need them to know first and [what] resources I can give them. And then I would say, “What are they going to have to do to get that question answered?” That would be the biggest change.

Agatha saw these considerations as part of a more intentional approach to question development, “It drove home that you can’t just ‘harum-scarum’ come up with a question and think that your kids are going to get there. It does require some thought and strategy....like backward planning....[which] I had never thought about before.”

Although Agatha revised her question numerous times while completing the Question Development Task, implementing her question further emphasized the importance of a thorough and deliberate approach to question development.

Molly: “I can’t go back and not teach that way”. Of the three teachers, Molly had the most powerful implementation experience. Unlike Agatha and Quentin, she did not implement the compelling question she crafted through the Question Development Task but used an inquiry from *Teaching the C3 Framework* (Swan, Lee, Mueller, & Day, 2014, p. 149-156) with the compelling question “Why vote?” The lesson began with a whole-class discussion about a photograph. Students then completed station work, which included analyzing graphs of voting data and comparing platforms of current presidential

candidates. Class concluded with a whole-class discussion and an individual writing assignment about the compelling question.

Molly believed the compelling question was key to the lesson's success, primarily because of "the natural engagement it creates." She continued,

It's weird when you go and work on something to actually have it be what it says it's going to be....When you truly have a compelling question, it's what kids want to answer, so for me [there was] a light bulb moment where I was, "Oh, okay, I get it."

She believed students engaged with this particular compelling question because it was "not too academic" and because the question was introduced to students via a photograph, "I think you always need that hook...to stimulate conversation....It gave a nice discussion point to get you to the next part, 'Why does [voting] matter? People say it doesn't matter?' I just think that stimulus for me is essential." Molly also noticed that "as the lesson was going on, it was always going back to that bigger question....[and] I was still teaching the concepts and the facts but within the umbrella of the question." Molly believed the lesson resonated with students throughout the unit, leading students to make connections between that investigation and content covered later in the unit.

Throughout our discussion, Molly emphasized how this experience "blew her mind." She was enthusiastic in her belief that compelling questions can be powerful teaching tools,

I can't describe it. Literally there was this moment where I turned my head to look at the screen [where the question was projected] and like "oh" – It was literally a game changer....I was apprehensive about it too, and I took a plunge, and all of a sudden it made sense.

For Molly, what "made sense" was the ability of a compelling question, crafted with student relevance in mind, to naturally foster critical thinking around complex issues,

That question, “economic, social, whatever” doesn’t work. With “why vote” it’s addressing those [topics] and works like a charm....Being in the classroom and seeing the evolution happen – I can’t go back and not teach that way....There’s been nothing in my teaching so far that helps me get to the enduring issues and the “so what” of social studies as much as the compelling question, and that’s what I’m really excited about. Hopefully, I can get [students] thinking critically about the world.

Molly implemented this compelling question early in the study, and it is easy to see the influence of this experience on her Question Development Task and Question Evaluation Task, particularly her focus on student relevance and her criticism of questions that trended away from the succinct, provocative nature of “Why vote?”

Desired KASSS Supports

Overall, teachers responded positively to the portions of KASSS they were asked to examine. Teachers said the KASSS questioning standards reflected best practice. For example, Calvin believed they were designed to get students more involved with the concepts and skills of social studies, and Ryn appreciated that the standards put more responsibility for questioning in the students’ hands. Agatha commented that the questioning standards represented worthwhile student goals, “Of course they will [develop questions that promote inquiry]. That’s what we want every student to be able to do....These are great goals. [They] are things kids have to be able to do to be 21st century learners.” The teachers also asserted that KASSS had the potential to move social studies instruction in positive directions. Elizabeth believed these standards might make her questions more intentional because she would focus on questions that could actually sustain students’ through the entire Inquiry Cycle. Molly argued that specifically including questioning in the standards was vital to promoting inquiry more generally, “These parts of the standards are essential to inquiry. I feel like the compelling question

and the supporting question [standards] will enable questioning to happen in the classroom more than it has in the past.” Ryn also believed KASSS represented a “move forward in the education system.” She continued,

If these are the standards, [teachers] will have more freedom to teach [using inquiry] instead of having to be driven by “we have to make it through the content; we don’t have time to do questioning or inquiry.” If these are the standards then it will be easier for them to be able to justify being able to do [inquiry], so they are more likely to do it...I think it might open things up for teachers instead of constricting down what they can teach, which I think is a really good thing.

Teachers did express some concerns after examining selected portions of KASSS. The compelling question standard was described as “vague” (Elizabeth) and “thick” (Calvin). Both Elizabeth and Ryn doubted that teachers unfamiliar with the *C3 Framework* would grasp the meaning of a compelling question from the standard alone, though they believed seeing it within the context of the Inquiry Cycle would help. Not all teachers were equally optimistic about the likelihood of transformation, in part because they believed KASSS might not align as well with others’ beliefs about teaching or inquiry. Quentin said, “I like the idea of it. My fear is that...there’s not going to be any implementation, and teachers are going to do the same thing.”

Although the teachers expressed greater comfort with inquiry and compelling questions by the end of the study, each discussed the need for support as the standards move forward. Several of the teachers mentioned the importance of working with colleagues, both to better understand and implement KASSS and as an asset to question development. Ryn thought, “it would have been a lot of fun to come up with this [question] as a PLC. Our PLC has lots of interesting people from different backgrounds in it. I think it would have been a lot stronger.” Molly agreed, “The best resource is

somebody who you can talk with and create those compelling questions...if you don't have back and forth discussion [about] what makes something really compelling, I don't think you can understand it." After sharing her implementation experience with her colleagues, Agatha wished she had taken a "team approach" because "every single person who made a comment on it had an idea that would have made it better."

Teachers also expressed interest in examples, in the form of sample questions, possible question stems, or videos of inquiry in practice. Calvin believed these resources would ensure that schools and districts were "using [the standards] the same," but Elizabeth deemed overly-prescriptive guidance as undesirable,

Each school is so different, and your students at each school are so different...I would appreciate it if they gave us some themes, like your compelling question needs to be about the Bill of Rights, and then either I or we or the students could create it.

Molly has been introduced to a particular approach to inquiry through her graduate course, the Inquiry Design Model (Grant, Lee, & Swan, 2015). She believed IDM had "given [her] a great concrete understanding of this [Inquiry Cycle] so that this doesn't seem overwhelming." She thought many teachers would benefit from IDM, which has "give[n] [her] a basic starting point of which to continue to grow and expand and make more complex [her] practice of the Inquiry Cycle," but she cautioned that "if you give people too much, they're not going to do it on their own; therefore, it's not going to change their instruction, because they're not going to understand it."

Molly's comment hints at a final form of support desired by teachers, time. Teachers wanted time to work with colleagues to develop a fuller understanding of compelling questions and determine how they will use them instructionally. Agatha emphasized, "if we want teachers to do this, then we have to give them time to create

opportunities for kids....Professional development is key to this.” Teachers wanted time to observe and collaborate with colleagues across schools and beyond, because “time to look toward those states who are already doing it and seeing what kind of examples they have, and how they came to that process would be good” (Calvin). Teachers also wanted time to *do* inquiry with their students, to “try it and take risks and learn from failures” (Elizabeth). Over the course of the study, Molly was personally committed to using compelling questions and inquiry in her classroom and reflected passionately about the impact of those experiences,

Three months ago, I wouldn't have believed in the power of inquiry, not that I didn't know it was good, I just didn't know that it could take all my crazies and make them not crazy.... I don't think you can truly understand it without actually doing it and making it your own....Until you really try one out in class, I don't think you'll understand a) the power of it, b) the potential of it, or c) just exactly how different it is. And I don't know if I can even put into words what “different” means. Even just the compelling question. Unless you try it, I don't think you can understand why it is so different.

Of the participants, Molly seemed most confident in the potential of compelling questions. This was due, in part, to her immersion in experiences that provided several of the supports discussed above. Through her graduate course and her work with a regional social studies network, Molly was provided time, space, and collaborative professional partnerships, which emphasized to her that teachers “have to do it” if they are going to understand and fulfill the expectations of KASSS.

Summary

Overall, teachers responded positively to KASSS and believed it had the potential to improve social studies instruction. They liked the centrality of inquiry and questions to the document, but they expressed some concern that all students were capable of creating and working with compelling questions. Teachers said their understanding of

compelling questions was enhanced by the experience of developing a question. Teachers who implemented a compelling question in class learned additional lessons about the potential and pitfalls of compelling questions. As the state moves forward with KASSS implementation, teachers believed they and others would benefit from exemplars, time to collaborate with colleagues, and opportunities to practice and reflect.

Chapter Summary

Through a comprehensive analysis of study data drawn from teacher interviews, field notes generated during verbal reports, and teacher-completed tasks (e.g., Question Development Task), several themes emerged. I organized these themes into four claims that reflected various facets of teachers' understandings of inquiry questions. Teachers' notions of inquiry, questions, and citizenship intersected, which influenced their characterization of questions as central to inquiry and citizenship. Teachers identified student relevance and complexity as key attributes of compelling questions, and teachers were influenced by these attributes when engaged in question development. Despite consistency in identifying these attributes, teachers applied them distinctly when developing a compelling question and when evaluating others' compelling questions, which emphasized the subjective nature of compelling questions. Finally, teachers' willingness to use compelling questions was impacted by personal experience, which influenced the supports they identified as key to successful implementation of the proposed standards. These findings speak to the potential of compelling questions, particularly when included within a state standards document, to influence teachers' curricular and instructional decisions.

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Chapter Five

Discussion and Implications

The main purpose of this study was to examine how high school social studies teachers define and develop questions to support student inquiry. Using a qualitative design influenced by phenomenological principles, I worked with six high school civics teachers from a single Kentucky school district. Teachers participated in three interviews, each of which included a verbal report. In addition, teachers completed a questionnaire, a Question Development Task, and a Question Evaluation Task. I then applied holistic and selective analysis in order to identify essential themes. This analysis was continuous across participants, data sources, and themes. In this chapter, I will expand upon the findings, making connections to relevant literature and my theoretical framework and discussing broader implications of the study. The chapter concludes with recommendations for future research.

Teachers identified questioning as central to inquiry and an important civic skill. In particular, teachers said questions were useful in initiating and advancing inquiry, roles they equated with the two types of questions, compelling and supporting, identified in the Kentucky Academic Standards for Social Studies (KASSS). Teachers identified student relevance and complexity as key attributes of compelling questions but applied these attributes in distinct ways. Teachers' question development processes were heavily influenced by the attributes of student relevance and complexity and were more deliberate than their typical approaches to question development. Although teachers' expressed positive views of inquiry, compelling questions, and KASSS, their willingness

to use compelling questions was impacted, both positively and negatively, by personal experiences.

A major impetus for this study was my curiosity about the relationship between teacher questions and student questions. I operated under the assumption that teachers' understandings of and approaches to questions can impact students' questions. By better understanding how teachers define and develop inquiry questions, I hoped to gain insight into how teachers might use these questions instructionally and the potential of these questions to influence students' social studies experiences. My interest in the broader implications of teachers' use of inquiry questions is supported by my theoretical framework because of the potential of new cultural tools to prompt "fundamental transformation" of a mediated action (Wertsch, 1998, p.45). Figure 5.1 represents the key elements of a mediated relationship – actor, tool, and action.

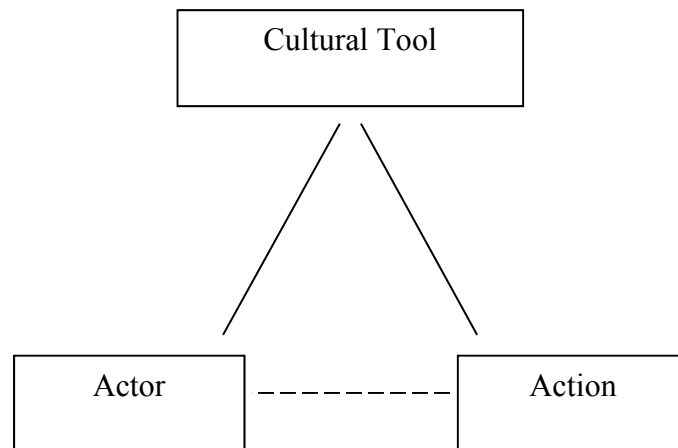


Figure 5.1. Model of mediated action. Adapted from Vygotsky, 1978, p. 40.

Although compelling questions were the primary cultural tool of interest to this study, KASSS and the Inquiry Cycle are additional cultural tools that, individually and in conjunction with compelling questions, may impact the trajectory of teacher action. In

particular, what deserves further consideration is the degree to which these new cultural tools may influence teachers' curricular and instructional decisions. In the following sections, I address these areas through three questions that frame the discussion: (1) Will these tools make inquiry more likely? (2) Will these tools influence curricular choices? and (3) Will these tools increase students' agency?

Will These Tools Make Inquiry More Likely?

This section focuses on the potential of new cultural tools to increase teachers' use of inquiry. Using the language of mediated action, teacher is the actor; compelling questions, the Inquiry Cycle, and KASSS are the cultural tools; and inquiry is the action (see Figure 5.2).

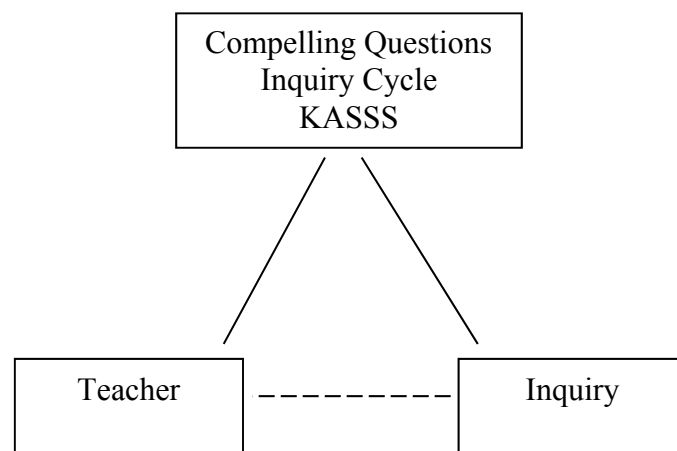


Figure 5.2. Inquiry as mediated action

The three cultural tools present in this mediated action are separate yet reinforcing. Although the tools may independently influence the teachers' uses of inquiry, that influence may be amplified when viewed in relationship (e.g., compelling questions as a practice within the Inquiry Cycle that is included in KASSS). This study suggests that while these cultural tools may reflect teachers' positive views of inquiry and clarify their

understandings of inquiry, the degree to which their practice will be impacted remains unclear. In the following pages, I discuss how increased use of inquiry may be incentivized by the standards document but hindered by teachers' muddled understandings of questions and questioning within instruction.

Inquiry Reinforced by Standards

Mediated action occurs within a cultural-historical context (Wertsch, 1998). In considering the likelihood that teachers will utilize inquiry more frequently as an instructional approach, KASSS is both a cultural tool and an important context for analyzing the potential impact of the cultural tool of compelling questions.

Compelling questions exist outside of KASSS (e.g., NCSS, 2013), and our discussions of inquiry questions preceded our discussion of the KASSS standards; however, the presence of compelling questions within the standards document was key to teachers' thoughts about the viability of the tool. Although teachers talked about the general importance of questioning, the inclusion of compelling questions in the standards document cast questioning as not just a valuable instructional strategy, but more akin to an instructional mandate. Teachers suggested that KASSS's incorporation of compelling questions and the Inquiry Cycle said something about expectations for social studies instruction, which they believed would prompt them, and possibly their colleagues, to teach differently.

Other studies have found that standards documents, particularly when paired with high-stakes assessment, have the potential to influence teachers' decisions (e.g., Fickel, 2006; Mueller & Colley, 2015; van Hover, 2006; Vogler & Virtue, 2007). Standards most frequently impact teachers' content choices and assessment practices. For example,

Fickel (2006) and van Hover (2006) found that teachers tended to emphasize content from the standards that was included on previous state assessments and adjusted their in-class assessments to mirror the types of questions students would encounter on state assessments. Evidence that a standards document influences instructional practices, as suggested by teachers in the present study, is less common (e.g., Grant, 2007; Salinas, 2006). Additionally, in the studies mentioned above, teachers regularly cast standards in a negative light, complaining that standards limited how and what they can teach. Examples of teacher praise, such as Ryn's suggestion that KASSS will create more curricular and instructional freedom for teachers by making it "easier for them to be able to justify" doing inquiry, are unusual.

Several factors may account for these differences. Unlike the standards documents examined in the studies mentioned above, KASSS has yet to be implemented. These teachers were not relaying their actual experiences with KASSS but rather their anticipated, possibly even idealized, experiences with KASSS. It is quite possible that teachers' views of KASSS and compelling questions may change over time. Teachers' enthusiasm may wane as the newness of the tools wears off, especially if teachers struggle to utilize these tools or if they have negative experiences when implementing these tools. Alternatively, if teachers persist through the challenges and gain more experience with the tools, they may feel a sense of mastery (Wertsch, 1998). Molly's experience, in particular, illustrated the potential of experience to foster positive views of these cultural tools.

Secondly, these teachers were selected, in part, because of their positive attitudes toward inquiry, so their positive responses may be more reflective of their "particular

developmental history of experience” (Wertsch, 1998, p. 38) than the affordances of these cultural tools. In other words, because these teachers are more comfortable with inquiry, they may be more likely to identify the benefits of these cultural tools. Teachers acknowledged this potential discrepancy, saying that although the standards seemed to align with their views of social studies instruction that others are “not going to embrace this and [are] not going to do this with their students because you really do have to rethink the way you deliver instruction” (Agatha). This may also be a product of teachers’ ability to appropriate these tools (Wertsch, 1998). Teachers who see inquiry as aligned with their views of teaching may be more capable of “making [the tool] one’s own” (Wertsch, 1998, p. 53) than teachers who sense disconnect between compelling questions and their preferred instructional approaches.

A final factor may be the uniqueness of KASSS as a standards document. As mentioned, KASSS is heavily influenced by the *C3 Framework* (NCSS, 2013), which is cast as “an approach to instructional planning” (Grant, 2013, p. 322) as opposed to a list of curricular content. The authors of KASSS followed this trajectory, leaving the bulk of curriculum development to districts, schools, and teachers (Fraker, 2015); therefore, teachers are less aware of KASSS’s impact on content selection because specific content has not been prescribed. Similarly, because corresponding assessments have not been developed, teachers are less aware of KASSS’s impact on assessment practices. In its current form, KASSS is primarily a pedagogical model, so teachers are only able to anticipate instructional impacts. Because the proposed pedagogical model seems to reflect the instruction to which these teachers aspire, they welcome those impacts.

Inquiry Clarified Yet Still Muddled

Teachers said KASSS will increase their likelihood of utilizing inquiry, either because they sensed the Kentucky Department of Education is encouraging them to do so or because they identified fewer constraints on what and how they can teach; however, it is unclear if this renewed emphasis on inquiry will ultimately influence teacher practice. These cultural tools may provide a vernacular that aids teachers in verbalizing their understandings of inquiry, but crystalized language may not be enough to alter practice. Additionally, even if these cultural tools do influence teacher practice, it is unclear if increased and effective uses of inquiry will result, particularly if teachers do not acknowledge potential gaps in their current approaches to inquiry.

The fuzziness of inquiry contributes to the challenge of analyzing whether or not inquiry will happen. As discussed in Chapter Two, there are various definitions of inquiry within the academic literature, which can make it difficult for educators to grasp the concept despite its prevalence. As Quentin mentioned, “It’s been a buzzword for a long time. People always talk about inquiry-based instruction, but nobody really knows what it is.” Despite the myriad definitions, the literature identifies asking questions, gathering evidence, and developing conclusions as key inquiry practices (Oppong-Nuako, Shore, Saunders-Stewart, & Gyles, 2015), and teachers’ definitions of inquiry tended to include these practices (see Table 4.1). For example, Ryn’s definition included “asking big idea questions and then researching to find the answer,” and Quentin’s definition included, “the investigation and development of a solution to a problem or question.” When teachers were asked to describe how they approach inquiry-based instruction, their examples seemed to align with their definitions and to include the key practices (see

Table 4.2). Molly used increasingly complicated questions to guide students' investigation of a painting, Ryn provided documents related to the Civil Rights Movement, and Quentin's students developed conclusions about the challenges of Reconstruction. Although teachers' examples incorporated questions, evidence, and conclusions, they differed significantly in scope and in their integration of a final element emphasized in the academic literature and their own definitions – students should be central to the inquiry process.

The literature emphasizes that inquiry necessitates “meaningful questions” (Levstik & Barton, 2015), “passion” (Grant & VanSledright, 2001), and “active, persistent, careful consideration” (Dewey, 1933). These descriptors suggest that inquiry is not simply a matter of encountering inquiry practices but applying those practices to topics that matter to students and in ways that allow students to immerse themselves in the experience. This is what seemed to be missing from several of the teachers' examples, as translating a provision of the Magna Carta or reviewing teacher-provided summaries of different Reconstruction Plans does not exude meaningfulness and authenticity. I am not asserting that there is one right way to conduct inquiry; however, it seems these teachers' practice-oriented approaches led them to believe, at least initially, that non-direct instruction in *any* form constituted inquiry, a tendency Barton and Levstik (2004) noted.

A potential benefit of the Inquiry Cycle and its component parts may be vernacular that allows teachers to better identify specific inquiry practices. Additionally, how those practices are explained (e.g., including the term *compelling* and the phrase *students will independently and with others*) may encourage teachers to approach inquiry

in ways that better integrate inquiry practices with meaningfulness and authenticity for students. Nonetheless, it is unclear how much that revised understanding will impact the classroom. Teachers responded positively to the Inquiry Cycle and said it had the potential to positively impact social studies instruction, but teachers provided few specifics regarding how the Inquiry Cycle would alter their instruction. They said the Inquiry Cycle clarified what students should be doing during inquiry and respected language in the document that emphasized shifting responsibility for learning to students, but they were uncomfortable with the implications of that language for their own instruction and students. Teachers emphasized that student relevance was a key attribute to compelling questions, but only Quentin's question specifically included students' experiences, whereas most focused on issues that sounded fairly removed from students' lives (see Table 4.3). Teachers noted the Taking Action practices, but their tendency to view those practices through civic or academic lenses influenced the degree to which they believed those practices would transform their instruction. On the whole, it seems these tools may help teachers recognize the absence of students in their current approaches to inquiry, but awareness of a tool's affordances is not equivalent to being able to use a tool in a way that maximizes those affordances. In other words, these tools may clarify teachers' understanding of inquiry, but that does not mean teachers are any more likely to implement this understanding of inquiry in their classrooms.

These varied interpretations reinforce Wertsch's (1998) assertion that "cultural tools should not be viewed as determining action in some kind of static, mechanistic way" (p. 30). The teachers understood these tools uniquely, and even when presenting similar views, they anticipated using these tools uniquely. So, too, will students,

colleagues, principals, parents, and researchers encounter these tools through their “particular developmental history of experience” (Wertsch, 1998, p. 38). These varied contexts must be considered when evaluating whether or not these new cultural tools increase the use of inquiry-based instruction.

Will These Tools Influence Curricular Choices?

This section focuses on the potential of new cultural tools to influence teachers’ curricular choices. Using the language of mediated action, teacher is the actor, compelling questions is the cultural tool, and curricular choices is the action (see Figure 5.3).

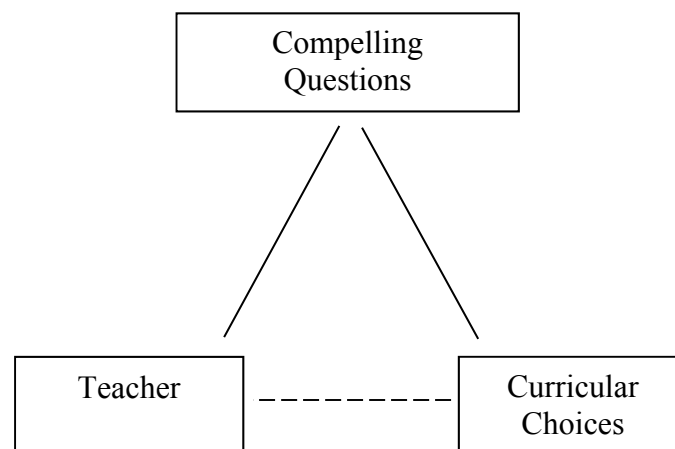


Figure 5.3. Curricular choices as mediated action

As discussed above, literature suggests that a standards document can impact teachers’ curricular decisions. Often, the result is pressure to cover long lists of identified content that seem to sacrifice depth for breadth (e.g., Mueller & Colley, 2015; Vogler & Virtue, 2007). This study suggests that the cultural tool of compelling questions may also impact curricular decisions, though in a significantly different way. The attributes teachers associated with compelling questions, particularly student relevance, may lead teachers to

select different content and alter how they frame content for students. The overall result may be greater intentionality regarding curricular choices. In the following pages, I discuss how the purposes teachers attributed to compelling questions may impede or encourage curricular change and the particular influence of Taking Action.

Contradictions of Purpose

Wertsch (1998) explained that “mediated action typically serves multiple purposes” (p. 32). In assessing the degree to which compelling questions may influence curricular choices, it is important to consider the varying purposes that teachers assigned to compelling questions. These purposes were initially reflected in the traits teachers attributed to compelling questions. Teachers suggested that one purpose of compelling questions was to fashion learning experiences that feel relevant to students. A second purpose of compelling questions was to fashion learning experiences that require students to engage in complex thinking. Additional purposes can be identified when the context is contracted and expanded (Wertsch, 1998). For example, when contracting the context to the Question Development Task, Agatha identified “get familiar with the Constitution” as a purpose of the compelling question. When expanding the context, compelling questions took on broader purposes, such as preparing students for assessments and modeling important civic skills. The potential of compelling questions to influence curricular choices in ways that encourage teachers to push beyond the content typically found in textbooks or on standardized assessments and toward content that better resonates with students depends, in part, on the purposes teachers assign to that cultural tool.

Wertsch (1998) also explained that “these multiple purposes, or goals, of mediated action are often in conflict” (p.32), which may impact the influence of a cultural tool. This conflict is reflected in the traits teachers attributed to compelling questions. Although teachers argued that it is important for compelling questions to possess both student relevance and complexity, there appeared to be some inherent tension between these two goals. Teachers wanted questions to reflect students’ curiosities but also address key disciplinary issues. Teachers wanted questions to be phrased in simple ways but also prompt complicated responses. Rossi and Pace (1998) identified this tension in their own study, citing teachers’ struggle to “develop questions that not only grab student attention, but also open doors that explore meaningful and significant themes that would broaden a student’s worldview” (p. 405). The potential of compelling questions to influence curricular choices is also dependent on how teachers negotiate these conflicting purposes.

This discussion benefits from the application of activity theory because it allows for a deeper examination of the origins and implications of the conflicts within mediated action. Although mediated action and activity theory are distinct, because researchers “increasingly draw upon both traditions...the distinction is becoming increasingly blurred” (Daniels, 2001, p. 85). Second-generation activity theory expands upon the mediated action relationship to more overtly display various cultural and historical factors (see Figure 5.4).

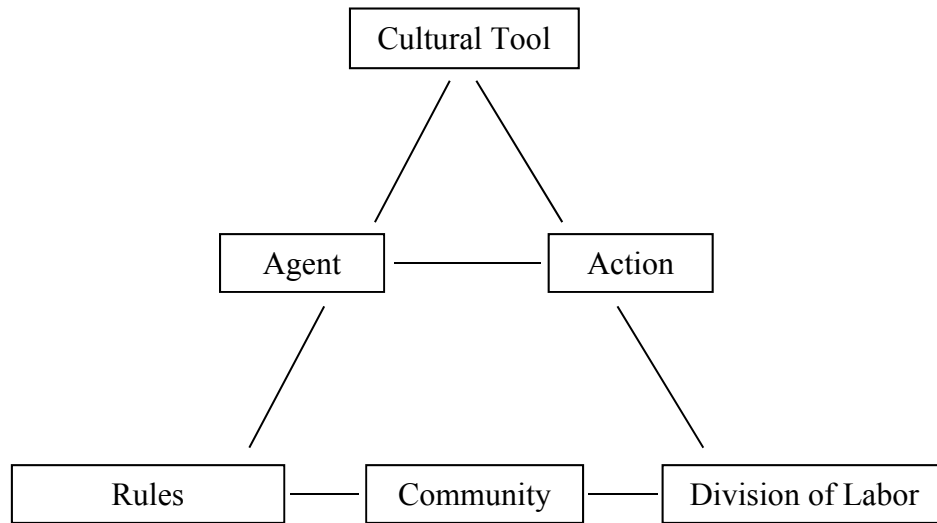


Figure 5.4. Model of second-generation activity theory. Adapted from Engeström, 2015, p. 63.

As noted above, varying purposes may result in conflict. Engeström’s (2015) four levels of contradiction flesh out the potential influence of internal and outward contradictions on activity,

The primary contradiction of activities...lives as the inner conflict...within each corner of the triangle of activity. The secondary contradictions are those appearing between the corners....The tertiary contradiction appears when representatives of culture (e.g., teachers) introduce the object and motive of a culturally more advanced form of the central activity into the dominant form of the central activity....The quaternary contradictions require that we take into consideration the essential “neighbor activities” linked with the central activity (p. 71).

Engeström’s first two levels of contradiction are most pertinent to this study.

Level 1 contradictions. Primary contradictions exist within components of activity. As discussed above, teachers noted numerous purposes for compelling questions, and these purposes occasionally conflicted with each other. Contradictions exist within other components as well. The action of curricular choices may include the purposes of presenting content that is common on standardized assessments, presenting

content that celebrates American values, presenting content that challenges the notion of American exceptionalism, and presenting content the teacher finds interesting.

Additionally, the personal pedagogical philosophy of a teacher may conflict with other sets of rules, such as those of the department, school, or district.

Level 2 contradictions. Secondary contradictions exist between components of activity (e.g., the purpose of the cultural tool may contradict the rules governing the activity). A number of potential secondary contradictions are present in the activity of curricular choices. A compelling question's promotion of student relevance may conflict with pacing guides (rules), the tradition of teachers determining what they teach (division of labor), and preparing students for common assessments (action). A compelling question's promotion of complexity may conflict with the prevalence of multiple-choice exams (rules) and students' experience with required skills (division of labor).

The impact of contradictions. Examining the Question Development Task shed light on the influence of contradictions on the activity of curricular choices. Teachers attempted to negotiate primary contradictions related to the purpose of compelling questions throughout the question development process. One strategy was their tendency to use one attribute as a starting place and then revise their compelling question to better reflect the second attribute. For example, Molly began by considering what issues her students might care about and revised her question so that it was more likely to engender a variety of evidence-based arguments. Calvin began by identifying topics with which students had historically struggled and revised her question in hopes it would "make them want to learn this." The inconsistency in teachers' responses to the Question Evaluation

Task (see Table 4.5) further highlighted the challenge of developing a compelling question that adequately fulfills these purposes.

The Question Development Task reflected secondary contradictions as well. Using some configuration of content standards as a starting point, the question development processes employed by Calvin, Quentin, and Ryn illustrated a potential contradiction between standards (rules) and compelling questions (tools). Molly's and Agatha's attempts to fashion a question inspired by their own interests into a question that would capture students' interests reflected a potential contradiction between teacher-selected content (division of labor) and compelling questions (tools).

Both of these secondary contradictions represent significant barriers to the potential of compelling questions to influence curricular choices. The products of the Question Development Task illustrated these barriers (see Table 4.3). Although several of the teachers used this opportunity to develop questions centered on content that may challenge traditional curricular themes, some struggled to present this content in accessible ways. Elizabeth and Agatha provide a nice comparison. Elizabeth developed the question "Who did the founders mean by 'we the people'? Did they really mean all people or just some?" Agatha developed the question "How did the exclusion of minority voices at the Constitutional Convention shape, alter, or change the Constitution itself as well as events in history?" Both of their questions challenge a traditional content theme of American exceptionalism by examining the intentions of the Constitution's authors. In this way, they both seem to be making different curricular choices; however, Agatha's question sounds much more like a typical teacher question. Teachers understood student relevance to mean the topic of the question and the phrasing of the

question, but few of the teacher-developed questions seemed to take the second element to heart. As discussed in Chapter Four, teachers acknowledged the subjectivity of compelling questions, and a contributing factor to subjectivity was different understandings of what it means for a question to be student-friendly. Teachers who emphasized the language element of student-friendly criticized certain questions for being overly thick, whereas others believed simply-stated questions would prompt simple answers. It is unclear how important the inclusion of student-friendly language is to the ability of compelling questions to influence curricular choices, but if success is predicated on students' abilities to perceive changes in the curriculum, then teachers will need to seriously consider not just the content they select but also how they frame content for students.

Contradiction as innovation. Engeström (2015) argued that contradictions prompt change, so even though there appear to be constraints regarding the potential of compelling questions to influence curriculum decisions, those contradictions, in many ways, may present a way forward from current challenges in social studies education.

Although the purposes of compelling questions may come in conflict with content standards and assessments (e.g., the purpose of student relevance may conflict with the purpose of a district curriculum map and corresponding assessments), these requirements are a reality of schooling that cannot be ignored. Advocates of questions as a method of centering instruction argue for their potential to bridge these mandates with issues of greater importance to students. Grant's and Gradwell's (2010) description of "questions that students can embrace" (p. 187) and Caron's (2005) list of questions that "provide more purposeful learning experiences" (p. 52) are not designed to ignore traditional lists

of content or cede all content selection to students. Rather, they attempt to make the curriculum more accessible to students. Ryn's comment that "they're going to be dealing with all that stuff that they think is really interesting, but in order to understand it, they're going to have to get that other content" acknowledged the potential of compelling questions to fulfill this objective. It is important to note that none of the teachers identified compelling questions as an impetus to change what they traditionally teach. Instead, they valued compelling questions as a way to engage students so that it becomes easier to, as Ryn said, "teach the things they don't really necessarily like but need to know."

Although not particularly revolutionary, such a shift in approach appears to be a worthwhile innovation. Compelling questions seemed to push these teachers to think more intentionally about aspects of required content that most appeal to students. Compelling questions also seemed to push these teachers to think more intentionally about the various ways content could be framed for students. To use Schwab's (1973) language of curricular commonplaces, compelling questions led teachers to be more considerate of the learner commonplace. As implemented by these teachers, compelling questions may be an effective way to avoid the perils of over and under emphasis of the learner commonplace. Teachers' concern with student relevance guarded against a curriculum in which "students have no interest or control," (Ricketts, 2013, p. 32) while their focus on complexity guarded against a curriculum that is "not unified" and "frivolous" (p. 32).

Compelling questions may also be a way to balance the various commonplaces, particularly the subject matter common place and the learner commonplace. Compelling

questions allow for the selection of content that is rooted in the disciplines, but teachers may approach that content from an angle that is more considerate of students. Molly noted this potential, “That question, ‘economic, social whatever,’ doesn’t work. With ‘Why vote?’ it’s addressing those [topics] and works like a charm.” For Molly, this relatively slight adjustment made a significant difference. Attempts to approach the same content from a different angle were present in teachers’ Question Development Tasks as well. Quentin’s first draft was “What protections are provided by the Bill of Rights?” He believed his final version, “Describe how the United States would look without the Bill of Rights. How would you as a citizen be affected?” helped students better connect with the material. Calvin’s first draft was “How does the U.S. Constitution exemplify a social contract?” She believed her final version, “What is a more important charge of the government, to protect individual rights or maintain order?” was more likely to engage students and engender conversation. None of these cases represent significant changes in content but rather adjustments to how content is framed.

Willingness to alter how content is framed might also be considered a shift in teachers’ pedagogical content knowledge. Teachers worked with the same broad content, but the introduction of a new pedagogical tool may have influenced their “understanding of how particular topics, problems, or issues are organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction” (Shulman, 1987, p. 8). As discussed above, teachers appreciated compelling questions not because they drastically altered the curriculum but because they encouraged them to approach the curriculum differently. In particular, teachers believed compelling questions would force them to think more intently about student relevance. This was not always an easy

process. Teachers developed a compelling question about the Constitution, which may be considered a text already imbued with “pedagogical layers” (Segall, 2004, p. 492), especially if deemed foundational to a civics course. Some teachers struggled to apply the tool of compelling questions to this particular topic, possibly because of the weight of these layers. As Molly explained, “What’s compelling about the Constitution? It’s not that the Constitution isn’t compelling. The Constitution is a compelling document, but you study it so much in a very basic way.” It is possible that the impact of this tool on pedagogical content knowledge is dependent on the context in which it is applied.

The Civic Purpose of Compelling Questions

As discussed in Chapter Four, teachers were given an opportunity to view the KASSS questioning standards within the context of the Inquiry Cycle. After doing so, teachers commented that a compelling question needs to be capable of moving students through each of the identified practices, including Taking Action. The Inquiry Cycle included in KASSS is heavily influenced by the Inquiry Arc of the *C3 Framework* (NCSS, 2013), which described this practice as,

opportunities to adapt and apply their work in the disciplines that constitute the social studies in order to develop the skills and dispositions necessary for an active civic life. In this respect, civic engagement is both a means of learning and applying social studies knowledge. (p. 59)

Approaching compelling questions with this conception of Taking Action seems more capable of influencing teachers’ curricular choices, as content would need to be selected and framed in such a way that civic action is both pertinent and possible. Teachers made strong arguments as to the civic mission of social studies. They emphasized the ability of inquiry to foster civic dispositions and the importance of questioning among civic skills. Nonetheless, when discussing an element of the standards that specifically reflected these

civic ideals, most teachers shied away from taking up that mantle. Instead, these teachers interpreted Taking Action through an academic lens, characterizing that inquiry practice as typical classroom behavior such as participating in class, which seems less likely to alter the content teachers would select or the compelling questions teachers would craft to frame content.

A reason for the difference in interpretation may be how action is presented in both documents. The *C3 Framework* uses the term Taking Informed Action and includes a series of indicators that specifically flesh out elements of Taking Informed Action – understand, assess, and apply (p. 62). *Informed* is not present in the KASSS phrasing. Additionally, the standards “address options of individuals and groups to identify and apply a range of strategies and complex reasoning to take public action or propose a solution” and “engage in disciplinary thinking used by social scientists” are grouped under the Taking Action heading (see Figure 3.1). As presented, teachers may see these standards as fulfilling the same purpose in a classroom, which may account for teachers’ tendency to provide examples of in-class behaviors or disciplinary skills when describing Taking Action. This understanding of Taking Action seems less capable of influencing teachers’ curricular choices, as reflected in the compelling questions teachers developed.

Although teachers were not asked to consider Taking Action during the development process, they were asked how they would use these compelling questions with students, and none mentioned experiences that would align with the *C3 Framework’s* depiction of Taking Action. After viewing the Inquiry Cycle, teachers mentioned the need to rework their questions to address Taking Action, but only Molly and Ryn remarked that opportunities for civic action would need to be considered.

Because this study focused on civics teachers, it is particularly surprising that participants did not seem to recognize or take advantage of opportunities to more fully reflect civic action, of which they spoke so eloquently, through their compelling questions.

Will These Tools Increase Students' Agency?

This section focuses on the potential of new cultural tools to influence opportunities for students to exercise agency. Using the language of mediated action, teacher is the actor, compelling questions is the cultural tool, and opportunities for students to exercise agency is the action (see Figure 5.5).

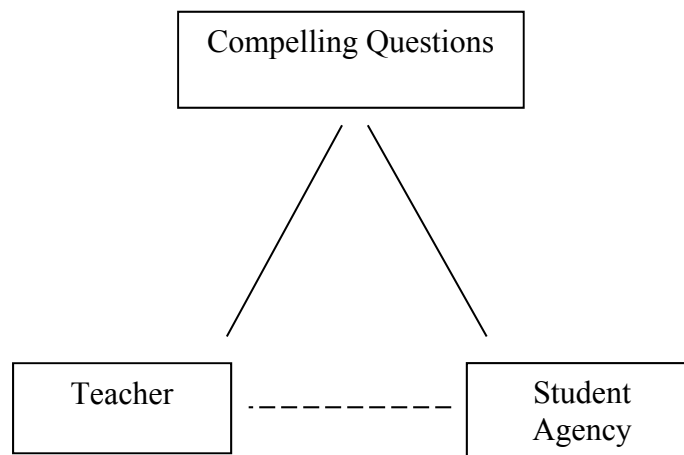


Figure 5.5. Opportunities for student agency as mediated action

Bandura (2001) defined agency as the ability to “intentionally make things happen by one’s actions” (p. 2). Student agency can take various forms, but the element most pertinent to this discussion is the influence of student voice on the curriculum. Wertsch (1998) argued “it’s not as if cultural tools, in and of themselves, operate as independent, causal factors, but they can have a potent effect on the dynamics of human action, including the power and authority relationships involved in it” (p. 65). This study suggests that teachers’ use of compelling questions may influence the ability of students

to exercise power and authority in the classroom but in rather limited ways. In the following pages, I discuss teachers' willingness to enlist students as partners in curriculum development and briefly address the potential of Taking Action to advance other facets of student agency.

Students as Partners

The potential for compelling questions to create opportunities for student agency is closely connected to the potential for compelling questions to influence teachers' curricular choices. As discussed above, compelling questions may influence the content teachers choose to address as well as the way they frame content. Should teachers pay particular attention to the attribute of student relevance, the result may be compelling questions that make curriculum more accessible to students, both in topic and in tone. However, crafting a question related to a topic teachers believe will appeal to students, even if written in student-friendly language, is not equivalent to opportunities for students to influence the curriculum itself.

Allowing students to create compelling questions seems like the most direct way for students to influence the curriculum, but teachers clearly and consistently communicated concerns with this approach. Quentin was the most vocal of the teachers,

I've honestly never even thought about having students do their own questions or inquiry before. I don't even know how I would approach that, honestly....having completely student led inquiry, giving them a topic and having them come up with it. I tend to shy away from giving kids that much control because that terrifies me because I'm afraid of what I'd get back.

Some teachers doubted students' abilities to craft compelling questions because they believed students did not understand the attributes that were required of such a question. Other teachers believed students did not possess the requisite content knowledge to

develop a compelling question. Either way, these teachers were uncomfortable with this opportunity for student agency. This hesitancy was reflected in the Question Development Task. Beyond considering what students had enjoyed in the past, none of the teachers directly engaged students as part of the Question Development Task. I did not communicate such an expectation, but neither did I discourage it, as I asked teachers to approach the task in the way that made the most sense or felt most natural to them. If teachers believed student input was important, they could have gathered it.

Teachers from other studies have also expressed appreciation for student questions while simultaneously doubting students' abilities to craft quality questions. Rop's (2002) investigation of a science teacher found that even though the teacher wanted to "honor student questions" (p. 717), he only "value[d] and actively encourage[d] the student questions that naturally [went] with the flow of his lesson plan and [were] well tuned to his specific lesson content objectives" (p. 725). Similarly, Mueller (in press) explored contradictions in two social studies teachers' suggestions that students' questions needed to be respected as their entry points into content and their suggestions that students were unprepared to develop questions. In both cases, teachers' qualms originated from concerns that students' questions would detract from their responsibilities to cover required content and prepare students for assessments. Despite the current exclusion of civics from Kentucky's assessment system, the teachers in this study felt similar content and assessment pressures. Some mentioned implicit or explicit expectations to prepare students for the future U.S. history assessment, while others referenced the wide array of content traditionally associated with the civics course (e.g., political systems, rights and responsibilities, geography, economics). These factors

indicate that teachers are unlikely to pursue this most direct relationship between compelling questions and student agency.

Teachers' concerns about students' abilities as questioners are not unfounded. The literature suggests that students need substantial support throughout the inquiry process, including during the questioning phase (e.g., Levstik & Barton, 2015). Additionally, the literature suggests that explicit instruction around questioning is key to building students' skills in this area (Chin & Osborne, 2008; Ciardiello, 1998; Cuccio-Schirripa & Steiner, 2000). Engaging in inquiry centered on teacher-developed compelling questions may serve this purpose, particularly if teachers discuss with students the strengths of those questions and the steps they took to develop those questions. Molly specifically mentioned the instructional value of modeling her question development process, "It showed them that questions are not perfect the first time. It doesn't get the right kind of response you want the first time, so you have to go back and redo that." Teacher-developed questions may be considered a form of scaffolding that can gradually come down as teachers become more confident in students' questioning abilities.

Although entrusting students as question developers did not emerge as a viable outcome, at least not immediately, of compelling questions, the study did reveal willingness to share control over the curriculum with students. When discussing the inclusion of *collaboratively* in the standards, some teachers did address the possibility of partnering with individual students or groups of students to develop compelling questions. This approach to question development lends itself to opportunities for students to exercise agency over the curriculum, as it steps away from "banking

education” (Freire, 1970/2003, p. 72), in which “students are the depositories and the teacher is the depositor.” (p. 72). Friere argued the importance of people “feel[ing] like masters of their thinking by discussing the thinking and views of the world explicitly or implicitly manifest in their own suggestions and those of their comrades” (p. 124); therefore, students should have substantial authority over the curriculum instead of teachers deciding what students should learn or guessing what students want to learn. Marker (2000) found this particularly possible in social studies if teachers take “the problems and needs of students themselves as the *starting point* [emphasis in original]” (p. 139) of curriculum. He continued,

By grounding the social studies curriculum in experiences of students and their political, economic, social, and cultural settings, teachers enable students to attach the experiences they bring to the class to the concepts and themes of the social studies curriculum. . . . Integrating student experience into the curriculum can be done only when students are given the opportunity to plan what they will learn with the teacher. Student experience will not become an integral part of the curriculum if students do not have a hand in determining and planning what will be studied. (p. 139)

Teachers illustrated the potential for compelling questions to serve as a tool through which teachers “can plan with students rather than for students” (Marker, 2000, p. 139). Elizabeth and Molly began their question development processes by considering students’ interests. Molly revised her question in real time based on students’ responses. Although the product of Agatha’s Question Development Task was spurred primarily by her own interests, the question provided on the questionnaire, “Why would people from other countries view the United States in a negative light?” was a direct response to a student’s curiosity. Teachers emphasized that a compelling question must be compelling *to students*. If taken seriously, that understanding could provide opportunities for students to exercise agency over the curriculum.

Simply adopting the approach of using questions to introduce instruction and shape students' learning experiences could be transformative because it seems to shift the nature of the experience. Presenting students with a compelling question may signal a dialogic as opposed to a didactic learning experience. According to Nystrand, Gamoran, Kachur, & Prendergast (1997), "In dialogic instruction, there is more give-and-take between teachers and students....Students not only answer questions; they also make points and contribute to discussions....Knowledge is something generated, constructed, indeed co-constructed in collaboration with others" (p. 17). The authors identified authentic questions as a valuable way to promote dialogic instruction. Similar to compelling questions, the authors described authentic questions as "questions for which the asker has not prespecified an answer" (p. 38). The authors contended that authentic questions "signal to students the teacher's interest in what they think and know and not just whether they can report what someone else thinks or has said" (p. 38). When teachers use compelling questions to frame content, students may hear the teacher saying, "I am not sure what the answer is, so let's figure this out together."

Questions and Action

The degree to which teachers consider Taking Action during question development may also influence the ability of compelling questions to provide opportunities for student agency that go beyond influencing the curriculum. As Molly and Ryn articulated, for a compelling question to fulfill the expectations of the Inquiry Cycle, which includes Taking Action, a question must lead students to "do something and not just talk about it or write an essay about it. They have to actually go do something outside of the classroom" (Ryn). Both Molly and Ryn agreed that the products of their

Question Development Task did not sufficiently address Taking Action, but they anticipated they would more consciously consider the civic nature of compelling questions in the future. Should Molly and Ryn succeed in modeling this type of question, they may contribute to a learning environment in which “students begin to learn how to develop questions and gather information in ways that enable them not only to better understand society but also to change it” (Hursh & Ross, 2000, p. 10). Holdsworth (2000) argued that such experiences foster student agency by nurturing “the capacity and willingness to act upon one’s learning – to produce something of value, to be valued and to value one’s self as someone who can make a difference” (p.353). In our early conversations as to the role of questions in social studies, this is the type of question teachers identified – questions that challenge the status quo, lead to a better understanding of others, and prompt consideration of ways one can induce change in the world. Teachers wanted students to ask powerful questions and to act on those questions, but most did not, at least at this point, craft compelling questions in ways that supported these broader civic goals.

Implications

Kentucky provided a unique context for this study because of the recent development of standards that specifically incorporate questions and inquiry. Although findings from the present study suggest broader implications, the implications are most immediate for this local context, particularly as Kentucky moves forward with the Kentucky Academic Standards for Social Studies (KASSS). This section focuses on issues the Kentucky Department of Education (KDE) and teacher educators within Kentucky need to consider in hopes of easing the stumbling blocks to effective

implementation of KASSS; however, these implications could also impact other schools, districts, or states that incorporate similar constructs (e.g., compelling questions, Inquiry Cycle) into their curricular and instructional frameworks.

Implications for the Kentucky Department of Education

As curricular-instructional gatekeepers, teachers are essential to the outcomes of new policy initiatives (Thornton, 2005). Spillane, Reiser, and Gomez (2010) asserted, “implementation hinges on whether and in what ways local implementing agents’ understanding of policy demands impacts the extent to which they reinforce or alter their practice” (p. 47). This study examined how a small group of high school civics teachers understand selected elements of KASSS. Although their interpretations cannot adequately reflect the views of all Kentucky teachers, their insights are pertinent to KDE’s implementation efforts.

In a broad sense, there appears to be consistency in how these teachers understand inquiry and compelling questions; however, that consistency dissipates when teachers discuss the specifics of implementing these concepts. If KDE desires greater coherence in implementation, they will need to provide guidance beyond the KASSS document. Teachers expressed this sentiment. They interpreted KASSS as a step toward greater curricular and instructional freedom and appreciated that move, but they were concerned about sufficiently fulfilling the goals of the standards and did not want to be left to flounder. This support will be especially important for teachers in small districts. In some schools, one teacher constitutes the entire social studies department and may not have the same access to collaboration that teachers in the present study considered essential to success.

As discussed in Chapter Four, teachers identified a number of desired supports. Examples included sample compelling questions, possible question stems, and videos of inquiry in practice. Although each teacher identified these supports as valuable, they disagreed as to how prescriptive those supports should be. Calvin preferred more substantial guidance that would keep teachers, schools, and districts on the same page. Elizabeth preferred minimal guidance so teachers, schools, and districts are better able to adapt the tools to their individual contexts. Molly also cautioned against extensive guidance because she believed teachers may grow dependent and not take ownership over the process. Depending on their goals for implementation, KDE may have to walk a fine line between too much and too little support.

The Connecticut Elementary and Secondary Social Studies Frameworks (CSDE, 2015) offer a model of potential supports. This document includes guidelines for a compelling question, describing it as a question that “a specialist studying that era or subject would ask...is written in student-friendly language...[and] will excite students about the subject being studied” (p. 5). Additionally, the document includes “a list of course compelling questions that should guide instruction and research in that particular course or grade” (p.7). Examples of compelling questions attached to the high school civics and government course include: What does it mean to be a citizen? Are deliberation and compromise necessary for political decision-making? How do laws both shape and reflect economic decision-making? and What are the relationships between government decisions, geographic placement, and individual needs? (p. 101-110).

KDE created a similar resource. Considerations for Curriculum Development documents are available for each grade or course (Fraker, 2015) and include summative

grade level compelling questions, contextual inquiries by discipline, and possible compelling questions attached to key disciplinary ideas (KDE, 2015a.). Although a high school civics course is not specifically included, the Considerations for Curriculum Development document most reflective of the content my participants currently teach is identified as High School Option 1: Comparative Studies. Table 5.1 provides examples of the three types of questions listed above.

Table 5.1

Selected Compelling Questions for Comparative Studies Course

Question Type	Examples
Summative Compelling Questions	<ul style="list-style-type: none"> • How is the world connected? • What does it mean to be a citizen of a country? • How is scarcity a global issue?
Contextual Inquiries by Discipline	<ul style="list-style-type: none"> • What forms of government can be seen across the world? • How do various countries deal with questions about production, distribution, and consumption? • What is the significance of political boundaries?
Compelling Questions for the Key Idea “civic engagement is highest in developed countries”	<ul style="list-style-type: none"> • Is the purpose of all governments to meet their citizens’ needs? • How do governments influence their citizens’ actions? • Is there a global responsibility to protect human rights?

There are several reasons why I doubt the usefulness of this document for teachers. It includes a substantial number of compelling questions, but, unlike the Connecticut Frameworks, it does not include guiding principles on what constitutes a compelling question. Although I might challenge the degree to which the questions provided by CSDE meet their identified criteria, especially in the areas of “student-

friendly language” and “excite students”, it does attempt to provide some clarity as to the attributes of a compelling question. KDE’s document includes neither guiding principles nor explanations as to why their examples should be considered exemplars. Considering the variety of compelling questions presented, it is possible a teacher might review this document and assume that *any* question is a compelling question. It also lacks guidance regarding how these compelling questions could be translated into classroom practice, which is the support participants most desired. Teachers felt pretty comfortable with their abilities to create compelling questions, but they were far less confident in their abilities to bring the questions to life in their classrooms. Although it may be difficult to develop these materials prior to KASSS’s formal implementation, KDE should work diligently to create case studies and video examples of teachers’ effective use of compelling questions. Such resources would not only allow KDE to articulate the attributes of a compelling question but also emphasize, as Agatha noted, that a compelling question is just one of many factors influencing an inquiry’s success.

Additionally, KDE should be particularly cognizant of doubts teachers may have about the ability of all students to conduct inquiry. In an investigation of teachers’ implementation of rigorous math standards, Spillane (2001) found that teachers’ views about students’ abilities influenced their approach to policy implementation, which resulted in a prevalence of teacher-centered instruction with students deemed less capable. Spillane explained, “When it comes to providing all students with opportunities to engage with a more demanding curriculum, this account suggests a tremendous gulf between the rhetoric of reform, on one hand, and local practice and rhetoric, on the other” (p. 235-236). It is unlikely teachers in the present study are unique in their hesitancy to

trust students, particularly those considered struggling, to ask and investigate compelling questions; therefore, it is especially important for KDE to show teachers what inquiry looks like in various classroom settings.

Implications for Teacher Educators

Another desired support teachers noted was time to collaborate with colleagues, to observe colleagues, and to experiment in their own classrooms. Time is a scarce resource in most schools, but teacher preparation programs may be more accommodating. Ideally, teacher educators will provide substantial time for pre-service teachers to practice developing compelling questions and designing instruction around compelling questions. These experiences could also allow pre-service teachers to think deeply about factors that influence their curricular choices, examine the relationship between curriculum and instruction, and participate in collaborative planning. These exercises could stand alone or be integrated with a traditional unit plan assignment. If completed in conjunction with cooperating teachers, these exercises could also serve as valuable professional learning opportunities for in-service teachers.

Time to build these skills is essential, but teacher educators should also introduce pre-service teachers to helpful resources that model compelling questions. The Big History Project describes itself as an interdisciplinary world history course that “helps students see the overall picture and make sense of the pieces: it looks at the past from the Big Bang to modernity, seeking out common themes and patterns that can help us better understand people, civilizations, and the world we live in” (Big History Project, n.d., p. 1). Their curriculum is composed of ten units, each of which is situated around a “driving question” (p. 2). As examples, the driving question for the Early Humans unit is

“What makes humans different from other species?” and the driving question for the Acceleration unit is “To what extent has the Modern Revolution been a positive or negative force?” (p. 2). The lesson resources include “investigations” into the driving questions (p. 3). By examining The Big History Project, pre-service teachers may gain a better understanding of the value of structuring instruction around questions, how questions can be used to organize vast amounts of curriculum, and methods for implementing those questions in the classroom.

The Inquiry Design Model (Grant, Lee, & Swan, 2015), developed by the lead writers of the *C3 Framework*, provides a one-page blueprint for designing an inquiry that incorporates elements from the *C3 Framework’s* Inquiry Arc, many of which are also included in KASSS’s Inquiry Cycle. An asset of the blueprint is the inclusion of “staging the question,” which can prompt teachers to think more intentionally about student relevance. More valuable for pre-service teachers, however, are the inquiries developed using IDM for the New York State Social Studies K-12 Resource Toolkit Project (NYSED, 2015). The narratives accompanying the inquiry blueprints articulate the rationale behind the various elements of the inquiry, including the compelling question. Although designed to “avoid over-prescription” (Grant, Lee, & Swan, 2015, p. 1), the narratives do provide some guidance as to how the inquiry may be implemented in classrooms. This could be particularly beneficial for novice teachers who are less able to translate ideas into practice.

Teacher educators should also introduce pre-service teachers to resources that may increase their comfort with student-developed questions, such as the Question Formulation Technique (Rothstein & Santana, 2013). Although QFT is designed to

foster student questioning, teachers are an important part of the process, which may allay some teachers' concerns. QFT outlines a clear, consistent structure used to assist students as they produce, improve, and prioritize questions. Teachers provide the QFocus, which prompts students' questions, and the criteria for prioritizing questions. Both of these allow the teacher to establish a purpose for questioning and influence the outcome of questioning while still encouraging and respecting students' curiosities. If provided with suitable resources and experiences within their teacher preparation programs, new teachers may be better prepared to implement the vision for social studies outlined in KASSS.

Suggestions for Future Research

Teachers' development and use of compelling questions requires further exploration to better understand the potential of new cultural tools to impact social studies instruction. This study indicates several areas for future study:

- the dynamics of an individual's question development process as compared to a collaborative question development process,
- the potential of structured exercises (e.g., Question Development Task) to strengthen teachers' facility with inquiry,
- the potential impact of teachers' use of compelling questions in classroom settings on their understanding of compelling questions,
- the potential of a state standards document to foster cohesion regarding teachers' understanding and practice of inquiry.

In addition to the above recommendations for research, since this study focused on a small group of ninth-grade civics teachers from a single Kentucky school district,

additional studies that examine teachers from other districts, both inside and outside of Kentucky, as well as other subjects would be valuable.

Conclusion

This study examined how high school social studies teachers define and develop questions for inquiry. Using a qualitative design influenced by phenomenological principles, I worked with six ninth-grade civics teachers from a single Kentucky school district to examine their understandings of inquiry and questions, particularly within the context of the newly developed Kentucky Academic Standards for Social Studies. Analyzing interview transcripts as well as several teacher-completed tasks, I found that teachers characterized questioning as an inquiry skill and a civic skill, identified student relevance and complexity as attributes of compelling questions, focused on these attributes during their question development process, and were influenced by their personal experiences with inquiry and questions. These findings shed light on the potential of compelling questions to influence teacher's curricular and instructional decisions and suggest several points for future research as well as more immediate considerations for policy makers and teacher educators within Kentucky. With the proper supports, these cultural tools may assist teachers in taking great strides toward the long-desired goal of making student inquiry a common feature in social studies classrooms.

Appendix A

Teacher Questionnaire

Thank you for your willingness to participate in this study. The first part of the questionnaire focuses on questioning and inquiry. It is composed of open-ended items that ask you to describe your opinions of inquiry, your experiences with inquiry, and a specific teaching event. The second part of the questionnaire focuses on your teaching experience. These open-ended items ask about your years of teaching and the content you typically cover in your ninth-grade civics class.

Your views are important so please answer the questions as fully as possible (the boxes will expand to fit your responses). Your responses are confidential and will not be used for purposes outside of this research. If you feel uncomfortable answering a question, please reserve your right to skip that question and continue.

Part 1: Inquiry and Questions

1. Teachers are often told to develop inquiry-based instruction. When you think about inquiry, what do you understand that term to mean?

2. What kinds of inquiry have you used in your social studies instruction?

3. What is a question you have used in class that succeeded in sparking student interest?

4. Why do you think the question mentioned in Item 3 worked so well?

Part 2: Teaching Experience

5. For how many years have you taught social studies?

6. For how many years have you taught the ninth-grade civics course?

7. What are some topics that you typically cover in the ninth-grade civics course?

8. Are you willing to be interviewed further about your responses?

9. If you responded “yes” to Item 8, please provide your name.

10. If you responded “yes” to Item 8, please provide days of the week and times that are most convenient for you.

Appendix B

Interview 1 Protocol

Opening: Ask participant to provide a pseudonym that will be used from this point forward. Introduce the purpose of the study. Explain that along with the interview, they will be asked to talk aloud about three quotes. Explain that at any point they may ask a question, ask for me to rephrase/repeat a question, or request that the interview be concluded.

1. Tell me about your path to becoming a teacher.
 - a. What drew you to teaching?
 - b. What drew you to social studies?
 - c. What do you consider the purpose of social studies?
 - d. What do you consider the purpose of a civics course?
 - e. What do you consider your primary goals for students?
2. On the questionnaire, you defined inquiry as _____. What led you to that understanding?
 - a. Have you received any official training on inquiry?
 - b. What were those experiences like?
3. Under what circumstances do you think inquiry is a good instructional approach?
 - a. Describe a time when inquiry has worked especially well with your students.
4. Are there any factors that discourage you from doing inquiry with your students? Why do these factors discourage you?
 - a. What steps have you taken to try to address these factors?
5. If I visited your classroom on a day when students were engaged in inquiry, what would your students be doing?
 - a. Why do you feel these exercises are important?
6. What purposes do you think questions serve in a social studies classroom?
 - a. Under what circumstances do you pose questions to your students?
 - b. Under what circumstances do students pose questions for use in class?
 - c. How important do you think questions are to a successful inquiry?
7. On the questionnaire, you listed _____ as a question that sparked interest in your students. How was that question developed?
 - a. What factors do you consider when you develop questions to use with students?
 - b. What is your process for developing questions to use with students?
 - c. How would you explain to a student the traits of an inquiry-worthy question?

8. I'm going to provide you with three quotes to use for a talk-aloud exercise. Please read the quote aloud and then verbalize your thinking around the quote. In essence, you should say aloud whatever goes through your head.
 - a. Repeat process with quote #2.
 - b. Repeat process with quote #3.

9. Do you have any thoughts about inquiry or questions that we have not covered today that you would like to share?

Appendix C

Interview 2 Protocol

Opening: Remind participants of the purpose of the study. Explain that along with the interview, they will be asked to talk aloud about two standards from the Kentucky Academic Standards for Social Studies (KASSS). Explain that at any point they may ask a question, ask for me to rephrase/repeat a question, or request that the interview be concluded.

1. It's important that I represent your thoughts as well as I can, so I'd like to share some ideas that I took away from our previous conversation and give you an opportunity to review them.

During our last interview we talked about your views of and experiences with inquiry. Drawing from your comments, I generated the following description _____. Would you like to revise, correct, or add to that description in any way?

Repeat with other concepts from previous interview (e.g., questions, the relationship between questions and inquiry)

2. Remind them how a talk-aloud works.

Today's talk-aloud will be prompted by two standards from KASSS. I'll give them to you one at a time. Please read the standard aloud and then verbalize your thinking around the standard. In essence, you should say aloud whatever goes through your head.

- a. Repeat process with standard #2.

3. Pose retrospective prompts

- a. Have you received any training related to Kentucky's proposed social studies standards? Describe those experiences to me?
- b. What does the word "compelling" mean to you?
- c. What does the word "supporting" mean to you?
- d. What do you see as the primary difference between the types of questions outlined in the standards?
- e. What does the word "collaboratively" mean to you?
- f. Are there circumstances when you think teachers should be developing these types of questions?
- g. What does "key disciplinary concept" mean to you?
- h. What does "enduring issue" mean to you?
- i. What do you think of the decision to include questions in the standards?

4. How do these standards correspond with your views of inquiry?

5. How do these standards correspond with your views of social studies?

6. What do you see as the instructional uses of compelling questions?
 - a. Have you been utilizing this type of question in your classroom?
 - b. What are the benefits of incorporating compelling questions into your instruction?
 - c. What are the challenges of incorporating compelling questions into your instruction?

7. Do you have any additional thoughts about the standards we reviewed today that you would like to share?

Closing: Describe the Question Development Task participants are asked to complete prior to the next interview. Things to emphasize:

- Develop a question that meets your understanding of a compelling question.
- I picked a topic that all participants listed as being addressed in their civics curriculum.
- You can approach this topic however you want – it could deal with the Constitution as a whole document, a particular piece of the Constitution, a Constitutional issue, etc.
- Approach this task in the way that makes the most sense and feels the most comfortable to you. We're going to talk about your process next time, which is why I'm providing this form. Hopefully it will trigger your memory a bit.
- You can complete this form as you develop the question or after you develop the question. You can use just this form or include any other "stuff" you might accumulate as you develop the question.
- Remember, I'm not looking for a particular type of question or for a particular approach to developing the question – I just want to learn about what you naturally do.

Appendix D

Question Development Task Template

Before the next interview, please complete the following.

- 1) Keeping in mind what the term means to you, develop a *compelling question* that would be appropriate for an inquiry related to the Constitution.
- 2) Determine how you would use that compelling question in your classroom.

Please approach this task in whatever way is most comfortable and natural for you. Below is a guide for summarizing your question development process. Should you choose, you are welcome to compile additional notes.

I started by...		
Drafts of the question...		
I ended up with...		I would use this question...
Resources I consulted...	Challenges I encountered...	Factors that influenced me...

Appendix E

Question Development Task: Calvin

Question-Development Task

Before the next interview, please

- 1) Keeping in mind what the term means to you, develop a *compelling question* that would be appropriate for an inquiry related to the Constitution.
- 2) Determine how you would use that compelling question in your classroom.

Please approach this task in whatever way is most comfortable and natural for you. Below is a guide for summarizing your question-development process. Should you choose, you are welcome to compile additional notes.

<p>I started by...</p> <p>Looking at the standards and reading through the C3 framework. I then turned to my curriculum map to choose a topic that my data shows students have struggled with during this unit. This was the idea of Social Contract and creating a government that can provide its citizens with security and order without crushing individual rights.</p> <p>I then sat down and thought about how to involve my students in a conversation about why the Constitution exemplifies the ideas of Social Contract and how it can be used to both protect and violate citizens.</p>		
<p>Drafts of the question...</p> <ol style="list-style-type: none"> 1. "A social contract is when people give up some rights to receive order and law from a government. How does the US Constitution exemplify a social contract?" – This really wasn't debatable and I felt it wouldn't bring about much conversation. I also wanted my question to use examples from today to engage the students more. 2. "A social contract is when people give up some rights to receive order and law from a government. In what ways does the US Constitution exemplify a social contract and how does it get carried away or bend to maintain order?" – At this point, I had to sit down to decide what answer I wanted from students, or what parts I felt they could comfortably debate using the Constitution itself as support. 		
<p>I ended up with...</p> <p>As early citizens, our American ancestors entered into a social contract with our Founding Fathers while creating the Constitution. What is a more important charge of the government, to protect individual rights or maintain order?</p>	<p>I would use this question...</p> <p>To make connections between current headlines and the idea of rights and maintaining order. To spark a debate over when it is acceptable to ignore rights listed in a government document to maintain the order promised through the Preamble of the Constitution.</p>	
<p>Resources I consulted...</p> <p>C3 framework Personal Unit lessons Data from formative and summative assessments on the Constitution NCSS's Inquiry Arc</p>	<p>Challenges I encountered...</p> <p>Fostering cognitive thinking as well as making sure students would be making connections to current events and primary resource documents as support for claims.</p>	<p>Factors that influenced me...</p> <p>Data on the assessment Wanting to spark interest Connection to current events</p>

Appendix F

Interview 3 Protocol

Opening: Remind participants of the purpose of the study. Explain that along with the interview, they will be asked to talk through their Question Development Task. Explain that at any point they may ask a question, ask for me to rephrase/repeat a question, or request that the interview be concluded.

1. As we did last time, I want to share some of the ideas I took away from the second interview and give you an opportunity to review them.

During our last interview we talked about your views of two standards from the proposed social studies standards document. Drawing from your comments, I generated the following description of compelling questions _____. How would you revise that description?

Repeat with other concepts from previous interview (e.g., supporting questions, views on the standards more generally)

2. Last time, we focused on a small portion of the new standards – just the standards that deal with questions. Do the questioning standards have any influence on how you understand inquiry?
 - a. You mentioned in our first interview that a major purpose of social studies is to prepare students for participation in a democracy. How, if at all, do these standards help you achieve that purpose?
3. I'd like to show you those two standards within the context of what KASSS calls the Inquiry Cycle. Does seeing those standards in this context have any influence on how you understand compelling or supporting questions?
 - a. Does this Inquiry Cycle have any influence on how you understand inquiry?
 - b. Does this Inquiry Cycle have any influence on how you understand what students should be doing during inquiry?
4. In preparation for today's interview, you were asked to develop a compelling question that would be appropriate for an inquiry related to the Constitution. I also asked you to think about how you would use that question instructionally. I asked you to summarize your process on a provided form. Using that form as a guide, please talk me through your process.
5. Pose retrospective prompts
 - a. Did you find this task challenging?
 - i. What seemed most difficult?
 - ii. What came most easily?
 - b. How similar was your process to the way you generate other types of questions for use in the classroom?

- i. What makes a compelling question different from the other questions you ask?
 - c. What had the greatest influence on your choices?
 - i. Why did you eliminate certain questions?
 - ii. Why do you feel this is an example of a compelling question?
 - iii. How do you think students would respond to this question?
 - iv. How might students answer this question?
 - d. If you were to do this again, would you approach it any differently?
- 6. Based on your experience, what advice would you give other teachers who are trying to develop compelling questions?
 - a. What resources would help teachers with the process of developing compelling questions?
 - b. What resources would help teachers with the process of using compelling questions in the classroom?
- 7. Based on your experience, how would you guide students through the process of developing a compelling question?
- 8. How did this experience influence your understanding of the KASSS standards [that relate to questions]?
 - a. Do you think the KASSS standards related to questions will lead you to approach questions differently?
 - b. Do you think the KASSS standards related to questions will lead you to approach instruction differently?
- 9. Do you mind if I contact you in the future if I have further questions or want to run any of my conclusions by you?

Remind them they can contact me at any time if they have any questions or concerns.

Appendix G

Question Evaluation Task: Molly

<p>How did the exclusion of minority voices at the Constitutional Convention shape, alter, or change the Constitution itself as well as events in history?</p>	<p>Describe how the United States would look without the Bill of Rights. How would you as a citizen be affected?</p>	<p>Who did the founders mean by "we the people"? Did they really mean all people or just some?</p>	<p>As early citizens, our American ancestors entered into a social contract with our Founding Fathers while creating the Constitution. What is a more important charge of the government: - to protect individual rights or maintain order?</p>	<p>Does the Constitution protect people from the government?</p>	<p>Timestamp</p>
<p>This feels more like an Essential Question to me. For me, compelling questions ask/address the bigger questions we have in regards to the social sciences. If we apply this to history, compelling questions lead students to address the "so what" of learning a historical fact. It allows for historical discussion and the possibility of multiple correct answers. This is very "teacher-driven, teacher was to know specific facts from students" sounding to me.</p>	<p>Nope. Too many words. The two sentences can go in two different directions. Describe the United States could discuss society as a whole, the design of cities, etc. while the citizen portion would address only how one individual, in the larger scope of the nation, is impacted. Also, it isn't argumentative. It's hard to find evidence to support what I would look like in a no Bill of Rights society since it is hypothetical.</p>	<p>The concept is compelling but the structure of the question is not. This is not correct at all because it's just coming out of my brain with no revision but "Did the Founding Fathers mean "all people" in the phrase "we the people"? Terrible, terrible grammar but hopefully that addresses my point. Compelling questions become mentally engaging and debatable because they throw an interesting idea out there, with no leading. The pop-culture phrase is "straight-no chaser." Extra words just muffle the argumentativeness of the concept.</p>	<p>For me, I don't really feel like this is a compelling question. I think its "compelling nature" can be argued but, for me, there are far too many words. Sounds really silly and really juvenile, but, for me, compelling questions provide a clear, succinct, guiding mental debate. I can't really place my feedback in the proper terms in writing, but I feel to be compelling, the first statement needs to be omitted. Additionally, the question statement above needs to be shortened. I don't know why length is such an important factor for me but I just think they need to be to the point to allow the answer to go in multiple directions. I also feel that the question portion is way too leading. For me, a good compelling question doesn't need staging to be a good question. I don't know if that makes sense but a compelling question should be able to stand on its own: it should be able to draw in multiple arguments, possibilities, etc. without a "preview" statement.</p>	<p>Yes. I think it could be made more compelling for the students but I think it meets the general characteristics of: 1) It's engaging or thought provoking 2) It can be answered in many ways 3) It can be answered in one lesson, with prior knowledge, or expanded to a whole unit of study (it can be the driving force of research, discussion, study) 4) It can be answered using modern and historical evidence None of the requirements above are official, or what "textbooks" say a compelling question needs to be, just my personal thoughts.</p>	<p>12/30/2015 12:09:15</p>

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Publications

Articles

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