

## 9.3.3

## Lesson 4

## Introduction

In this lesson, students continue to draft their research papers while focusing on cohesion—both within and between paragraphs. Students will also receive instruction around topic development and writing conclusion paragraphs. Students are assessed based on the coherence of their drafts. For homework, students draft their conclusion paragraph using the W.9-10.2.f checklist as a guide. Students also choose one of their sources to read, circling words and phrases from the **Connecting Ideas Handout** and making a note of how those words and phrases help to connect their ideas.

## Standards

Assessed Standard(s)	
W.9-10.2.b, c	<p>Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</p> <p>b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p>c. Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p>
W.9-10.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
Addressed Standard(s)	
W.9-10.2.f	<p>Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</p> <p>f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p>
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.

## Assessment

Assessment(s)
<ul style="list-style-type: none"> <li>The learning in this lesson will be captured through the strength of inter- and intra-paragraph cohesion and development of a topic.</li> </ul> <p>① This assessment is evaluated using the W.9-10.b and c portions of the Informative/Explanatory Research Paper Writing Rubric and Checklist (refer to 9.3.3 Rubric and Checklist Packet in 9.3.3 Lesson 2).</p>
High Performance Response(s)
<p>A High Performance Response may include the following:</p> <ul style="list-style-type: none"> <li>Thus, modern researchers claim that language is not the only sign of intelligence. Sometimes, very bright animals do not express their intelligence in ways that we can immediately see or notice. For example, a recent study of 59 chimpanzees concluded that the animals “fake laugh” in response to others’ laughter. According to Horowitz and Shea, “The researchers discovered that when one chimp laughed others sometimes engaged in ‘laugh replications’ that lacked the full acoustic structure of spontaneous laughter. In other words, they were fake-laughing.” This behavior exhibits chimps’ social etiquette. It is spontaneous and untaught, but humans would not notice it right away.</li> <li>Sometimes animals possess an intelligence that we must uncover. A recent study by researchers at Duke University revealed something about rhesus macaque monkeys: They can “mentally represent and compare numbers,” as well as do simple math problems (Duke). “We know that animals can recognize quantities, but there is less evidence for their ability to carry out explicit mathematical tasks, such as addition,” said graduate student Jessica Cantlon. “Our study shows that they can” (Duke). The monkeys were offered a “variable number of dots” on a touch screen. The dots disappeared, and a new screen appeared with two boxes, one with the sum of the first two sets of dots and one with a different number. When the monkeys tapped the box with the sum of the first two sets, they were rewarded with food. The same test was given to a group of college students. While the college students got the answer correct more often (94% vs. 76%), both the students and the monkeys responded at the same rate. Similarly, both groups’ number of correct answers declined equally when the two sets of numbers were close together (e.g., 11 and 12) (Duke). This study proves that the monkeys already had this ability, and were simply using it in ways we did not notice; we only had to construct the right test for them to show us this intelligence.</li> </ul>

## Vocabulary

Vocabulary to provide directly (will not include extended instruction)
<ul style="list-style-type: none"> <li>cohesion (n.) – the action or fact of forming a united whole</li> <li>transition (n.) – a passage in a piece of writing that smoothly connects two topics or sections to each other</li> </ul>
Vocabulary to teach (may include direct word work and/or questions)
<ul style="list-style-type: none"> <li>None.*</li> </ul>

\*Students should be using their Vocabulary Journal to incorporate domain-specific vocabulary from Unit 9.3.2 into their research paper, as well as to record process-oriented vocabulary defined in the lesson.

## Lesson Agenda/Overview

Student-Facing Agenda	% of Lesson
<b>Standards &amp; Text:</b> <ul style="list-style-type: none"> <li>Standards: W.9-10.2b, c, W.9-10.4, W.9-10.2.f, W.9-10.8</li> </ul>	
<b>Learning Sequence:</b> <ol style="list-style-type: none"> <li>Introduction of Lesson Agenda</li> <li>Homework Accountability</li> <li>Cohesion in Writing and Topic Development</li> <li>Drafting</li> <li>Conclusion Instruction</li> <li>Closing</li> </ol>	<ol style="list-style-type: none"> <li>5%</li> <li>10%</li> <li>25%</li> <li>40%</li> <li>15%</li> <li>5%</li> </ol>

## Materials

- Copies of the **Connecting Ideas Handout** for each student
- Student copies of the **9.3.3 Rubric and Checklist Packet**
- Students copies of the **MLA Citation Handout** (refer to 9.3.3 Lesson 3)

## 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 the assessed standard for this lesson: W.9-10.2b, c and W.9-10.4. Inform students that today's topic is cohesion in writing, as well as how to properly develop a topic.

- ▶ Students listen.

### Activity 2: Homework Accountability

10%

Place students in pairs and instruct them to briefly look over one another's citation strategies in the paragraphs they drafted for homework. Students should provide positive feedback and highlight any errors in citation. To guide their feedback, students should reference the MLA Citation Handout they received in the previous lesson, comparing their peers' work to the examples in the handout.

- ▶ In pairs, students look over the paragraphs they drafted for homework. An example critique would be:
- ☞ MLA guidelines require that you name the publication the article appeared in, but you forgot to add the publication.

### Activity 3: Cohesion in Writing and Topic Development

25%

Instruct students to finish drafting their paragraphs if they have not already and then work to organize the paragraphs to create *cohesion* throughout the paper. Explain to students that *cohesion* in writing refers to how well the paragraphs and sentences flow into one another to create a whole that is clear and logical to the reader. Explain to students that to create *cohesion*, they must do two things: organize the information logically and use correct *transition* words between sentences and paragraphs. Explain to

students that a *transition* is passage in a piece of writing that smoothly connects two topics or sections to each other. Explain to students that arriving at a point of *cohesion* is the result of a process that involves revision and editing.

① Remind students to record the definitions of *cohesion* and *transition* in their Vocabulary Journals.

Distribute the Connecting Ideas Handout.

Provide students with the following two examples, and ask them to consider which they think is more cohesive and logical.

- Much of her work has revolved around creating less stressful environments for animals in the meatpacking industry, in turn helping businesses prosper. Temple Grandin is an animal scientist who argues that untrained handlers and poor systems design often cause stress in the meatpacking industry. Grandin says that, “Stress is bad for human growth, too” (p. 21). “...stressed animals gain less weight, which means less meat to sell. Dairy cattle who’ve been handled with prods give less milk” (p. 21).
- Temple Grandin, an animal scientist, argues that untrained handlers and poor systems design often cause stress in the meatpacking industry. She claims that “stressed animals gain less weight, which means less meat to sell. Dairy cattle who’ve been handled with prods give less milk,” (p. 21). For this reason, much of her work has revolved around creating less stressful environments for animals in the meatpacking industry, in turn helping businesses prosper.

Once students have read the examples, ask pairs to discuss which one is more cohesive. Ask volunteers to explain their answer.

💬 The second paragraph is more cohesive. The first paragraph is confusing to read.

Ask students:

**What about the first paragraph makes it less cohesive?**

💬 It jumps around and has unnecessary information. It seems like this information belongs in multiple paragraphs.

**What about the second paragraph makes it more cohesive?**

💬 The second paragraph provides only relevant information and presents it logically, so the reader can follow along without becoming confused.

**What specific words and phrases in the more cohesive paragraph contribute to its success?**

- Temple Grandin is introduced in the first sentence as “an animal scientist,” so the reader is introduced to her just before we learn about her arguments. The phrase “for this reason” helps the reader see the connection between the previous sentence and the following one.

Explain to students that cohesion should also exist between paragraphs. In both cases, transitional words and phrases can help link their ideas and support the logic of the paper. Direct students to look at their **Connecting Ideas** Handout for transitional words to use in specific cases. To show how ideas are similar, students might use phrases like, “in the same way,” or “similarly.” For example: “Grandin argues that, ‘stressed animals gain less weight’ (p. 21). Similarly, she claims that “stress is bad for human growth.” Show students that these words can be used within a paragraph but also to connect two different paragraphs.

- ▶ Students listen and look over the words on their handout.

Present student pairs with the following two paragraphs and examine how they cohere from sentence to sentence and between paragraphs:

- Many people would say this is unfair. For example, what if someone held a book up to a dolphin and asked the dolphin to read it aloud? Even if a researcher spent years trying to teach a dolphin to read aloud, he will never be able to do it. When the dolphin inevitably fails this task, is it fair to assume it is because he is dumb? Perhaps it is more correct to say that dolphins do not have the physical ability to read text aloud than it is to claim that they cannot do it because they are unintelligent. Dolphins do not have the correct vocal chords or jaw structure to read aloud. Similarly, one could never teach a dolphin to have a thumb. Would a dolphin be considered unintelligent if it could not hold a hammer?
- Thus, modern researchers claim that language is not the only sign of intelligence. Sometimes, very bright animals do not express their intelligence in ways that we can immediately see or notice. For example, a recent study of 59 chimpanzees concluded that the animals “fake laugh” in response to others’ laughter. According to Horowitz and Shae, “The researchers discovered that when one chimp laughed others sometimes engaged in ‘laugh replications’ that lacked the full acoustic structure of spontaneous laughter. In other words, they were fake-laughing.” This behavior exhibits chimps’ social etiquette. It is spontaneous and untaught, but humans would not notice it right away.

Ask student volunteers to identify words that help with transition and cohesion, using their Connecting Ideas Handout as a reference.

- Student responses should include words like “for example,” “similarly,” and “thus.”

Inform students that the Connecting Ideas Handout is a good resource to have as they write this research paper and beyond this unit as they continue to write formally. Ask students to use the categories column to direct their choice of transitional words and phrases as they write. For example, if

they are looking to add more information about what they are talking about, they can look in the “Add Related Information” section and choose the word “furthermore” to help them connect their ideas.

- ▶ Students listen and examine the handout.

Inform students that cohesion and the logical presentation of information are both crucial to effectively developing a topic. In addition to having concrete details and relevant examples to support a claim, the information has to be presented in a way that is appropriate to the audience’s knowledge of the topic. Share with students that, in a way, writing a paper is like teaching: writers are teaching the reader what they know about a topic. To do this, students must start slowly and build up to an understanding, working logically as they progress through information to ensure that the reader understands the topic and research. Remind students that arriving at a point of cohesion is the result of a process that involves revision and editing.

- ▶ Students listen.

## Activity 4: Drafting

**40%**

Ask students to take out the 9.3.3 Rubric and Checklist Packet, and turn to the checklists for sub-standard W.9-10.2.b, c.

- ▶ Students turn to the checklists for sub-standards W.9-10.2.b, c.

Instruct students to use both checklists as they are drafting, organizing, and adjusting their paragraphs for cohesion and development of a topic. Inform students that they will be assessed according to this document when they submit their final paper.

- ▶ Students listen.

Ask students to organize their paragraphs and make any adjustments to what they have written to ensure:

1. There is cohesion and logic to their paragraphs.
2. The information is presented in a way that effectively develops a topic for the reader. Remind students that they may need to add concrete details, transition words, or delete sentences/passages to polish their paper.

- ▶ Students work independently on their drafts to ensure cohesion, logic, and appropriate topic development.

① As students work, walk around the class and address individual concerns.

Ask students to submit two paragraphs they worked on in class, and assess them on their use of transitional words/phrases and logical presentation of information.

- ▶ Students submit two paragraphs they worked on in class.

### Activity 5: Conclusion Instruction

**15%**

Once students have finished drafting for the day, inform them that they will begin drafting their conclusions tonight for homework. Direct students to turn to the checklist for sub-standard W.9-10.2.f in their 9.3.3 Rubric and Checklist Packet. Remind students to reference this checklist as they are drafting their conclusions.

- ▶ Students examine the checklist for sub-standard W.9-10.2.f.

Explain to students that an effective conclusion restates the claim of the paper and briefly summarizes some of the evidence presented in the paper to reinforce that claim. Explain that a conclusion is somewhat like the introduction paragraph in reverse: The first sentence of the conclusion paragraph should generally state the central claim of the paper, and the following sentences should open out and possibly offer a new way of thinking.

- ▶ Students listen.

Present students with the following example of a conclusion:

- All of these examples prove that animals are often more intelligent than we can see at first. But there is still an unanswered question: How do they compare to humans? One answer is that animals, while often smarter than we think, are not nearly as smart as us. It would not take the average human 30 years to learn to count to seven or learn to say, “Want grape.” By the same token, animals seem to have no interest in studying humans, but our desire to know about them highlights our superior intelligence. However, there is another possibility: What if we are only measuring the intelligence we humans can see? What if there is something brilliant going on that we have not learned to measure and analyze? We have learned to teach parrots English, and perhaps it is only a matter of time before we begin to learn some complex language of the animal kingdom previously unknown to us.

Ask students what they notice about the conclusion, discussing the following questions as a class:

**What elements of the paragraph conclude the essay, and in what direction does the conclusion lead the reader?**

- 💬 The conclusion briefly states what the research in the paper implies and returns to the question introduced at the beginning of the essay: “Who is smarter, animals or humans?”



**What is similar about the conclusion and the introduction? What's different?**

① If needed, present students with the model introduction and have them re-read it.

- The conclusion restates the introduction's claim that it is not an easy question to answer. Unlike the introduction, the conclusion then offers that there is so much we have yet to learn. It leads the reader to be interested in reading more about the topic.

**Activity 6: Closing****5%**

Display and distribute the homework assignment. For homework, instruct students to draft their conclusions, using the W.9-10.2.f checklist as a guide. Instruct students to also choose one of their sources and read through it, circling words and phrases from the Connecting Ideas Handout and briefly explaining how those words and phrases connect ideas.

**Homework**

For homework, draft your conclusion paragraph using the W.9-10.2.f checklist as a guide. Also, choose one of your sources and read through it, circling words and phrases from the Connecting Ideas Handout and briefly explain how those words and phrases connect ideas.

# CONNECTING IDEAS

## USING TRANSITIONAL WORDS AND PHRASES

Transitional words and phrases create links between your ideas when you are speaking and writing. They help your audience understand the logic of your thoughts. When using transitional words, make sure that it is the right match for what you want to express. And remember, transition words work best when they are connecting two or more strong ideas that are clearly stated. Here

ADD RELATED INFORMATION	GIVE AN EXAMPLE OR ILLUSTRATE AN IDEA	MAKE SURE YOUR THINKING IS CLEARLY UNDERSTOOD	COMPARE IDEAS OR SHOW HOW IDEAS ARE SIMILAR	CONTRAST IDEAS OR SHOW HOW THEY ARE DIFFERENT
<ul style="list-style-type: none"> <li>furthermore</li> <li>moreover</li> <li>too</li> <li>also</li> <li>again</li> <li>in addition</li> <li>next</li> <li>further</li> <li>finally</li> <li>and, or, nor</li> </ul>	<ul style="list-style-type: none"> <li>to illustrate</li> <li>to demonstrate</li> <li>specifically</li> <li>for instance</li> <li>as an illustration</li> <li>for example</li> </ul>	<ul style="list-style-type: none"> <li>that is to say</li> <li>in other words</li> <li>to explain</li> <li>i.e., (that is)</li> <li>to clarify</li> <li>to rephrase it</li> <li>to put it another way</li> </ul>	<ul style="list-style-type: none"> <li>in the same way</li> <li>by the same token</li> <li>similarly</li> <li>in like manner</li> <li>likewise</li> <li>in similar fashion</li> </ul>	<ul style="list-style-type: none"> <li>nevertheless</li> <li>but</li> <li>however</li> <li>otherwise</li> <li>on the contrary</li> <li>in contrast</li> <li>on the other hand</li> </ul>
EXPLAIN HOW ONE THING CAUSES ANOTHER	EXPLAIN THE EFFECT OR RESULT OF SOMETHING	EXPLAIN YOUR PURPOSE	LIST RELATED INFORMATION	QUALIFY SOMETHING
<ul style="list-style-type: none"> <li>because</li> <li>since</li> <li>on account of</li> <li>for that reason</li> </ul>	<ul style="list-style-type: none"> <li>therefore</li> <li>consequently</li> <li>accordingly</li> <li>thus</li> <li>hence</li> <li>as a result</li> </ul>	<ul style="list-style-type: none"> <li>in order that</li> <li>so that</li> <li>to that end, to this end</li> <li>for this purpose</li> <li>for this reason</li> </ul>	<ul style="list-style-type: none"> <li>First, second, third...</li> <li>First, then, also, finally</li> </ul>	<ul style="list-style-type: none"> <li>almost</li> <li>nearly</li> <li>probably</li> <li>never</li> <li>always</li> <li>frequently</li> <li>perhaps</li> <li>maybe</li> <li>although</li> </ul>