What Makes a Question Valuable? Teaching Students to Pose Their Own Questions

Joan Brodsky Schur

Most of what students discuss and write in school is in response to questions their teachers pose. Class discussion usually revolves around teacher-generated inquiries. On homework assignments, teachers design questions to assess students' reading comprehension, or to foster their ability to synthesize information. However, it is important that students be able to formulate their own questions. The College, Career and Civic Life (C3) Framework is clear about the ultimate goals of Dimension 1. Table 5 of the Framework reads, "Individually and with others, *students* construct compelling questions..."

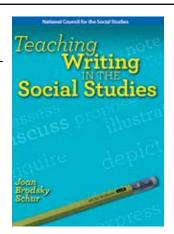
Without practice, it is difficult for students to formulate their own investigative questions. When I ask students to write questions for one another based on an assigned reading, they usually pose trivial questions of fact. Answers are based on "finding the answer" in the text. In other words, students have not formulated inquiries that lead to an interrogation of the text: What makes this author a reliable source of information, and how do I know? What is the author's purpose and point of view? How does this text relate to my prior knowledge or conflict with what someone else has written? We cannot

blame students if they don't know how to ask higher level thinking questions; teachers are trained to believe that is their job. But unless students learn to formulate their own inquiries, they remain passive learners guided by the questions of others. Students will be more engaged in coursework when asked to pose and answer their own questions.

Formulating Engaging Questions

If our goal is to help students formulate questions that initiate sustained research, we need to consider what it is that makes a question valuable. The attention given to inquiry in our field today is especially rich with question-posing methodologies. Grant and Wiggins build their design strategy around "Essential Questions," which are described as "elemental" or "foundational." Essential Questions in this sense reflect the key inquiries within a discipline. The Persistent Issues History Network creates teaching units driven by "ethical questions that apply to contemporary society" in order to highlight the relevance of the past to today. For example, the Persistent Issue, "What is the best way to distribute a society's resources?" can guide inquiries

This article has been excerpted with minor adjustments from the author's recent book, *Teaching Writing in the Social Studies*, which was published by National Council for the Social Studies in 2020. In the book, the author draws on her extensive experience as a teacher of both social studies and English to show how social studies teachers can integrate excellent writing instruction into their courses. The book recommends several writing strategies, each of which is embedded in social studies content, to show how thinking skills, mastery of information, and writing reinforce one another. The chapters of the book present a structured progression in which students become proficient at writing on a small scale—for example, through short writes, or paragraphs about clearly defined topics—as the foundation for more ambitious projects such as essays and research papers.



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on medieval societies, the New Deal, or the economic crash of 2008.³ Another angle is decision-making inquiries that task students with choosing the best solution to a problem. The Brown Choices Program reinforces the real-life decision-making processes of policymakers.⁴ The DBQ Project (specializing in Document Based Questions) states that all of the DBQ units are based on questions that "encourage interpretation, have more than one correct answer, and are arguable." Discipline-specific methodologies also exist. For example, National Geographic has a Geo-Inquiry Process that asks students to consider if their question is tied to a specific place, and if so, "Does the issue or topic [of the question] impact the present or future human or natural environment?" If not, students revise their inquiry to meet these and other criteria.

At the high school level, formulating questions that have more than one correct answer is what distinguishes the humanities from STEM subjects (science, technology, engineering and mathematics). There may be more than one way to arrive at the answer to a high school physics problem, but there is no debate about what the answer is. This is why I do not believe that critical thinking in the sciences can be a substitute for inquiry in the humanities. Social studies teachers do establish facts, but insight into their import depends upon our analysis of what motivates human behavior, why different societies privilege certain values over others, what factors cause social change, and our continuous re-analysis of the past in the light of the present.

By posing engaging questions, we stimulate our students to follow suit. As John C. Bean writes,

Asking authentic questions—that is, questions to which the teacher does not already know the answer or to which there are not predetermined answers—is extremely powerful in creating a classroom culture that feels intellectually engaging. One can also think of authentic questions as being generative in nature. That is, they generate or help to promote class inquiry and discovery, framing learning as a complex, multifaceted, communal activity as opposed to a process of simply accumulating information.⁷

The C3 Framework supports this goal: "Questioning is key to student learning. The C3 Framework encourages the use of compelling and supporting questions, both teacher- and student-generated, as a central element of the learning process." More emphatically, the Framework states that, "Beginning in grade 6, students should be able to take increasing responsibility for their learning so that by grade 12 they are able to construct questions and plan inquiries more independently." The NCSS and C3 Teachers publication *Blueprinting An Inquiry-Based Curriculum* includes a chapter on student-directed inquiry.

Have we lost sight of student-led inquiry? The Right Question Institute thinks so: "It is possible that students enter the workforce and graduate college without honing their question formulation skills because teacher education has traditionally focused more on teacher-generated questions than student questions." The goal of The Right Question Institute is to make it possible "... for all people to learn to ask better questions and participate more effectively in key decisions." Teachers need to learn both: how to frame effective questions they pose to the class, as well as how to help students formulate their own questions, as suggested in Table 5 of the C3 Framework. ¹³

Investigating the Cold War

What propels students to ask questions about a topic they are studying, for example the Cold War? Visual prompts (including photographs, paintings, and artifacts) are a good way to spark students' inherent curiosity. One visual thinking strategy is to ask students three questions while they look at a visual source. The first one is, "What's going on in this picture?" Second comes the follow-up question to the student's answer, "What makes you think so?" prompting the student to provide evidence. Third, the question that starts the sequence again: "What more can we find?" 14

For example, we can begin a study of the Cold War by showing students an image of a fallout shelter in the 1950s and employing these visual thinking prompts.

Teacher: What's going on in this picture?

Student A: I think this picture shows a time when people lived underground.

Teacher: What makes you think so?

Student A: It looks like a small underground space because they have a device [a periscope] for seeing above ground. Maybe they were afraid of something.

Teacher: What else can you find?

Student B: I think people are planning to live underground.

Teacher: What makes you think so?

Student B: The underground home is supplied with food, like on the left lower corner, and beds. So they slept there, too. Like maybe it's a fallout shelter?

Teacher: What else can you find?

Here we have helped students to deduce that this is a fallout shelter. After the image has piqued students' interest, we can ask them what more they want to know and understand about the Cold War, such as: Were people's fears of nuclear war justified by the events of the Cold War? If so, would fallout shelters have proved useful?

The Right Question Institute (RQI) helps learners to generate and improve upon their own questions through a simple sequence of activities. It begins with a question focus, provided by a teacher/facilitator, or chosen by the students. This is a technique I remember from the 1970s when it was called

"brainstorming." It works well in groups of five students placed around a poster-size sheet of paper, with the question focus prominently posted on it. All students pose questions in rapid succession. One student can play scribe for the group, or everyone can have a colored marker in hand. (Bright and bold works best once these are posted in the classroom.) It's important to set down the rule that no one remark on anyone else's questions. Fear of being embarrassed is a silencer: the minute I am afraid I might be criticized or challenged, my questions dry up, whereas a continuous stream of questions sparks more questions. One question leads students to think of another. The time period allotted to this activity should make it fast-paced; fifteen minutes should suffice. Brainstorming is a better method for generating questions than is the KWL chart (what do I know, what do I want to know, what have I learned?). This is because filling in the KWL chart requires metacognition, which slows down the flow of questions.

Next, the RQI method asks learners to categorize each question as either openended or closed-ended. RQI defines a question as closed-ended if it can be answered with a yes, no, or one-word response. Open-ended questions are defined as those that require more of a response. After students classify their questions as one or the other, RQI asks that students rewrite their questions in the reverse direction: from open to closed, or closed to open. In the process, students start to think about how to express questions and experiment with alternatives.

In the chart at right, the focus on the Cold War was chosen by the teacher. The questions on the left appear in the order in which students brainstormed them (thus no logical sequence). I have tried to classify their questions according to RQI guidelines. For example, "Who started the Cold War?" can be answered with one word, so I have classified it as a closed question. Note that Jay McTighe and Grant Wiggins believe that "intent trumps form." They write, "Why you ask a question (in terms of the desired result

Student Chart: Question Focus THE COLD WAR

Questions	Type*	
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Who started the Cold War?	C ⇒ O	On what basis can we decide who started the Cold War?
When did the Cold War begin?	C ⇒ O	How do historians decide which actions and words started the Cold War?
Why was the Cold War an outgrowth of World War II?	O ⇒ C	Did the Cold War start because the U.S.S.R. dominated Eastern Europe at the end of World War II?
What events most escalated the Cold War?	O⇒C	What was one event that escalated the Cold War?
Which countries became satellites of the Soviet Union?	C → O	Why did some countries become incorporated into the Soviet Union while others remained satellites?
When did the Cold War end?	C⇒O	What were the effects of the end of the Cold War?
Did the Cold War end?	C⇒O	For what reasons could we argue that the Cold War continues today?
What was one thing Americans feared during the Cold War?	C⇒O	How were fears of nuclear war manipulated by both sides?
How did life in the U.S. change during the Cold War?	O⇒C	What percentage of Americans built bomb shelters?
Why did Communist policy in the U.S.S.R. lead to food shortages?	o⇒c	How long did Soviets have to wait on lines for food?
Were there some positive things about Communism?	c⇒o	Why do some Russians today remember Communism with fondness?
Did Reagan end the Cold War?	c ⇒ o	Why do some people believe Reagan ended the Cold War?
If the Soviet Union was our ally during World War II, why did she become our enemy so soon after?	O⇒C	What was one promise the Soviet Union failed to keep to her allies in 1945?
What were the consequences of the U.S.S.R. becoming a nuclear power?	o ⇒ c	How many years after 1945 did the Soviets detonate a nuclear weapon?
What was the purpose of forming the Soviet Union?	O⇒C	How many republics were part of the Soviet Union?
Why was the Berlin Wall built?	O ⇒ C	How long did it take to build the wall?
Who first developed the term domino theory?	C→O	What were the consequences of interpreting the rise of the Vietcong as part of the domino theory, rather than as an anticolonialist force?

^{*}Arrows indicate a change in the type of question. C=closed, O=open

of asking it) matters more than *how* you phrase it." In asking, "Who started the Cold War?" my intention may have been to open up a debate: was it the U.S.S.R. or the U.S.? Churchill, Stalin, or Truman? But in teaching the writing of questions, I am emphasizing what wording invites open-ended versus closed answers, as per the RQI methodology.

At the City and Country School in New York City, where I have been a teacher and social studies consultant, faculty have used both the RQI methodology and the work of Grant and Wiggins to help them arrive at what they considered to be essential questions for a study of immigration. Over the course of several sessions, our understanding about questions became more complex: both open and closed questions have a meaningful place in learning to research. The faculty noted the following: ¹⁶

- Open questions keep learners questioning, introduce complexities, invite multiple perspectives, provide an opportunity to agree or disagree, lead to the writing of arguments, draw on big picture thinking that connects different eras and places, require the collecting of evidence, and may have answers that evolve with more research.
- Closed questions elicit answers that supply evidence and examples, draw on prior knowledge, satisfy curiosity, provide context, are answerable through research, help to define terms, and provide data in support of an argument.

A good question doesn't usually take shape in the blink of an eye. In terms of the Inquiry Arc of the C3 Framework, some open questions on the chart make better Compelling Questions than others, while only some closed questions are useful as Supporting Questions in answering it. Has a student posed a closed question easily answered on Wikipedia, or an open question that generates research and reflection? Let's look at "Why do some people believe Reagan ended the Cold War?" The weakness here is that "some people" is vague. "Why do some historians of the Cold War..." would be an improvement. Furthermore, the question doesn't lead us to evaluate whether "some people" were right or wrong. "How can we assess whether President Reagan ended the Cold War?" puts the emphasis on the criteria we should use. "To what degree is President Reagan responsible for ending the Cold War?" asks us to weigh his contribution against others. Open questions, depending upon how they are worded, ask for different types of evidence.

According to what other criteria might we ask students to categorize their questions?

Here are some ways to consider:

- Classify questions according to the categories: Factual, Conceptual, Values.¹⁷ This helps students to separate facts, ideas, and assumptions.
- Classify questions according to which disciplines have the most potential to help answer the question. This focuses students on how to apply Dimension 2 of the C3 Framework, Applying Disciplinary Concepts and Tools. Relevant social studies fields include history, economics, civics, geography, sociology, anthropology, and psychology.¹⁸
- Re-order the questions so that they follow the sequence in which events unfolded during the Cold War (chronology).
- Identify questions according to six types of Socratic questions:¹⁹
 - 1. Questions that ask for clarification
 - 2. Questions that probe assumptions
 - 3. Questions that probe reasons and evidence
 - 4. Questions about viewpoints and perspectives
 - 5. Questions that probe implications and consequence
 - 6. Questions about the question
- Categorize questions according to relevant categories of the Inquiry Design Model.
 Among those of use to students: Analytic, Comparative, Evaluative, and Problem-Based.²⁰

We can see from the list of questions on the Cold War that some reflect prior knowledge, such as the question using the term "satellite" country ("Which countries became satellites of the Soviet Union?"). It's worth pointing out to students how the use of figurative language heightened tensions during this period, beginning with the term "Cold War" itself. A satellite revolves around a star; here countries revolve as inexorably around the U.S.S.R. The use of the phrase "Iron Curtain" does not mean that there was a curtain made of iron; it refers to a division of European territory as unbreachable as an iron wall. How did the use of language like the "domino theory" heighten fears of Communism? What happens when dominoes stand propped up closely in a row, and you push over the first one? When teaching good writing, it always pays to focus on language. In this regard, assigning anything written by

George Orwell provides a model of great writing and makes the point that words matter!

Notes

- 1. National Council for the Social Studies, *The College, Career, and Civic Life (C3) Framework for Social Studies State Standards: Guidance for Enhancing the Rigor of K-12 Civics, Economics, Geography and History* (Silver Spring, Md.: National Council for the Social Studies, 2013), 24. The emphasis is mine.
- Grant Wiggins and Jay McTighe, Understanding by Design, Second Edition (2005) and Essential Questions: Opening Doors to Student Understanding (2013), both published by the Association for Supervision & Curriculum Development: Alexandria, Virginia.
- 3. See the "PIH Curriculum Matrix" of the Persistent Issues in History Network at Auburn University, Auburn, AL at www.pihnet.org.
- 4. The Choices Program at Brown University, Providence, R.I. at www.choices.edu.
- 5. The DBQ Project, Evanston, Ill. at www.dbqproject.com.
- "The Geo-Inquiry Process" from National Geographic at www.nationalgeographic. org/education/programs/geo-inquiry/.
- 7. John C. Bean, Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom, Second Edition (Hoboken, N.J.: John Wiley & Sons, 2011), 36.
- 8. The College, Career, and Civic Life (C3) Framework, 17.
- 9. The College, Career, and Civic Life (C3) Framework, 24.
- Kathy Swan, S.G. Grant, and John Lee, Blueprinting an Inquiry-based Curriculum: Planning with the Inquiry Design Model (Silver Spring, Md.: National Council for the Social Studies and C3 Teachers, 2019). See chapter 7.
- Andrew P. Minigan, Dan Rothstein, Luz Santana, Sarah Westbrook, "Stimulating and Sustaining Inquiry with Students' Questions," *Social Education* 81, no. 5 (October 2017): 268–272.
- 12. Right Question Institute, homepage at https://rightquestion.org.
- 13. The College, Career, and Civic Life (C3) Framework, 24.

- 14. Visual Thinking Strategies (Bolinas, Calif.), at www.vtshome.org. I was introduced to a wide array of invaluable questioning strategies at the Smithsonian American Art Museum's Clarice Smith National Teacher Institutes in the summer of 2011.
- 15. Jay McTighe and Grant Wiggins, "What Makes a Question Essential?" online at www.ascd.org/publications/books/109004/chapters/What-Makes-a-Question-Essential%A2.aspx. This is the first chapter of their book, *Essential Questions: Opening Doors to Student Understanding* (Alexandria, Va.: Association for Supervision & Curriculum Development, 2013).
- 16. I attended and helped to lead meetings of this kind at the City and Country School, a progressive school for ages 2 through 13 in New York City founded in 1914. My notes are from the 2017–2018 school year.
- This pedagogy was supplied by Professor Maria Hantzopoulos of Vassar College at a workshop for teachers held at the South Asia Institute of Columbia University, March 4, 2018.
- 18. The College, Career, and Civic Life (C3) Framework, 29–52, and Appendices B, C, and D.
- 19. Retrieved at Changing Minds.org, http://changingminds.org/techniques/questioning/socratic_questions.htm. The six types of "Socratic Questions" are based on the work of Richard Paul and Linda Elder, *The Art of Socratic Questioning* (Dillon Beach, Calif.: Foundation for Critical Thinking, 2006 and 2018). This website gives examples of questions under each of the six categories.
- Kathy Swan, John Lee, and S.G. Grant, *Inquiry Design Model: Building Inquiries in Social Studies* (Silver Spring, Md.: National Council for the Social Studies and C3 Teachers, 2018), 34–42.

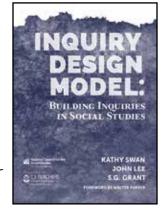


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