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| 10.3.3 | Lesson 11 |

# Introduction

In this last lesson of the unit, students work in class to finalize the research-based argument papers (End-of-Unit Assessment), editing, polishing, and rewriting as necessary. Students are evaluated on the final draft’s alignment to the criteria of the 10.3.3 Rubric and Checklist. The final draft should present a precise claim that is supported by relevant and sufficient evidence and valid reasoning. The draft should be well-organized, distinguishing claims from alternate and opposing claims and using language that clearly links the major sections of the text and clarifies relationships among the claims, counterclaims, evidence, and reasoning. Finally, the draft should show control of the conventions of written language and maintain a formal style and objective tone. For homework, students listen to and assess a podcast in preparation for the Module Performance Assessment.

# Standards

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| Assessed Standard(s) | |
| W.9-10.1.a–e | 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.   1. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence. 2. 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. 3. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. 4. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. 5. Provide a concluding statement or section that follows from and supports the argument presented. |

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| L.9-10.1 | Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. |
| L.9-10.2 | Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. |
| L.9-10.3.a | Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.   1. Write and edit work so that it conforms to the guidelines in a style manual (e.g., MLA Handbook, Turabian’s Manual for Writers) appropriate for the discipline and writing type. |
| L.9-10.6 | Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. |
| Addressed Standard(s) | |
| W.9-10.4 | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3.) |
| 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. |
| L.9-10.1.a | Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.   1. Use parallel structure. |
| L.9-10.2.a–c | Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.   1. Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses. 2. Use a colon to introduce a list or quotation. 3. Spell correctly. |

# Assessment

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| Assessment(s) |
| End-of-Unit Assessment: Student learning in this lesson is assessed via the research-based argument paper.   * This assessment is evaluated using the 10.3.3 Rubric. |
| High Performance Response(s) |
| A High Performance Response should:   * Adhere to the criteria in the 10.3.3 Rubric and Checklist. * See attached model research-based argument paper. |

# Vocabulary

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| Vocabulary to provide directly (will not include extended instruction) |
| * None.\* |
| Vocabulary to teach (may include direct word work and/or questions) |
| * None.\* |

\*Students should use their vocabulary journals to incorporate domain-specific vocabulary from Unit 10.3.2 into their research paper, as well as to record process-oriented vocabulary defined in the lesson.

# Lesson Agenda/Overview

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| Student-Facing Agenda | % of Lesson |
| **Standards:**   * Standards: W.9-10.1.a–e, L.9-10.1, L.9-10.2, L.9-10.3.a, L.9-10.6, W.9-10.4, W.9-10.8, W.9-10.9, L.9-10.1.a, L.9-10.2.a–c |  |
| **Learning Sequence:**   1. Introduction of Lesson Agenda 2. Homework Accountability 3. 10.3.3 End-of-Unit Assessment: Final Research-Based Argument Paper 4. Closing | 1. 5% 2. 10% 3. 80% 4. 5% |

# Materials

* Student copies of the 10.3.3 Rubric and Checklist (refer to 10.3.3 Lesson 3)
* Copies of the 10.3.3 End-of-Unit Assessment for each student
* Copies of the Speaking and Listening Rubric for standards SL.9-10.4, SL.9-10.5, and SL.9-10.6 for each student

# Learning Sequence

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| 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.** |
| *Italicized text indicates a vocabulary word.* |
| ⏵ | 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 introducing the lesson agenda and assessed standards in this lesson: W.9-10.1.a-e, L.9-10.1, L.9-10.2, L.9-10.3.a, and L.9-10.6. In this lesson, students complete their final draft of their research-based argument paper to be evaluated for the 10.3.3 End-of-Unit Assessment. Students work independently and hand in the final product at the end of class.

* Students look at the agenda.

Activity 2: Homework Accountability 10%

Ask student volunteers to briefly share one or two edits they made for homework based on the peer review session and to explain their decisions by referencing the corresponding checklist(s) in their 10.3.3 Rubric and Checklist.

* Students share one or two edits made for homework.
* Student responses will vary by individual research paper.

Activity 3: 10.3.3 End-of-Unit Assessment: Final Research-Based Argument Paper 80%

Instruct students to spend the remaining portion of the class completing the final draft of their research-based argument papers. Inform students that they may use their Research Portfolios, all checklists and rubrics used in this unit, and previous versions of their research-based argument papers with peer comments to guide the creation of the final draft. Advise students they should use this time to edit, polish, and/or rewrite as they see fit, using all the skills they have learned over the course of this unit. Students should also finalize their Works Cited page and format their paper according to MLA citation. Remind students that the final draft will be assessed using the 10.3.3 Rubric, and evaluated based on its alignment to the conventions of an argument text, including reference to citations as well as proof that the evidence-based central claim has developed from research and is supported by sufficient evidence.

* Students work independently to finalize their research-based argument papers.
* If necessary, consider reviewing the components of W.9-10.4, which include producing clear, coherent writing that employs organization and style appropriate to the task, purpose, and audience.
* Remind students to use textual evidence to support their analysis as explained in W.9-10.9.
* Remind students to consider the instruction on semicolons, colons, and parallel structure (L.9-10.1.a and L.9-10.2.a, b, c) when finalizing their drafts.
* Remind students to cite sources properly as detailed in W.9-10.8.

Activity 4: Closing 5%

Display and distribute the homework assignment. For homework, instruct students to prepare for the module performance task by listening to a podcast featuring Rebecca Skloot, author *of The Immortal Life of Henrietta Lacks*. Explain that the homework has a twofold purpose: It serves as an exemplar for the module performance assessment, and it introduces a new Speaking and Listening Rubric for standards SL.9-10.4, SL.9-10.5, and SL.9-10.6 that will be used to evaluate students’ podcasts in the module Performance Assessment.

Distribute the Speaking and Listening Rubric for standards SL.9-10.4, SL.9-10.5, and SL.9-10.6. Instruct students to use this rubric to assess Rebecca Skloot’s podcast. Review the rubric with students and answer any questions students may have about it.

* Students examine the Speaking and Listening Rubric for standards SL.9-10.4, SL.9-10.5, and SL.9-10.6 and ask clarifying questions.
* Inform students that this rubric is similar to the Speaking and Listening Rubric for SL.9-10.1 to which they were introduced in Module 10.1.
* Completion of this homework is necessary to ensure students are prepared for the module Performance Assessment.

# Homework

Listen to the first 22 minutes, 7 seconds of the *Science Weekly* podcast featuring an interview with Rebecca Skloot, author of *The Immortal Life of Henrietta Lacks.* Use the Speaking and Listening Rubric to assess the podcast for standards SL.9-10.4, SL.9-10.5, and SL.9-10.6. The podcast may be found at the following link:<http://www.theguardian.com/science/blog/audio/2010/jun/21/science-weekly-podcast-henrietta-lacks-rebecca-skloot>. 10.3.3 End-of-Unit Assessment

**Final Research-Based Argument Paper**

**Your Task:** Rely on the evidence you have gathered to write the final draft of your research-based argument paper. In crafting your paper, include a precise central claim that is derived from your research and supported by relevant and sufficient evidence and valid reasoning. Be sure to use evidence from at least five of your identified sources, distinguishing claims from alternate and opposing claims. Use specific and objective language that clearly links the major sections of the text and clarifies relationships among the claims, counterclaims, evidence, and reasoning. Use your Research Portfolios, checklists and rubrics, and previous versions of your research-based argument paper with peer comments to guide the creation of your final draft.

**Guidelines**

**Be sure to:**

* Review your writing for alignment with all components of W.9-10.1.a–e.
* Establish your precise central claim about the problem-based question.
* Distinguish your central claim from alternate or opposing claims.
* Establish and organize the central claim, supporting claims, counterclaims, reasoning, and evidence.
* Develop supporting claims and counterclaims equally while explaining the strengths and limitations of both.
* Use relevant and sufficient evidence and valid reasoning from at least five of the sources to develop your argument.
* Identify the sources that you reference in MLA format.
* Organize your ideas in a cohesive and coherent manner that clarifies the relationships between supporting claims and reasoning, between reasoning and evidence, and between supporting claims and counterclaims.
* Maintain a formal and objective style of writing while attending to the norms and conventions of argument writing.
* Follow the conventions of standard written English.
* Accurately use general academic and domain-specific words and phrases appropriate to the subject of the research-based argument paper.

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| **CCRS:** W.9-10.1.a–e  **Commentary on the Task:**  This task measures W.9-10.1.a–e because it demands that students:   * Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. * Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence. * 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. * Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. * Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. * Provide a concluding statement or section that follows from and supports the argument presented.   This task measures L.9-10.1 and L.9-10.2 because it demands that students:   * Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. * Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.   This task measures L.9-10.3.a and L.9-10.6 because it demands that students:   * Write and edit work so that it conforms to the guidelines in a style manual (e.g., MLA *Handbook*, Turabian’s *Manual for Writers*) appropriate for the discipline and writing type. * Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. |

Model Final Research-Based Argument Paper

Grave-robbers, body snatchers, reanimated monsters: this is the stuff of horror films and nightmares. In the real world, human tissue can be removed from a body without consent and used to develop a cell line or genetic map. Not quite a horror movie, but a nightmare when it happened to Henrietta Lacks and her family: in 1951, doctors removed some of Henrietta’s cells without asking and grew the first line of immortal cells. The Lacks family was in the dark for decades about Henrietta's cells, and what they learned over time was incomplete and misleading information that did nothing to help them understand what had been done to Henrietta and why. It is this fear of the unknown and a lack of understanding concerning medicine and science—that is, how human tissues are used or what can be created from them—that fuels a fear of mad scientists like those in horror films. Care must be taken to protect patients and their families from psychological trauma when tissues are removed from the body and used without consent for research or profit. But how much protection is enough? Who should own tissue, or profit from tissue after it has been surgically removed from a patient's body? Based on the complications inherent in profiting from tissues, granting anyone the rights to sell human tissue is morally and ethically questionable; neither researchers nor patients should have rights to sell any human tissue.

What the law tells people about ownership of tissue is already complicated and confusing. Even patients granting permission to a research institution to use donated tissue can confuse who actually owns the donated tissue. According to Schmidt, “As it stands now, tissue banks appear to have de facto ownership over sample inventories and the right to use them as they wish” (1174). Consent forms, or forms that patients complete and sign before or after surgery, can be overly complicated and written in legal language that is difficult to understand. As a result, patients may not comprehend what they are agreeing to regarding their donated tissue. According to Wayne Grody, MD, quoted in Schmidt, “patient ownership could lead to the advent of daunting informed consent forms that might deter some individuals from donating samples” (1175). However, even if permission to use tissue is granted through consent forms, these forms may not clearly define who gets final ownership of donated tissues, thus affecting who can profit from the tissues if the tissues are sold. In the case of Dr. Catalona, tissue was collected by one researcher using a consent form provided by the university where he worked and when he moved to another university, many of his patients moved with him. However, the consent form did not provide enough information to make it clear that ownership of the tissue would be retained by the original university, forcing him to leave all the tissue samples behind, against the wishes of many of his patients (Hing). This is a clear example of how many legal consent forms do not cover the complex issues involving patient’s permission and transfer of legal ownership. And, if there is not a clear idea of ownership, then selling tissues can be even more confusing.

It is easy to understand how the problem of selling one’s own tissue becomes even more complicated due to the differences of what tissue is legal and illegal to sell. It is legal to sell cells from: eggs, sperm, plasma, blood, breast milk, and hair (Park; Truog, Kesselheim, and Joffe 38). While it is currently illegal to sell, but legal to donate, internal organs, skin, corneas, bone, and bone marrow, it is legal to sell bone marrow extracted through peripheral apheresis, a method that draws marrow through the blood (Park). This extraction process shows that “marrow cells should be considered a fluid like blood,” and therefore legal to sell (Park). As new technologies like these emerge, the issue of tissue ownership, sale, and donation grows more complicated because there are more distinctions being made about what kinds of tissues can be bought and sold. In order to have clear and concise guidelines, regardless of the technology involved, it should not be legal to sell any human tissue for profit.

The legal issues that deal with patients’ rights to tissue removed during surgery need to be clearly defined because doctors and researchers can profit from tissue taken during surgery. Patients cannot claim ownership of tissue removed during surgery because of hazardous waste laws, so patients cannot make a profit from their removed tissues. For example, a patient cannot legally take his or her appendix home after an appendectomy (Schmidt 1174). However, patients must grant consent for residual tissues to be used in research (Truog, Kesselheim, and Joffe 37–38). This current system does not offer enough protection for the patient, as when a patient passes away, donated tissues can be banked for medical use or research, or “processed and sold for profit and become such items as bone putty and collagen” (Josefson 303). So, even though dying patients donate or give consent for their tissues to be used in research, they probably do not realize they are also giving consent for donated tissues to be sold for profit. Additionally, although the National Organ Transplant Act of 1984 prohibits trafficking of organs tissue, tissue banks routinely make a profit through use of legal loopholes: “tissue banking is big business and the law is readily side-stepped by invoking ‘processing and handling fees’ so that the tissue itself is not officially sold” (Josefson 303). So, donated tissue is often sold through unofficial “fees” without any consequences. These examples demonstrate that the line between donation and sale can be complicated and often blurred for the purpose of making money. In order to both protect a patient’s rights and ensure that choices are made with the advancement of medical understanding, it is better to prevent any sale or profit resulting from tissue donated during surgery or any medical situation.

In addition to the problems surrounding the sale of tissue, granting researchers legal ownership of others’ genes, cells, or tissues infringes on individuals' rights to privacy and control over their unique genetic information, as “individuals can be identiﬁed by genetic sequences numbering just 75 base pairs of DNA” (Schmidt). Consequently, a large section of the population objects to the patenting of their genetic information: “In a study of potential tissue donors, 32 percent said they would be offended by the patenting of products of research with their DNA” (Andrews). Despite these objections, the possible financial incentives are enough to encourage many for-profit companies to patent genetic codes aggressively: “If a biotech company could identify the sequence of a gene from your body, as Myriad Genetics did with the BRCA1 and BRCA2 breast cancer genes, it then had a 20-year monopoly where it could charge whatever it wanted for anyone to look at the gene's sequence” (Andrews). Researchers from universities are also incentivized to misuse and exploit individuals’ rights and privacy through their tissue and genetic information. Such is the case of the Havasupai Indian tribe from Arizona who are suing Arizona State University over a damaging misuse of their genetic information: “tissues they had donated to Arizona State University for diabetes research were also used in what they viewed as potentially stigmatizing studies of schizophrenia, inbreeding, and population migration” (Schmidt 1175). Profits and personal gain should not take precedent over an individual’s right to privacy, especially in relation to the unique genetic make-up of one’s own body.

Furthermore, the sale or resale of human tissue is dehumanizing and exacts a psychological toll on the patient or the patient’s family. In a similar situation to Henrietta Lacks, a patient named John Moore also had his tissue removed, and his doctor created a cell line, all the while lying to Moore about what he was doing with the tissue. Andrews states, “When Moore found out that he was Patent No. 4,438,032, he felt that his integrity had been violated, his body exploited and his tissue turned into a product.” According to Catalona, “patients have grown increasingly worried that genetic information extracted from tissues could somehow be used against them” (Schmidt 1175). He states that, “insurance companies . . . might refuse coverage to the donors or their children on the basis of inherited disease susceptibility” (Schmidt 1175). Even when confronted with standard tissue donation practices, like donating the tissues of a deceased relative, the majority of the population is against the sale of these tissues: “73 percent of the U.S. families asked to donate tissue from deceased relatives say that it is "not acceptable for donated tissue to be bought and sold, for any purpose" (Andrews). Although it is important to support scientific advancement and provide viable tissues for research and to aid people who need transplants or other procedures, it is also important to recognize the rights and dignity of both the patient and the patient’s families. It is clear that at the very least, the sale of tissue is harmful to the individual on a personal level.

Some might argue that all tissue should be available for an individual to sell if it does not endanger the individual’s life and would improve his or her financial situation. An often cited claim is that compensation is necessary to meet the demand for donated tissues: “With about 114,000 people waiting for organs in the U.S. alone on any given day, and only 3,300 donors, the urgent medical need runs up against moral standards of the value of human life” (Park). A monetary incentive could be extremely effective and allow those without financial means to use their body as a resource for an income as Truog, Kesselheim, and Joffe reference in the case of Ted Slavin who had valuable blood and was able to sell a serum for as much as $10,000 per liter (37). Even if there is not a large sum to be made, there are other types of incentives that carry social benefits and would promote donation, such as the type cited in the Catalona decision: “a voucher that can be applied to things such as scholarships, education, housing or a donation to a charity” (Park). Though these incentives would convince a lot of people to donate samples, it would certainly be dangerous and skew donations towards those who might be thinking of earning some money quickly rather than thinking of their overall health. It is also important to keep in mind that “few individuals will contribute tissues that generate financial blockbusters” (Truog, Kesselheim, and Joffe 38). Without the ability to profit from specific tissues, doctors may also be more willing to reveal when tissues are valuable, and this would allow patients to decide how generous they want to be with their donations.

Tissue is removed every day during surgical procedures such as liposuction, amputations, mastectomies, and even biopsies of healthy tissue. In every cell of a person’s body is a mirror of the human within whose body the cell began. As humans learn more about genetics and heredity, the mirror can reflect that donor’s children and parents, stretching farther back and forward in time, connecting biology to information that can support groundbreaking research or provide valuable capital that can be used in positive or negative ways. Because of the problems that are inherent in the selling of tissue, the dangers of turning a system that saves lives into a for-profit business, and the infringement on individual’s rights and liberties, it is clear that changes must be made to the way we handle tissue sale and ownership. In order to protect the rights of patients and the privacy and dignity of individual human beings, neither researchers nor patients should have rights to sell their tissue. Money and science should not mix, for the good of humanity.

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Speaking and Listening Rubric

**Assessed Standards: SL.9-10.4, SL.9-10.5, SL9-10.6**

*Presentation of Knowledge and Ideas*

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|  | **2-Point Participation** | **1-Point Participation** | **0-Point Participation** |
| **Clarity**  **SL.9-10.4** | Presents information with a high level of clarity, conciseness, and logic, such that listeners can follow the line of reasoning. The organization, development, substance, and style of the presentation are effectively appropriate to the purpose, audience, and task. | Presents information with a clarity, conciseness, and logic, such that listeners can follow the line of reasoning. The organization, development, substance, and style of the presentation are appropriate to the purpose, audience, and task. | Presents information without clarity, conciseness, and logic, making it difficult for listeners to follow the line of reasoning. The organization, development, substance, and style of the presentation are inappropriate for the purpose, audience, and task. |
| **Media Utilization**  **SL.9-10.5** | Skillfully and strategically uses digital media in presentations to add interest and to enhance understanding of findings, reasoning, and evidence. | Makes effective use of digital media in presentations to add some interest and to enhance some understanding of findings, reasoning, and evidence. | Makes little or ineffective use of digital media in presentations to add interest or to enhance understanding of findings, reasoning, and evidence. |
| **Speech**  **SL.9-10.6** | Effectively demonstrates a strong command of formal English and the ability to adapt speech to the task and context of the presentation. | Demonstrates a command of formal English and the ability to adapt speech to the task and context of the presentation. | Demonstrates some command of formal English and some ability to adapt speech to the task and context of the presentation. |

**Speaking and Listening Checklist**

**Assessed Standards: SL.9-10.4, SL.9-10.5, SL9-10.6**

*Presentation of Knowledge and Ideas*

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|  | **Did I…** | **✔** |
|  | Prepare my podcast in a manner that ensures it is presented clearly, concisely, and logically so that my audience will be able to follow my line of reasoning? |  |
| **Clarity** | Ensure that my podcast’s organization, development, substance, and style are appropriate for my purpose, audience, and task? |  |
|  | Make strategic use of digital media to add interest to my podcast? |  |
| **Media Utilization** | Use the technology to enhance my findings, reasoning, and evidence? |  |
|  | Demonstrate a command of formal English? |  |
| **Speech** | Understand my assignment and adapt my speech accordingly to the task and the context of using podcast technology? |  |