

Handouts for an Inquiry Project

Katie Anderson Knapp, Amy Hopkins, Janet Longanecker, and Tiffany Yehle, with Emma Thacker

In this **Pullout**, teachers provide generalized examples of tools they designed for second, fourth, and fifth grade lessons at Holden Elementary School in Kent, Ohio. Each of the graphic organizers had a different purpose in the original lessons, but we've placed them in a sequence for possible use together. We hope readers may be able to use one or more of them, adapting each as needed to help their own students engage in inquiry about a meaningful curricular topic.

Janet Longanecker, a fifth-grade teacher, discusses a compelling question with the class, then offers guidance for her students to craft their own supporting questions and brainstorm resources they could use to investigate their questions. Using the organizer on **Handouts A and B**, Ms. Longanecker incorporated student voice as she applied the C3 Framework's Dimension 1, "Developing questions and planning inquiries" and Dimension 3, "Evaluating sources and using evidence."

Tiffany Yehle guided her fourth graders using **Handout C** as they designed their own inquiry questions and began searching for answers. These tasks may seem advanced for nine- and ten-year-old students, but with the organizer as a scaffold, students were able to move through their inquiries in a structured way.

Amy Hopkins used the table on **Handout D** throughout multiple inquiries as a tool to help her second-grade students organize their observations as well as their wonderings. Consistent use of the tool over time helped her students collect evidence and engage in ongoing questioning, emphasizing that the "end" of one inquiry is often the beginning of another.

While students naturally ask questions, the work of crafting compelling questions takes practice. In addition to tools such as those included in this section, teacher-facilitated instruction is paramount. It may be helpful for students to practice key inquiry skills through a teacher-designed inquiry that models effective questioning, curricular rigor, and relevant content focus. After participating in a teacher-designed inquiry (or a few of them), students will be more familiar with the concepts of compelling and supporting questions, including how they work in tandem to guide an inquiry. When a teacher believes students are ready to take more ownership of future inquiries, they might choose to do so as a class, coming to consensus on a topic of interest and curricular importance and brainstorming questions together; in small groups based on student content interest; or individually. In any case, teacher guidance and feedback throughout will help ensure students develop compelling questions that are both meaningful for the students and relevant for the social studies discipline(s) at hand. Developing compelling and supporting questions to plan an inquiry is no easy task, even for experienced teachers, but children can also engage in this work in age-appropriate ways, and they will likely become more engaged students and citizens as a result.

Since high-quality inquiries necessarily center on students' interests and genuine questions, it can be difficult for teachers to prepare support materials that are both responsive to their students' needs and flexible enough to suit the needs of a particular inquiry. (See the article by K. A. Knapp and A. Hopkins in this issue of *SSYL*). While some teachers may choose to design unique materials to support each inquiry they and their students implement, others may wish to use a more consistent format across multiple inquiries. We trust that teachers will consider the model handouts shown here, and then choose an option—or combination of options—that best suits their classroom demands.

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Inquiry Project: Composing a *Compelling* Question

With your teacher, you have discussed compelling questions for this activity. Write down two questions that are interesting to you:

1. _____

2. _____

Examples of compelling questions:

How can insects and humans interact in a sustainable way on Earth?

Who should decide which chemicals are okay to use on farms, and which should be prohibited?

Consider what resources might be available to you, what you *really* want to know, and what you would need to find answers to each question. Think this through, and then **choose the one question** you feel would be the most valuable and interesting for you to research.

My final choice for a compelling question is

HANDOUT B

Thinking about Resources that I Can Use

Make a list of **possible resources** you could use to research this question. There may be books, an encyclopedia, or a computer in your classroom. Human sources are appropriate too! You could interview someone in your family. You could ask a librarian, who may lead you to books, magazines, and websites like www.kidrex.org. You could ask parents and teachers to introduce you to an adult who knows about your topic. For example, a bee keeper might know a lot about bees.

Here are some resources that I can use to help me explore this topic:

1. _____

2. _____

3. _____

Inquiry Project

Crafting *Supporting* Questions

Copy your favorite **compelling** question again here:

Example: How can insects and humans interact in a sustainable way on Earth?

That's a big, conceptual question. Let's begin our study by asking some smaller questions. What specific things do you need to know about the topic?

Write two **supporting** questions (fact-based questions) that you could ask about this topic.

Examples: *In what ways do farmers help bees to make honey? Beyond farm practices, what other human activities conserve bees? Which human activities are harming bees today?*

1. _____

2. _____

Organizing the Information that I Find: Research Notes

As you begin your research, keep a record of what you find and the source of each piece of information. Use this organizer to help you keep track of your work as a researcher.

Information that I Find <i>Example: The overuse of pesticides is hurting bee populations.</i>	Sources (References) <i>"Bee Detective," www.pbslearningmedia.org</i>

Inquiry Project

My Observations and Wonderings

What answers did you find? What new things did you discover?	List any questions you were not able to answer. Describe any frustrations in your research.	What <i>new</i> questions do you have? What are your “wonderings?”