

9.3.1

Lesson 9


Introduction

In this lesson, students will engage in several discussions to further clarify both their understanding of the Grandin text, as well as their potential areas of investigation. Students will first participate in a fishbowl discussion about their areas of investigation, dialoguing with their peers about the pre-search and its effect on their understanding of an area of investigation. Students will then engage in a short discussion in pairs or small groups about a central idea in the Grandin text and how it is developed and refined over the course of the chapter. For assessment, students will then individually create an evidence-based claim about the development and refinement of a central idea in the chapter. For homework, students will review the Grandin text and their annotations—as well as their notes from today’s fishbowl discussion—in preparation for the End-of-Unit Assessment. Additionally, students will review the sources they found in the previous lesson and use them to solidify their area of investigation in preparation for the End-of-Unit Assessment.

Standards

Assessed Standard(s)	
RI.9-10.2	Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.
Addressed Standard(s)	
W.9-10.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
SL.9-10.1	Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively.

Assessment

Assessment(s)
<p>The learning in this lesson will be captured through a Quick Write at the end of the lesson. Students will answer the following prompt citing evidence from the text.</p> <ul style="list-style-type: none"> Students will write 1–2 paragraphs in which they make an evidence-based claim about Grandin’s development and refinement of a central idea in the text. <p> Assess this response using the Short Response Rubric.</p>
High Performance Response(s)
<p>A high performance response may include the following:</p> <ul style="list-style-type: none"> Animal stress in feedlots and meatpacking houses is inefficient and costs money, and visual thinkers, like Temple Grandin, can help lower stress, and therefore help the meatpacking industry make money. Grandin says that, “stressed animals gain less weight, which means less meat to sell.” She also points out that animals that are stressed will sometimes not walk through the lot efficiently, and an entire operation can slow down. Grandin says that often small visual details that most people do not notice are making the animals stressed, and she can notice those details: “When I got to the feedlot, it took me about ten minutes to figure out the problem...to me it was obvious: the alley was too dark.” Once she fixes the subtle visual problems, the animals become less stressed, things run more efficiently, and a business can run more effectively.”

Vocabulary

Vocabulary to provide directly (will not include extended instruction)
<ul style="list-style-type: none"> relevant (adj.) – closely connected or appropriate to the matter at hand
Vocabulary to teach (may include direct word work and/or questions)
<ul style="list-style-type: none"> None.*

*Students should be adding to their Vocabulary Journal as they conduct searches and evaluate sources for credibility and relevance. See Lesson 8, Activity 4 for more information.

Lesson Agenda/Overview

Student-Facing Agenda	% of Lesson
Standards & Text: <ul style="list-style-type: none"> Standards: RI.9-10.2, W.9-10.7, SL.9-10.1 Text: Grandin, <i>Animals in Translation</i>, Chapter 1 	
Learning Sequence: <ol style="list-style-type: none"> Introduction of Lesson Agenda Homework Accountability Fishbowl Discussion: Areas of Investigation Quick Write Closing 	<ol style="list-style-type: none"> 5% 15% 55% 20% 5%

Materials

- Student copies of the **Short Response Rubric and Short Response Checklist** (refer to 9.3.1 Lesson 1)

Learning Sequence

How to Use the Learning Sequence	
Symbol	Type of Text & Interpretation of the Symbol
10%	Percentage indicates the percentage of lesson time each activity should take.
no symbol	Plain text indicates teacher action.
	Bold text indicates questions for the teacher to ask students.
	<i>Italicized text indicates a vocabulary word.</i>
►	Indicates student action(s).
💬	Indicates possible student response(s) to teacher questions.
❗	Indicates instructional notes for the teacher.

Activity 1: Introduction of Lesson Agenda

5%

Begin by reviewing the agenda and the assessed standard for this lesson: RI.9-10.2. Inform students that today's class involves two discussions: one larger discussion to further investigate their potential areas of investigation, and one smaller discussion to explore the development of a central idea in Grandin's first chapter.

- ▶ Students listen.

Activity 2: Homework Accountability

15%

Ask students to work in pairs and share the potential sources they found for homework. Instruct students to first articulate their question and then briefly explain how each source relates to that question.

- ▶ Student pairs share the potential sources they found for homework. The students' responses vary based on the individual research they conducted.

Now ask students to discuss in pairs how this source is *relevant* to that question. Explain to students that *relevant* means closely connected to their question.

- 💬 Student responses vary based on the research each conducted. Possible student responses may include:
 - My question was, "How has the definition and study of animal cognition changed over the course of history?" The source I found is related to this question because it discusses how people have measured animal intelligence over the years. It also discusses what philosophers used to say about animal intelligence, including that it does not exist.

Ask students to share out any word they recorded in their vocabulary journal, including how they determined the meaning.

- 💬 Student responses vary based on the research each conducted. Possible student responses may include:
 - The source I found contained the phrase, "While the study of animal cognition is largely an empirical endeavor, the practice of science in this area relies on theoretical arguments and assumptions." I did not know what *empirical* meant, but I guessed it was different from "theoretical arguments and assumptions." If an argument or assumption is theoretical, that means it has not been proven. So I think *empirical* might mean something that can be proven. I looked up the word on dictionary.com, and learned it means "provable or verifiable by experience or experiment."

Activity 3: Fishbowl Discussion: Areas of Investigation

55%

In order to further explore their potential areas of investigation, instruct students to engage in a fishbowl discussion. Remind students that they have had this type of discussion in 9.2.3, Lesson 13. Explain to students that in this lesson, they will continue the work of collaborative discussion outlined in

SL.9-10.1, to which students were previously introduced. Remind students these discussion strategies have been taught in previous modules.

- ① Consider reminding students of the skills inherent in the sub-standards of Standard SL.9-10.1, to which students were previously introduced.

Break the class into two equal groups and form two circles—one inner and one outer. Explain to students that the inner circle serves as the discussion group, while the outer group listens and takes notes on the inner group’s discussion. After 10 minutes, the outer group provides feedback to the inner group about their discussion. After that feedback has been provided, the groups switch places, and the process repeats.

- ① Remind students that it is important to remain respectful during discussion. Respectful disagreement is okay, as long as the discussion remains focused and students articulate their disagreements collegially.

- ▶ Students break into two groups, form two circles, and listen.

Instruct the outer group to take notes on the inner group’s discussion, especially when something is unclear or when something engaging happens. Once students have formed two groups and arranged themselves into a fishbowl, pose the following question to the inside circle:

What did your pre-searches reveal about your areas of investigation?

- ① Student answers may vary depending on their areas of investigation and research conducted. The task at-hand is not to have students explain to the class how their pre-search affected their understanding of an area of investigation. Rather, it is for students to engage in a discussion about a range of possible areas of investigation and hear their peers’ thoughts.

Encourage students to ask questions about their peers’ areas of investigation and presearches. Possible questions might include:

How does this area of investigation interest you?

How did a particular source you found during your pre-search change your thinking about your area of investigation?

For example, students may ask: What about animal intelligence interests you? How has the source from *Scientific American* shaped your thinking so far about animal intelligence? What are contrasting points of view?

- ▶ Students discuss.

After 10 minutes, instruct students in the outer circle to share at least one inner circle student’s point, question, or response as well as something new they learned as a result of the discussion. Ask students

to note the strong points of the discussion and where it could have been stronger. Inform students in the outer circle that they have five minutes to share.

- ▶ Students in the outer circle share one point, question, or response as well as one thing they learned as a result of the discussion. Students in the inner circle listen.

Instruct students in the inner circle to move to the outer circle and the students in the outer circle to move to the inner circle. Repeat the discussion process.

Activity 4: Quick Write

20%

Instruct students to respond briefly in writing to the following prompt:

Make an evidence-based claim about the development and refinement of a central idea in the Grandin chapter.

Remind students to use the Short Response Checklist and Short Response Rubric to guide their written responses.

① Display the prompt for students to see or provide the prompt in hard copy.

- ▶ Students independently answer the prompt using evidence from the text.
- 🗣 See the High Performance Response at the beginning of this lesson.

Activity 5: Closing

5%

Display and distribute the homework assignment. For homework, instruct students to review the Grandin text and their annotations—as well as their notes from today’s fishbowl discussion—in preparation for the End-of-Unit Assessment. Additionally, instruct students to review the sources they found in the previous lesson and use them to solidify their area of investigation in preparation for the End-of-Unit Assessment.

- ▶ Students follow along.

Homework

Review the Grandin text and annotations—as well as your notes from today’s fishbowl discussion—in preparation for the End-of-Unit Assessment. Additionally, review the sources you found in the previous lesson and use them to solidify your area of investigation in preparation for the End-of-Unit Assessment.