

## 10.3.1

## Lesson 5

## Introduction

In this lesson, the first in a series of two lessons, students read and analyze pp. 127–136 of *The Immortal Life of Henrietta Lacks*. In this excerpt, Skloot describes cases in which HeLa cells were misused and explores issues of informed consent and human experimentation.

Students explore this passage through a Masterful Reading and a series of questions and discussions, in which they analyze how Skloot supports a perspective through description and use of language. Students continue to surface issues that emerge from the text and record them on their Surfacing Issues Tool. The assessment in this lesson is a Quick Write prompt: Analyze how Skloot uses examples in this portion of text to advance her purpose.

For homework, students select and refine inquiry questions they generated in this lesson. Students also respond to a writing prompt that requires them to compare the representation of HeLa cells in this lesson's excerpt with how they were represented in the previous lesson's text (pp. 93–97).

## Standards

Assessed Standard(s)	
RI.9-10.6	Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.
Addressed Standard(s)	
W.9-10.9.b	Draw evidence from literary or informational texts to support analysis, reflection, and research. b. Apply <i>grades 9–10 Reading standards</i> to literary nonfiction (e.g., “Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning”).
L.9-10.4.a	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grades 9–10 reading and content</i> , choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.

## Assessment

### Assessment(s)

Student learning is assessed via a Quick Write at the end of the lesson. Students answer the following prompt, citing textual evidence to support analysis and inferences drawn from the text.

- Analyze how Skloot uses examples in this portion of text to advance her purpose.

### High Performance Response(s)

A High Performance Response should:

- Determine Skloot's purpose in this portion of text (e.g., the importance of informed consent and the need to protect patient rights).
- Provide specific examples that advance Skloot's purpose (e.g., human experimentation by Nazi doctors, Southam's cancer experiments with HeLa cells on prisoners and cancer patients, Southam's trial).
- Describe how the details advance Skloot's purpose (e.g., Skloot gives the example of the horrible cases of "human experimentation" conducted by Nazi doctors such as "dissecting people alive" to demonstrate that patients should have rights and be protected. These horrific experiments led to the Nuremberg Code, which said "The voluntary consent of the human subject is essential" but it was not a law and provided no protection for patients in the United States, where "The bills were repeatedly voted down." The Nuremberg Code is the reason three doctors would not participate in Southam's cancer experiments and consequently called the study "illegal, immoral, and deplorable.").

## Vocabulary

### Vocabulary to provide directly (will not include extended instruction)

- inoculation (n.) – introduction of (the causative agent of disease) into the body of (a person or animal), in order to induce immunity
- immune system (n.) – a diffuse, complex network of interacting cells, cell products, and cell-forming tissues that protects the body from pathogens and other foreign substances, destroys infected and malignant cells, and removes cellular debris
- lymph nodes (n.) – any of the glandlike masses of tissue in the lymphatic vessels containing cells that become lymphocytes through which lymph passes to be filtered and cleaned
- refrain (n.) – a phrase or verse recurring at intervals in a song or poem
- diagnosis (n.) – the process of determining by examination the nature and circumstances of a diseased condition

- dissecting (v.) – cutting apart (an animal body, plant, etc.) to examine the structure, relation of parts, or the like
- ethical boundaries (n.) – the limits of accepted principles of right and wrong that govern the conduct of a profession
- civil courts (n.) – courts of law in which civil cases (private and civilian affairs) are tried and determined
- inalienable rights (n.) – that which is due to anyone by just claim, legal guarantees, moral principles, etc., and cannot be transferred to another without consent (e.g., rights of liberty or of speech)

#### Vocabulary to teach (may include direct word work and/or questions)

- informed consent (n.) – a patient’s consent to a medical or surgical procedure or to participation in a clinical study after being properly advised of the relevant medical facts and the risks involved
- human experimentation (n.) – a test or procedure carried out on a person under controlled conditions to determine the validity of a theory or make a discovery

## Lesson Agenda/Overview

Student-Facing Agenda	% of Lesson
<b>Standards &amp; Text:</b> <ul style="list-style-type: none"> <li>• Standards: RI.9-10.6, W.9-10.9.b, L.9-10.4.a</li> <li>• Text: <i>The Immortal Life of Henrietta Lacks</i>, pp. 127–136</li> </ul>	
<b>Learning Sequence:</b> <ol style="list-style-type: none"> <li>1. Introduction of Lesson Agenda</li> <li>2. Homework Accountability</li> <li>3. Masterful Reading</li> <li>4. Reading and Discussion</li> <li>5. Quick Write</li> <li>6. Closing</li> </ol>	<ol style="list-style-type: none"> <li>1. 5%</li> <li>2. 10%</li> <li>3. 20%</li> <li>4. 45%</li> <li>5. 15%</li> <li>6. 5%</li> </ol>

## Materials

- Student copies of the 10.3.1 Unit Glossary (refer to 10.3.1 Lesson 1)
- Student copies of the Surfacing Issues Tool (refer to 10.3.1 Lesson 3)
- Student copies of the Short Response Rubric and Checklist (refer to 10.3.1 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.
	<b>Bold text indicates questions for the teacher to ask students.</b>
	<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 assessed standard for this lesson: RI.9-10.6. Explain that in this lesson students listen to a Masterful Reading and analyze pages 127–136 of *The Immortal Life of Henrietta Lacks*, focusing on Skloot’s purpose and how she advances that purpose in this portion of text. Additionally, students track potential research issues, as well as generate further inquiry questions based on the issues surfaced in the text.

- ▶ Students look at the agenda.

### Activity 2: Homework Accountability

10%

Instruct students to Turn-and-Talk with a classmate about the previous lesson’s homework (preview the following lesson’s text) and annotate from “As HeLa grew like crabgrass in laboratories around the world” to “In fact, research flourished. And much of it involved HeLa” (pp. 127–136).

- ▶ Students Turn-and-Talk with a classmate, discussing the reading and annotations.
- 💬 Student responses may include:
  - Star near “He told them he was testing their immune systems; he said nothing about injecting them with someone else’s malignant cells” (p. 128) – this seems like an important detail because the doctor did not tell his patients what he was doing.
  - Star near “The deception was for his benefit . . . to participate in his study if they’d known what he was injecting” (p. 130) – this relates to the previous idea and also seems connected to the excerpt title: “Illegal, Immoral, and Deplorable.”
  - Box around “human experimentation” (p. 131) – this seems like an important vocabulary term.

- Star near “Every human being has an inalienable right to determine what shall be done with his own body” (p. 134) – this is taking a firm perspective about the testing that was happening.
- Box around “inalienable” (p. 134) – this is part of the opposite perspective to Southam’s and seems like an important word because it is connected with “rights” (p. 134).

① This annotation supports students’ engagement with W.9-10.9.b, which addresses the use of textual evidence in writing.

### Activity 3: Masterful Reading

**20%**

Begin a Masterful Reading of the entire excerpt from “As HeLa grew like crabgrass in laboratories” to “In fact, research flourished. And much of it involved HeLa” (pp. 127–136). Instruct students to follow along silently in their text as they listen to a Masterful Reading.

- ▶ Students follow along, reading silently.

### Activity 4: Reading and Discussion

**45%**

Instruct students to form pairs. Post or project each group of questions below for students to discuss.

① Instruct students to consult the 10.3.1 Unit Glossary for the terms found in today’s reading: *inoculation, immune system, lymph nodes, refrain, diagnosis, dissecting, ethical boundaries, civil courts, and inalienable rights*.

Instruct students to take out their Surfacing Issues Tool. Explain that students should record any potential research issues after each portion of text is read, and record two inquiry questions for each issue they surface in the text.

① For potential surfaced issues from this portion of text, see the Model Surfacing Issues Tool at the end of this lesson.

Instruct student pairs to reread from “As HeLa grew like crabgrass in laboratories” to “that could someday lead to a cancer vaccine” (pp. 127–129), annotate their texts, and answer the following questions before sharing out with the class.

#### What was the purpose of Southam’s experiment?

- ☛ Southam started his experiments because he wanted to understand cancer, whether it started as “a virus or an immune system deficiency” (p. 128). Southam was also worried about the safety of scientists, and he thought HeLa might “infect the scientists” (p. 127) who were working with the cells.

Review the following portion of text on page 128: “Within hours, the patients’ forearms grew red and swollen” to “Henrietta’s cancer cells metastasized to her lymph nodes.” What inferences can you make about the effects of the experiments on the health of the first test subjects?

- Skloot writes that the tumors “returned again, and again” (p. 128) and in one case “Henrietta’s cancer cells metastasized to her lymph nodes” (p. 128). The way Skloot describes the condition of these patients makes it seem like their health had gotten worse.

**Why did Southam choose prisoners as test subjects?**

- Southam used prisoners because they had “cooperated in several other studies” (p. 128) and they were “being used for research of all kinds” (p. 129) and were considered a “vulnerable population” (p. 129) because they could not give “informed consent” (p. 129). They are considered vulnerable because they may lack education that would help give them *informed consent*.
- ① Consider providing students with the following definition: *informed consent* means “a patient’s consent to a medical or surgical procedure or to participation in a clinical study after being properly advised of the relevant medical facts and the risks involved.”
- Students write the definition of *informed consent* on their copy of the text or in a vocabulary journal.

**How does Skloot’s description of the experiments on prisoners help make meaning of *informed consent*?**

- Skloot describes experiments that sound awful like “X-raying testicles” (p. 129) or being “infected with a potentially deadly disease” (p. 129). If prisoners were “unable” (p. 129) to give *informed consent* then it probably means they did not know much about the experiments.
- ① Consider drawing students’ attention to their application of standard L.9-10.4.a through the process of using context to make meaning of a word.

**What is the effect of Skloot’s use of the word *refrain* to describe the prisoner’s quotes?**

- Skloot quotes the prisoners saying they want to “pay back a little bit” (p. 129) and that these experiments “the wrong I have done . . . this might make a right on it” (p. 129); her use of the word *refrain* means this kind of phrase was repeated over and over and they were motivated mostly by guilt.

**How do Skloot’s details of Southam’s patients contribute to her perspective about *informed consent* in this specific study?**

- Skloot describes the prisoners as a “vulnerable population” (p. 129) and the first subjects were “about a dozen other cancer patients” (p. 128) as well as “terminally ill” (p. 129). Skloot’s details about Southam saying “nothing about . . . malignant cells” (p. 128) as well as the description of the size and frequency of the cancerous nodules as “two centimeters” (p. 128) contribute to her perspective of supporting *informed consent*.

Lead a brief whole-class discussion of student responses.

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Instruct student pairs to reread from “In the coming years, Southam injected HeLa” to “They also knew about the famous Nuremberg Trials” (pp. 129–131) and answer the following questions before sharing out with the class.

Remind students to continue to surface issues for research and generate inquiry questions.

**Why did Southam believe he was actually testing patients for cancer?**

- Southam believed that by “timing the rejection rate” (p. 130) of HeLa cells he could tell which subjects actually had cancer. The patients who “reject the cells more slowly” (p. 130) were likely to have cancer.

**What did Southam consider to be “responsible clinical practice” (p. 130)?**

- Southam believed that doctors should not cause “unnecessary fear” (p. 130) and that being informed about the study would be too “emotionally disturbing” (p. 130) to the uninformed patient. They would think that their “diagnosis is cancer” (p. 130) when he believed he was not actually giving anyone cancer.

**What is the impact of Skloot’s insertion of “(rightly or wrongly)” (p. 130) into Southam’s quote?**

- Skloot’s insertion impacts Southam’s claim because she is questioning whether it was right or wrong that his test would “suggest” (p. 130) to patients that they may have cancer.

**What claim does Skloot make about Southam’s “deception” (p. 130)?**

- Skloot claims that Southam did not fully explain his study and it “was for his benefit” (p. 130), since his patients may have “refused to participate” (p. 130).

**What is the effect of Skloot’s reference to “the research Nazis had done on Jewish prisoners” (p. 131) in connection with Southam’s study? How does this reference advance her purpose in this portion of text?**

- Skloot’s reference to the “research Nazis had done” (p. 131) relates Southam’s study with one of the worst cases of human treatment in human history, therefore making Southam seem

horrible. The doctors would not “conduct research on patients without their consent” (p. 130) and Skloot’s purpose in this text so far is to reinforce the importance of informed consent.

Lead a brief whole-class discussion of student responses.

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Instruct student pairs to reread from “Sixteen years earlier, on August 20, 1947” to “an empty formality. With this we cannot agree” (pp. 131–134) and answer the following questions before sharing out with the class.

Remind students to continue to surface issues for research and generate inquiry questions.

① Consider providing students with the following definition: *human experimentation* means “a test or procedure carried out on a person under controlled conditions to determine the validity of a theory or make a discovery.”

- ▶ Students write the definition of *human experimentation* on their copy of the text or in a vocabulary journal.

### Why does Skloot choose this section of the Nuremberg Code?

- 💬 Skloot quotes the part of the Nuremberg Code that talks about “voluntary consent” (p. 131) being necessary for *human experimentation*—testing research on humans. Skloot uses this portion of the code to advance her purpose that *informed consent* is important when experimenting on people. Skloot also notes there were “rules protecting laboratory animals” (p. 131) but not for “humans until Nuremberg” (p. 131).

### Why did the Nuremberg Code never pass as a law in the United States?

- 💬 The Nuremberg Code was “essentially, a list of recommendations” (p. 131) and did not become a law in the United States because there was “fear of interfering with the progress of science” (p. 131).

### Why was Southam free from the *informed consent* ruling in civil court?

- 💬 This ruling did not apply to Southam because he was a researcher, not a physician, and the ruling stated that a physician “violates his duty” (p. 132) if he or she does not provide *informed consent*, but in Southam’s case “subjects weren’t the researcher’s patients” (p. 132).

### What can you infer from Southam’s statement that “it seemed stupid to take even a little risk” (p. 134)?

- 💬 This statement means that Southam knew that injecting HeLa cells was potentially harmful because he “didn’t inject himself” (p. 134).

**How did Southam’s lawyer support the claim that Southam did not participate in “unprofessional conduct” (p. 134)?**

- Many doctors said “they’d been conducting similar research for decades” (p. 134). Southam’s lawyer’s claim was supported by the testimony of the other doctors; they thought his practices were “ethical in the field” (p. 134).

**Explain the two perspectives present in the case brought before the Board of Regents. Which perspective supports Skloot’s purpose?**

- The first perspective in this case was that Southam was doing what all doctors did in the field: “it was unnecessary to disclose all information” (p. 134). Southam did what was “ethical in the field” (p. 134) so he did not consider his actions wrong. The Attorney General’s perspective argued that it was a part of people’s *inalienable rights* “to be fearful and frightened and thus say NO” (p. 134). Skloot has been advocating for *informed consent* in this text: “Informed consent focused on what doctors were required to tell their patients” (p. 132). The Attorney General’s perspective supports Skloot’s purpose.

Lead a brief whole-class discussion of student responses.

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Instruct student pairs to reread from “Their decision called for more specific guidelines” to “In fact research flourished. And much of it involved HeLa” (pp. 134–136) and answer the following questions before sharing out with the class.

Remind students to continue to surface issues for research and generate inquiry questions. Additionally, students discuss their answers to the following questions and annotate the text in pairs.

**Compare the cases of Bertil Bjorklund and Southam. What happened to each scientist? Which case brought about change in scientific practices?**

- Student responses should include:
  - Both scientists had been giving “patients intravenous injections” (p. 133) but Bjorklund also injected himself.
  - Both scientists were punished. Bjorklund was “expelled from his laboratory” (p. 133). Southam was put on probation for a year, though shortly thereafter “Southam was elected president of the American Association for Cancer Research” (p. 135).
  - Even though Southam’s punishment was easier, it caused the NIH to implement “one of the largest research oversight changes in the history of experimentation on humans” (p. 135).

Lead a brief whole-class discussion of student responses.

## Activity 5: Quick Write

15%

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

**Analyze how Skloot uses examples in this portion of text to advance her purpose.**

Instruct students to look at their annotations to find evidence. Ask students to use this lesson's vocabulary wherever possible in their written responses. Remind students to use the Short Response Rubric and Checklist to guide their written responses.

- ▶ Students listen and read the Quick Write prompt.

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

Transition to the independent Quick Write.

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

## Activity 6: Closing

5%

Display and distribute the homework assignment. For homework, instruct students to select and refine three of the inquiry questions they generated in this lesson. Also, instruct students to respond to the following prompt:

**What conclusions can you draw between the representation of HeLa in this excerpt (“Illegal, Immoral, and Deplorable”) versus the representation of HeLa in “The HeLa Factory”?**

Ask students to use this lesson's vocabulary wherever possible in their written responses.

- ▶ Students follow along.

## Homework

Refine your inquiry questions and select three from the questions generated in this lesson. Respond in writing to the following prompt:

**What conclusions can you draw between the representation of HeLa in this excerpt (“Illegal, Immoral, and Deplorable”) versus the representation of HeLa in “The HeLa Factory”?**

## Model Surfacing Issues Tool

Name:		Class:		Date:	
Issue	Page Number(s)	Key Information about the Issue from the Text			
Southam's cancer experiments	127–136	Southam injected HeLa cells into patients without telling them because "he didn't want to cause any unnecessary fear." This example includes <i>informed consent</i> and <i>human experimentation</i> .			
The Nuremberg Code	131	This example is about a code of medical ethics made after Nazi doctors were put on trial. The code called for "voluntary consent" when performing <i>human experimentation</i> . It was not a law, just "a list of recommendations."			
Informed Consent	128–136	Most medical researchers thought it was "unnecessary to disclose all information to research subjects." This led to experiments on "vulnerable populations" like prisoners.			
Human experimentation	131–136	Nazi doctors had done "unthinkable research on Jews" and the Nuremberg Code was set to provide protection for human subjects. This was not a law and many researchers conducted dangerous experiments on people.			

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