

10.3.2

Unit Overview

“Engaging in an Inquiry-Based, Iterative Research Process to Write Arguments”

Texts	<p>Students choose texts for research based on their problem-based question.</p> <p><i>Model Research Sources:</i></p> <ul style="list-style-type: none"> • “A Court Allows Payment for Bone Marrow. Should People Be Able to Sell Their Parts?” by Alice Park (Source #1) • “Do We Own Our Bodily Tissues?” by Margaret Ng Thow Hing (Source #2) • “Paying Patients for Their Tissue: The Legacy of Henrietta Lacks” by Robert D. Truog, Aaron S. Kesselheim and Steven Joffe (Source #3) • “Tissue Banks Trigger Worry About Ownership Issues” by Charlie Schmidt (Source #4) • “Human Tissue for Sale: What Are the Costs?” by Deborah Josefson (Source #5) • “My Body, My Property” by Lori B. Andrews (Source #6) • “Body of Research—Ownership and Use of Human Tissue” by R. Alta Charo (Source #7)
Number of Lessons in Unit	13

Introduction

In this unit, students continue the research process begun in Unit 1. Students begin to deeply engage in this iterative, non-linear process with the goal of deepening students’ understanding of topics and issues that may lead to argument writing. Students continue to learn how to use the inquiry-based research process to gather, assess, read, and analyze sources, while organizing and synthesizing research to develop claims and counterclaims about a specific problem-based question.

Students are formally introduced to the research process by creating a Research Portfolio and learning about the Student Research Plan, a roadmap for students to reflect on their ongoing research progress

and next steps. Students vet areas of investigation, developed in Unit 1, to focus on a specific research topic/issue. From there, students learn how to develop specific inquiry questions and choose credible, relevant, and accessible sources by planning for searches, assessing sources, annotating sources, taking notes, and evaluating arguments effectively.

Through these inquiry steps, students create a problem-based question and an initial research frame that guides independent searches. Using the reading skills developed in previous modules and the source assessment skills introduced in this unit, students conduct independent research by using inquiry questions to explore and deepen their understanding of their specific problem-based question. As the research process continues, students continually revisit the research frame to analyze their research direction and focus, while assessing and making changes as necessary. As this cyclical and iterative research process evolves, students begin to organize and synthesize their data, make claims about inquiry paths, and eventually the problem-based question itself.

Additionally, students are exposed to the fundamentals of argument-based writing through the examination and delineation of arguments. Students work to identify the effective components of argument-based writing and begin to expand their understanding of effective argument writing by establishing counterclaims opposing their claims.

There is one formal assessment in this unit; however, students continually reflect on their research progress by journaling about their research progress and next steps using a Research Journal. The End-of-Unit Assessment asks students to develop an Evidence-Based Perspective by writing a one-page synthesis of their personal conclusions and perspective derived from the research (W.9-10.7, W.9-10.9).

Note: This unit suspends Accountable Independent Reading (AIR). Students are held accountable for building a volume of independent reading as they read multiple sources and refine and deepen their understanding of their inquiry topic and later, problem-based question.

Literacy Skills & Habits

- Assess sources for credibility, relevance, and accessibility.
- Conduct independent searches using research processes including planning for searches, assessing sources, annotating sources, recording notes, and evaluating argument.
- Develop, refine, and select inquiry questions for research.
- Develop and continually assess a research frame to guide independent searches.
- Collect and organize evidence from research to support analysis in writing.
- Craft claims about inquiry questions, inquiry paths, and a problem-based question using specific textual evidence from the research.
- Develop counterclaims in opposition to claims.

Standards for This Unit

CCS Standards: Reading-	
RI.9-10.1.a	Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. a. Develop factual, interpretive, and evaluative questions for further exploration of the topic(s).
RI.9-10.8	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.

CCS Standards: Writing	
W.9-10.1.b	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. Explore and inquire into areas of interest to formulate an argument. b. Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns.
W.9-10.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
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.
W.9-10.8	Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.
W.9-10.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.

CCS Standards: Speaking & Listening	
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 <i>grades 9–10 topics, texts, and issues</i> , building on others' ideas and expressing their own clearly and persuasively.

CCS Standards: Language	
L.9-10.4. a, c, d	<p>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.</p> <ul style="list-style-type: none"> 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. c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).

Note: Bold text indicates standards that will be assessed in the unit.

Unit Assessments

Ongoing Assessment	
Standards Assessed	RI.9-10.1a, RI.9-10.8, W.9-10.7, W.9-10.8, W.9-10.9
Description of Assessment	Varies by lesson but may include completed research tools, responses to Quick Write prompts focused on developing research skills, and vocabulary learned through research as tracked in the vocabulary journal.

End-of-Unit Assessment	
Standards Assessed	W.9-10.7, W.9-10.9

Description of Assessment	<ul style="list-style-type: none"> Students submit a completed Research Portfolio with the four sections organized including 1. Defining an Area of Investigation, 2. Gathering and Analyzing Information, 3. Drawing Conclusions, 4. Discarded Material. The Research Journal is also located in the Research Portfolio. Students write a one-page synthesis of their developing perspective derived from their research. Students draw on the research evidence collected to express their Evidence-Based Perspective on their problem-based question.
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Unit-at-a-Glance Calendar

Lesson	Text	Learning Outcomes/Goals
1	Students choose texts for research based on their individual research question/problem.	Students are formally introduced to the research unit and construct a Research Portfolio to house all research previously conducted in Unit 1 and the research materials distributed and gathered in this unit. Additionally, students vet their 2–3 possible areas of investigation (from Unit 1, Lesson 15) to identify a research topic/area of investigation for use throughout the unit.
2	Students choose texts for research based on their individual research question/problem.	Students work to generate more specific inquiry questions to frame their research. Students were introduced to inquiry questions in Unit 1. In this lesson, they learn how to craft specific inquiry questions for their selected research topic/area of investigation developed in the previous lesson. Students engage in a research process check-in during which they review the Student Research Plan Handout. Students also review inquiry questions from Unit 1 and generate, vet, and refine specific inquiry questions for their research topic/area of investigation using a Specific Inquiry Questions Checklist.
3	Students choose texts for research based on their individual research question/ problem.	Students learn how to select inquiry questions, plan search locations, and use key words and phrases to conduct effective and efficient research. Additionally, students learn how to formally assess sources for credibility, accessibility, and relevance.
4	Students choose texts for research based on their individual research question/problem.	Students continue to develop their research skills as they learn how to closely read important sources for selected inquiry questions, using annotation and note taking. Students are introduced to additional annotation codes and a Taking Notes Tool.

Lesson	Text	Learning Outcomes/Goals
5	Students choose texts for research based on their individual research question/problem.	Students learn how to evaluate an evidence-based argument. Students work to develop their ability to identify the necessary components of a compelling argument, systematically evaluate arguments, and assess the effectiveness of these arguments.
6	Students choose texts for research based on their individual research question/problem.	Students construct a frame (Research Frame Tool) to guide their research by establishing inquiry paths that allow them to explore various aspects of their research topic/area of investigation. Students group their inquiry questions thematically, establish a problem-based question, and formally plan their research using the Research Frame Tool.
7	Students choose texts for research based on their individual research question/problem.	Students begin conducting searches independently using the Research Frame and associated search tools. This lesson is the first of three lessons during which students conduct sustained, independent research during class. While researching, students consider how to use inquiry questions to drive research while continually assessing sources for credibility and usefulness in answering inquiry questions.
8	Students choose texts for research based on their individual research question/problem.	Students continue to conduct searches independently using the Research Frame as a guide, with the associated search tools. This lesson is second in a series of three lessons focusing on the independent search process. It builds on the previous lesson by focusing students on determining if the research surfaced is sufficient to address established inquiry paths and questions, and adjusting the search accordingly. Additionally, students read sources closely, analyzing details and ideas, and taking notes for each source to determine how it addresses inquiry questions and paths.
9	Students choose texts for research based on their individual research question/problem.	Students continue to conduct searches independently. This lesson is the last in a series of three lessons focused on conducting searches independently. Students assess their current search process and make strategic decisions about changes, additions, and deletions to the Research Frame. Students make final decisions about their research direction by revising their Research Frame accordingly.

Lesson	Text	Learning Outcomes/Goals
10	Students choose texts for research based on their individual research question/problem.	Students analyze and synthesize their research to make claims about inquiry questions within an inquiry path. Students complete at least two Forming Evidence-Based Claims Tools for all inquiry paths on the Research Frame. These initial claims are the foundation for the Evidence-Based Perspective students will develop in Lesson 13.
11	Students choose texts for research based on their individual research question/problem.	In this lesson, students organize, analyze, and synthesize their claims (Forming Evidence-Based Claims Tools) from the previous lesson to develop comprehensive claims about each inquiry path in the Research Frame. This work directly prepares students for developing and writing an Evidence-Based Perspective (End-of-Unit Assessment) in Lesson 13. Students build on the claims created in the previous lesson to develop comprehensive claims that reflect a deeper understanding of the inquiry paths and the problem-based question itself.
12	Students choose texts for research based on their individual research question/problem	Students choose one claim from the previous lesson to form a counterclaim in opposition to that claim. Students identify evidence to support their counterclaims and record that information on the Forming Counterclaims Tool before engaging in a peer review. Students use the Evidence-Based Claims Criteria Checklist to evaluate a peer's counterclaim.
13	Students choose texts for research based on their individual research question/problem.	Students complete the End-of-Unit Assessment by conducting a final review of the Research Portfolio and writing an Evidence-Based Perspective based on the research outcomes from the unit. Students submit the final Research Portfolio and the Evidence-Based Perspective. The Evidence-Based Perspective is assessed using a rubric based on the Research Portfolio content.

Preparation, Materials, and Resources

Preparation

- Identify and contact the media specialist/librarian/person best positioned to assist students with conducting research.
- Reserve computer lab or classroom with technology and Internet access for all students.

- Read and annotate model sources (see page 1).

Materials/Resources

- Binders or Electronic Folders (for the Research Portfolio)
- Access to technology (if possible): interactive whiteboard, document camera, and LCD projector
- Copies of handouts and tools for each student: see Materials list in individual lesson plans
- Highlighters
- Copies of the 10.3.2 End-of-Unit Evidence-Based Perspective Rubric.