

The New York State Toolkit and the Inquiry Design Model: Anatomy of an Inquiry

Kathy Swan, John Lee, and S.G. Grant

What does inquiry look like? Though often used, the concept of “inquiry” is typically ill defined and only rarely developed coherently and consistently through curriculum. The Inquiry Design Model (IDM) attempts to give legs to this alluring, but elusive construct.

IDM is a distinctive approach to creating instructional materials that honors teachers’ knowledge and expertise, avoids over-prescription, and focuses on the key elements envisioned in the C3 Inquiry Arc. Unique to the IDM is the *blueprint* based on these key C3 elements—a one-page presentation of the questions, tasks, and sources that define a curricular inquiry. The blueprint offers a visual snapshot of an entire inquiry such that the individual components and the relationship among the components can all be seen at once.

Each of the 84 inquiries within the New York State Toolkit features a blueprint and a description of how the inquiry might be taught. The inquiries are explicitly linked to the Key Ideas as well as to the related Conceptual Understandings, Content Specifications, and Social Studies Practices of the New York State K-12 Social Studies Framework. Although the inquiries align with standards, they are not intended to be comprehensive content units, nor are they intended to be a series of prescribed lesson plans. They are intended to serve as pedagogically rich examples of content and skills built out in inquiry-based fashion.

In this article, we illustrate the IDM

structure by unpacking one of the Toolkit inquiries. In the *Uncle Tom’s Cabin* inquiry, seventh-grade students explore how words can affect public opinion through an examination of Harriet Beecher Stowe’s novel.¹ Here, we highlight the compelling and supporting *questions* that frame and organize the inquiry; the assessment *tasks* that provide opportunities for students to demonstrate and apply their understanding; and the disciplinary *sources* that allow students to practice disciplinary thinking and reasoning. (See the blueprint for the *Uncle Tom’s Cabin* inquiry on page 317.)

Questions

From Socrates on, the value of questions in general, and their central role in teaching and learning in particular, has been well established. In Plato’s *Protagoras*, Socrates claims, “My way toward truth is to ask the right questions.” Answers are important, but a well-framed question can excite the mind and give real and genuine meaning to the study of any social issue. The C3 Inquiry Arc and the Inquiry Design Model feature compelling questions as a way to drive social studies inquiry.

The key to crafting compelling questions is hitting the sweet spot between

the qualities of being intellectually rigorous and personally relevant to students. Intellectually rigorous questions reflect an enduring issue, concern, or debate in social studies and speak to the big ideas of history and the social sciences. For example, the compelling question “Can Words Lead to War?” asks students to grapple with the power of words generally, and the causes of the Civil War specifically by examining the impact of the publication of *Uncle Tom’s Cabin*. Historians continue to tease out the profound complexity and the chains of action and reaction that caused this turning point in U.S. history. In the inquiry described in this article, students enter the ongoing historical discussion by investigating the impact of Harriet Beecher Stowe’s words.

Compelling questions need to be worth investigating from an academic angle, but they also need to be worth exploring from a student angle. Recall Jerome Bruner’s claim that “Any subject can be taught effectively in some intellectually honest form to any child at any stage of development.”² To take this point seriously does not mean that we have to dumb down the curriculum. In fact, it means just the opposite: Teachers *should* teach intellectually ambitious material. The key is to see within the ideas to be taught those elements that teachers know their students care about. It is not the case that students are uninterested in the Civil War. But it is the case that teachers

7th Grade *Uncle Tom's Cabin* Inquiry

Can Words Lead to War?

New York State Social Studies Framework Key Ideas & Practices	<p>7.7 REFORM MOVEMENTS: Social, political, and economic inequalities sparked various reform movements and resistance efforts. Influenced by the Second Great Awakening, New York State played a key role in major reform efforts.</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Gathering, Using, and Interpreting Evidence <input checked="" type="checkbox"/> Chronological Reasoning and Causation <input checked="" type="checkbox"/> Comparison and Contextualization
Staging the Question	Consider the power of words and examine a video of students using words to try to bring about positive change.

Supporting Question 1	Supporting Question 2	Supporting Question 3	Supporting Question 4
How did Harriet Beecher Stowe describe slavery in <i>Uncle Tom's Cabin</i> ?	What led Harriet Beecher Stowe to write <i>Uncle Tom's Cabin</i> ?	How did people in the North and South react to <i>Uncle Tom's Cabin</i> ?	How did <i>Uncle Tom's Cabin</i> affect abolitionism?
Formative Performance Task	Formative Performance Task	Formative Performance Task	Formative Performance Task
Write a summary of the plot of <i>Uncle Tom's Cabin</i> that includes main ideas and supporting details from Stowe's description of slavery in the book.	List four quotes in the sources that point to Stowe's motivation and write a paragraph explaining her motivation.	Make a T-chart comparing viewpoints expressed in newspaper reviews of <i>Uncle Tom's Cabin</i> and make a claim about the differences.	Participate in a structured discussion regarding the impact <i>Uncle Tom's Cabin</i> had on abolitionism.
Featured Source	Featured Source	Featured Source	Featured Source
<p>Source A: Summary of <i>Uncle Tom's Cabin</i></p> <p>Source B: Excerpts from <i>Uncle Tom's Cabin</i></p> <p>Source C: Illustrations from <i>Uncle Tom's Cabin</i></p>	<p>Source A: Harriet Beecher Stowe's concluding remarks to <i>Uncle Tom's Cabin</i>.</p> <p>Source B: Letter from Harriet Beecher Stowe to Lord Thomas Denman</p>	<p>Source A: Review of <i>Uncle Tom's Cabin</i> published in the <i>Boston Morning Post</i></p> <p>Source B: Review of <i>Uncle Tom's Cabin</i> published in the <i>Southern Press Review</i></p>	<p>Source A: Excerpt from Charles Sumner's Senate speech</p> <p>Source B: Article by John Ball Jr. published in <i>The Liberator</i></p> <p>Source C: Sales of <i>Uncle Tom's Cabin</i>, 1851–1853</p>

Summative Performance Task	<p>ARGUMENT Can words lead to war? Construct an argument (e.g., detailed outline, poster, essay) that discusses the impact of <i>Uncle Tom's Cabin</i> using specific claims and relevant evidence from historical sources, while acknowledging competing views.</p>
	<p>EXTENSION Create an educational video of the argument that responds to the compelling question "Can words lead to war?"</p>
Taking Informed Action	<p>UNDERSTAND Identify and describe a human rights issue that needs to be addressed (e.g., child labor, trafficking, or poverty).</p> <p>ASSESS Create a list of possible actions that involve words. This may include letters, editorials, social media, videos, and protests.</p> <p>ACT Choose one of the options and implement it as an individual, small group, or class project.</p>

The complete inquiry is available to all teachers at c3teachers.org/inquires

need to pull relevant connections from those ideas to students' lives.

In examining the compelling question “Can Words Lead to War?”, the student-friendly elements of the question quickly emerge. First, the question pulls on a thread that all students care about—words. Words are a powerful medium to which all students can relate. Students surely have said something they regret, repeated a word that has gotten an adult incensed, or watched as others have been hurt by an insult. Second, the question is free of jargon and is written in a way that is highly accessible for students. Students should be able to hold compelling questions in their heads in ways that are illuminating rather than merely decorative.

If compelling questions frame an inquiry, supporting questions sustain it. Supporting questions (SQs) build out the compelling question by organizing and sequencing the main ideas. Supporting questions follow a content logic or progression that becomes increasingly more sophisticated over the inquiry experience. For example, in the *Uncle Tom's Cabin* inquiry, the sequence of the supporting questions is:

- **SQ1:** How did Harriet Beecher Stowe describe slavery in *Uncle Tom's Cabin*?
- **SQ2:** What led Harriet Beecher Stowe to write *Uncle Tom's Cabin*?

- **SQ3:** How did Northerners and Southerners react to *Uncle Tom's Cabin*?
- **SQ4:** What was the impact of *Uncle Tom's Cabin* on abolitionism?

Taken together, the compelling question and supporting questions provide the architecture for the inquiry as they highlight the ideas and issues with which teachers and students can engage. There is no one right compelling question for a topic, nor is there only one way to construct and sequence supporting questions. The question “Can Words Lead to War?” has been vetted and found to be compelling by a range of teachers and academics, but that is not to say that others might not develop equally engaging questions on the antebellum period. Similarly, the supporting questions in this inquiry have won the teachers' endorsement. Others, however, might rearrange the sequence, insert additional questions, or even substitute a whole new series. All 84 inquiries are published in Word and PDF so that teachers wanting to modify questions can easily do so.

Formative and Summative Performance Tasks

The Inquiry Design Model blueprint features a variety of performance tasks that provide students with opportunities for learning and teachers with opportunities to evaluate what students know

and are able to do. Based on the idea that assessments serve instructional as well as evaluative purposes, the IDM features both formative and summative performance tasks as well as extension activities, and opportunities for taking informed action.

Following the C3 Inquiry Arc, IDM begins with a compelling question (Dimension 1) that is consistently answered in the form of an evidence-based argument (Dimension 4). In this way, the structure of the students' summative product is *convergent*—that is, each of the 84 inquiries in the Toolkit results in the construction of an evidence-based argument that answers the compelling question. Students have opportunities for *divergent* thinking through the extension activities and exercises in taking informed action.

Although the extension activities and exercises in taking informed action in the 84 inquiries allow students to express their arguments creatively, the heart of each inquiry rests between two points—the compelling question and the argument that defines the summative performance task. What comes between (e.g., supporting questions, formative performance tasks, and sources) is designed to prepare students to move constructively between the compelling question and the summative argument. In the seventh-grade *Uncle Tom's Cabin* inquiry, for example, the summative performance task begins with the compelling question followed by the phrase, “construct an argument.” The verb *construct* was purposefully chosen to indicate that not all arguments must take the form of an essay.

In order to make a strong argument, students must engage with content and skills throughout an inquiry. Dimensions 2 and 3 of the C3 Framework help to provide clarity about the skills and conceptual knowledge that move students from question to argument. The formative performance tasks within the inquiry are designed as *exercises* intended to move students toward success in constructing a coherent, evidence-based argument. Although these tasks do not



1915-2015
The Armenian Genocide 100 Years
THE PROTOTYPE FOR GENOCIDE IN THE MODERN ERA

ATTEND OUR CONFERENCE PRESENTATION:

November 14 | 11:15 AM TO 12:05 PM
ROOM 219 | ERNEST N. MORIAL CONVENTION CENTER

“The Ten Stages of Genocide and the Armenian Case” Sara Cohan

COME VISIT US AT
BOOTH #1027 IN INTERNATIONAL ALLEY

Sales of *Uncle Tom's Cabin*

Date	Sales
June 5, 1851 – April 1, 1852	A serial publication in the <i>National Era</i> magazine has a circulation of about 8,000
March 20, 1852 – April 1, 1852	The first printing of 5,000 copies of <i>Uncle Tom's Cabin</i> sells out in two weeks.
April 2, 1852 – April 15, 1852	The second printing of 5,000 copies of <i>Uncle Tom's Cabin</i> also sells out in two weeks.
May 1852	Sales of the first edition reach 50,000
September 1852	Sales of the first edition reach 75,000
October 1852	Sales of the first edition reach 100,000
Holiday season, 1852	3,000 copies of a special illustrated edition are sold
January 1853	30,000 copies are sold of a new "Edition for the Million"
February 1853	The first foreign language version is printed in German
1852	Another 100,000 copies of a special edition printed in England are sold
Early, 1853	Sales of various editions reach 310,000
End of 1853	Sales reach 1 million worldwide

Chart showing printing and sales figures for the book *Uncle Tom's Cabin*, 1851–1853. The chart is used as a source in the inquiry.

include all of what students might need to know, they do include the major ideas that provide a foundation for their arguments. In this way, teachers avoid “gotcha” assessments—tasks that catch students off guard or without the proper preparation for success on the summative performance task.

The formative performance tasks are framed by the supporting questions within the inquiry. In this way, the formative performance tasks and the supporting questions have a similar relationship to that of the summative argument and the compelling question. Moreover, the formative performance tasks increase in complexity so that students can build and practice the skills of evidence-based claim making.

In the *Uncle Tom's Cabin* inquiry, these formative performance tasks provide opportunities to develop the knowledge (e.g., an understanding of the book and its historical context) and practice the skills (e.g., reading sources and supporting claims with evidence) necessary to construct a coherent, evi-

denced-based argument. The sequence of the formative tasks is as follows:

1. Write a summary of the plot of *Uncle Tom's Cabin* that includes main ideas and supporting details from Stowe's description of slavery in the book.
2. List four quotes in the sources that point to Stowe's motivation and write a paragraph explaining her motivation.
3. Make a T-chart comparing viewpoints expressed in newspaper reviews of *Uncle Tom's Cabin* and make a claim about the differences.
4. Participate in a structured discussion regarding the impact *Uncle Tom's Cabin* had on abolitionism.

Far more than busy work, formative performance tasks are designed as exercises to support student growth and

Smithsonian American Art Museum



What can we find in this picture?

- a. A family portrait
- b. A reference to *Hamlet*
- c. A new nation's hopes for independence
- d. All of the above**

Explore American art's connections to your curricula and make history present.

Summer Institutes: Teaching the Humanities through Art

July 11–15, 2016
July 25–29, 2016

AmericanArt.si.edu/education/dev/institutes

Charles Willson Peale, *Mrs. James Smith and Grandson* (detail), 1776. Smithsonian American Art Museum, Gift of Mr. and Mrs. Wilson Levering Smith Jr. and museum purchase.



Eliza comes to tell Uncle Tom that he has been sold and that she is running away to save their child.

success when approaching the summative task.

Building on the purpose and structure of the summative and formative performance tasks, extension exercises highlight the alternative ways in which students may express their arguments. Such activities are in keeping with the C3 Framework, which asks students to (a) present adaptations of their arguments; (b) do so with a range of audiences; and (c) do so in a variety of venues outside of the classroom. Unlike the summative argument, extension activities are *divergent* in that the products vary from inquiry to inquiry. For example, in the *Uncle Tom's Cabin* Inquiry, students have the opportunity to adapt their arguments into a digital documentary. In the other Toolkit inquiries, adaptations range from writing letters to the editor, engaging in a classroom debate, and participating in perspective-taking exercises.

Experiences in taking informed action are designed so that students can civically engage with the content of an inquiry. Informed action can take numer-

ous forms (e.g., discussions, debates, presentations) and can occur in a variety of contexts both inside and outside of the classroom. The key to any action, however, is the idea that it is informed. The IDM, therefore, stages the activities for taking informed action so that students build their knowledge and understanding of an issue before engaging in any social action. In the *understand* stage, students demonstrate that they can think about the issues behind the inquiry in a new setting or context. The *assess* stage asks students to consider alternative perspectives, scenarios, or options as they begin to define a possible set of actions. And the *act* stage is where students decide if and how they will put into effect the results of their planning.

In the *Uncle Tom's Cabin* inquiry, taking informed action is expressed as three steps at the conclusion of the inquiry:

- *Understanding*: Identify and describe a modern issue that needs reform (e.g., child labor, trafficking, poverty).

- *Assessing*: Create a list of possible actions that involve words, such as letters, editorials, social media, videos, and protests.
- *Acting*: Choose one of the options for taking informed action and implement it as an individual, small group, or class project.

Taking informed action is included within all 84 inquiries in the Toolkit, but we acknowledge that teachers may not be able to enact the sequence due to time constraints. In some cases, taking informed action is embedded into the formative and summative performance tasks to ease the time burden on teachers and to make civic opportunities more seamless within the inquiry.

Sources

With compelling and supporting questions in place, along with a series of formative and summative performance tasks, the use of sources completes the IDM model. Sources provide the substance

and the content for an inquiry.

In the process of constructing an inquiry, teachers can use sources in three ways:

- To spark and sustain student curiosity in an inquiry;
- To build students' disciplinary (content and conceptual) knowledge and skills;
- To enable students to construct arguments with evidence.

These three uses of sources correspond with parts of the IDM blueprint: staging the compelling question, formative performance tasks, summative performance tasks, and additional tasks (i.e., extensions and taking informed action exercises).

Sparking curiosity is about engaging students as they initiate and sustain an inquiry. Just how to generate curiosity is, in large part, a pedagogical issue.

The IDM suggests that sources can play an important role in helping students become curious about and interested in knowing more about an inquiry topic.

Each of the inquiries offers a 10- to 30-minute activity called *Staging the Compelling Question* to spark student curiosity activities. In the *Uncle Tom's Cabin* inquiry, students are asked to react to a quote by Nathaniel Hawthorne:

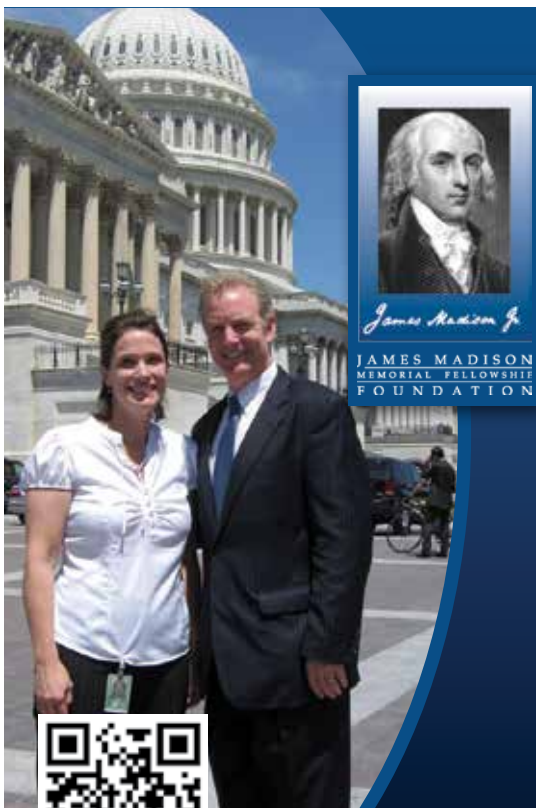
Words—so innocent and powerless as they are, as standing in a dictionary, how potent for good and evil they become in the hands of one who knows how to combine them.³

After reading the quote, students discuss the following prompts: Does what you say matter? Does how you say something matter? How responsible should we be for the words we say and write? Next, teachers might ask students about

a time when they spoke up for something they thought was unfair. This should appeal to a student's sense of fairness and introduce the idea that words can also create positive change. Using the ideas generated from the class discussion on the Hawthorne source, teachers can begin to stage the compelling question "Can words lead to war?" and set the historical stage for the inquiry.

Throughout an inquiry, students encounter sources to build their disciplinary knowledge (content and concepts) and skills (e.g., historical thinking, or geographic reasoning). The C3 Framework encourages shifting instructional practice to integrate disciplinary knowledge and disciplinary skills purposefully.⁴ The inquiries in the Toolkit put this idea into practice through the formative and summative performance tasks.

The image (on page 320) is a source for the first formative performance task



Transforming outstanding educators into constitutional scholars

- Fellowship awards up to \$24,000 for graduate study
- Recognized as the most prestigious award in constitutional history for secondary teachers



For more information, visit WWW.JAMESMADISON.GOV

in the inquiry on *Uncle Tom's Cabin*. As such, it provides a powerful visual representation of an important episode in the book and key content in the inquiry. In this illustration, Eliza comes to tell Uncle Tom and his wife, Chloe, that Tom and Eliza's son, Harry, have been sold to a slave trader. Eliza had just overheard the news from her master, Mr. Shelby, that the trader will arrive in the morning to take Tom and Harry away. In a panic, Eliza plans that night to run away. The illustration and other sources in the task (another illustration and four text passages) collectively give students an opportunity to build their understanding about how Harriet Beecher Stowe described slavery through the fictionalized experiences of the characters in the book.

The summative performance task in the IDM calls on students to construct and support arguments, and sources play a big role in that process. Throughout an inquiry, students examine sources through the sequence of formative performance tasks. Doing so allows students to develop the knowledge they need in order to build arguments through evidence-based claims.

Each of the sources in this inquiry holds the potential to contribute to the arguments students might make. For example, the source on "Sales of *Uncle Tom's Cabin*" is useful as evidence in establishing the popularity of *Uncle Tom's Cabin*. Using this source, students might make an inference that the popularity of this book reflected a larger abolitionist sentiment in the country. This information, combined with other information from sources, can be used as evidence to make claims about the impact of the book.

It is rare that a source, as created, will be perfectly suited for use in an inquiry. Instead, most of the sources in the inquiries serve as interpretative materials. Some sources, such as photographs, may be used as they are in an inquiry, but many sources require adaptation in one of three ways:

- *Excerpting*. This involves using a portion of the source for the inquiry. Care should be taken to preserve information in the source that students may need to know about the creator and context of the source.
- *Modifying*. This involves inserting definitions and/or changing the language of a text. Modifying texts increases the accessibility of sources.
- *Annotating*. This involves adding short descriptions or explanations. Annotations allow teachers to set a background context for sources.

Examples of each of these three approaches to adapting sources are evident in the seventh-grade inquiry on *Uncle Tom's Cabin*.

- *Excerpting*—Text passages from *Uncle Tom's Cabin* are all carefully selected passages from a larger text.
- *Modifying*—The summary of *Uncle Tom's Cabin* was slightly modified to add information about the story that was missing from the original source.
- *Annotating*—The illustrations include annotations.

Some observers may object to making changes to sources, arguing that changing sources does more harm than good. When considering this point, teachers should keep in mind the purpose of the source in the inquiry and ask themselves whether they are using the source for the source's sake or to accomplish some other learning goal. It is probably rare to use sources just for the sake of using the original source.

Bringing it all together

The Inquiry Design Model takes inquiry as its general starting point. A compelling question serves to initiate an inquiry.

A summative performance task, where students address that question, serves to pull the inquiry together. The beginning and end points are important, but no more so than the elements—supporting questions, formative performance tasks, and sources—that comprise the middle of the Inquiry Design Model.

Using inquiry as the descriptor for the curriculum topics portrayed, however, reflects a specific, conscious decision not to produce fully developed and comprehensive curriculum units or modules. Teachers should find considerable guidance within each inquiry around the key components of instructional design—questions, tasks, and sources. What they will not find is a complete set of prescriptive lesson plans. Experience suggests that teachers teach best the material that they mold around their particular students' needs and the contexts in which they teach. Rather than scripts reflecting generic teaching and learning situations, the IDM encourages teachers to draw on their own wealth of teaching experience as they add activities, lessons, sources, and tasks that transform the inquiries into their own, individual pedagogical plans. ●

Notes

1. Harriet B. Stowe, *Uncle Tom's Cabin*, 1st ed. Boston: John P. Jewett and Company, 1852. Public Domain, www.gutenberg.org/files/203/203-h/203h.htm#link2HCH0045.
2. J. Bruner, *The Process of Education* (Cambridge, Mass.: Harvard University Press, 1960): 33.
3. N. Hawthorne, "American Note-Books of Nathaniel Hawthorne," *The Atlantic Monthly* 18, no. 110, December 1866. Public Domain, www.gutenberg.org/files/17217/17217h/17217h.htm#PASSAGES_FROHAWTHORNES_NOTE-BOOKS.
4. K. Swan, J.K. Lee, and S.G. Grant, *C3 Instructional Shifts*. C3teachers.org, 2014. Available online at www.c3teachers.org/c3shifts/.

KATHY SWAN (*University of Kentucky*), **JOHN LEE** (*North Carolina State University*), and **S.G. GRANT** (*Binghamton University*) are professors of social studies education and worked as the lead writers of the C3 Framework. Over the past year, the three scholars co-created the Inquiry Design Model (IDM) as they collaboratively worked as project directors of the New York Social Studies Toolkit Project. Swan, Lee, and Grant founded and co-direct C3 Teachers (c3teachers.org), a site dedicated to implementation of the C3 Framework in classrooms, schools, and states.