9.3.2	Lesson 9

Introduction

This lesson is the last in a series of three lessons focused on conducting searches independently. This lesson focuses on Criteria #5 and #6 of the research process addressed in the **Conducting Independent Searches Checklist**. As in Lesson 8, students use the previous lesson's assessment, with teacher feedback, to assess their current search process by making strategic decisions about changes, additions, and deletions to the **Research Frame**. As a result, students update the Research Frame as needed. Students continue to independently research, using the steps previously taught in Lessons 3–5 (plan searches, assess sources, annotate sources, and record notes).

For the lesson assessment, students turn in all completed research tools for the lesson, including **Potential Sources Tools**, **Taking Notes Tools**, and a current Research Frame. For homework, students continue conducting searches independently, following the steps outlined in Lessons 3–5 (plan for searches, assess sources, annotate sources, and record notes). Additionally, students organize their research by inquiry paths in the **Research Portfolio**.

Standards

Assessed Standard(s)	
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.
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.

Assessment

Assessment(s)
The learning in this lesson will be captured by the following:
• Students turn in the lesson's completed research tools, including Potential Sources Tools, Taking Notes Tools, and a current Research Frame.
ⓘ Assess the tools by completing a Conducting Independent Searches Checklist (refer to 9.3.2 Lesson 7) for each student using Criteria #5 and #6.
High Performance Response(s)
A high performance response may include the following:
• See the tools in Lessons 3–5 for model responses.

Vocabulary

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

*Students will encounter domain-specific vocabulary related to their individual research question/problem by reading, annotating, and recording notes on various sources. Students will track some of this vocabulary in their Vocabulary Journal when conducting independent searches during class and for homework.

Lesson Agenda/Overview

Student-Facing Agenda	% of Lesson
Standards & Text:	
• Standards: W.9-10.8, W.9-10.7	
Learning Sequence:	
1. Introduction of Lesson Agenda	1. 5%
2. Homework Accountability and Research Check-In	2. 20%
3. Independent Searches	3. 60%
4. Closing	4. 15%

Materials

- Student copies of the **Conducting Independent Searches Checklist** (refer to 9.3.2 Lesson 7)

- **Research Portfolios** (students have these)

- Student copies of the **Research Frame** (refer to 9.3.2 Lesson 6)

- Student copies of the **Potential Sources Tool** for each student (refer to 9.3.1 Lesson 8)

- Student copies of the **Assessing Sources Handout** (refer to 9.3.2 Lesson 4)

- Student copies of the **Taking Notes Tool** (refer to 9.3.2 Lesson 5)

- Computers with Internet connection (one for each student)

- Copies of the **Independent Searches Self-Evaluation Tool** for each student (optional activity)

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.
	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 reviewing the agenda and sharing the assessed standard for this lesson: W.9-10.8. In this lesson, students use the previous lesson's assessment, with teacher feedback, to assess their current search process by making strategic decisions about changes, additions, and deletions to the Research Frame. Students continue to independently research, using the steps previously taught in Lessons 3–5 (plan searches, assess sources, annotate sources, and record notes). Additionally, students turn in all completed research tools from the lesson, including Potential Sources Tools, Taking Notes Tools, and a current Research Frame.

▶ Students look at the agenda.

Activity 2: Homework Accountability and Research Check-In   20%

Instruct students to take out the independent research completed for the previous lesson's homework and the Conducting Independent Searches Checklist.

Instruct students to Turn-and-Talk with a classmate about Criteria #3 and #4 on the Conducting Independent Searches Checklist by discussing two examples from the homework (independent research) that best exemplify these criteria.

- 💬 Student responses will vary based on their individual research but listen for students to use the language of Criteria #3 and #4 from the Conducting Independent Searches Checklist while discussing.

- ⓘ Criterion #3 on the Conducting Independent Searches Checklist is the following: Determines if information is sufficient to address established inquiry paths and questions in the Research Frame and adjusts the search accordingly. Criterion #4 is the following: Reads sources closely, analyzes details and ideas, and takes notes for each source to determine how it addresses inquiry questions and paths.

- ⓘ Students were provided with a Conducting Independent Searches Checklist in Lessons 7 and 8.

- ⓘ Consider circulating during the pair discussion to monitor students' research progress and to hold students accountable for homework completion.

Distribute the previous lesson's assessment (completed research tools) and the Conducting Independent Searches Checklist (with teacher feedback on Criteria #3 and #4 only) to each student. Instruct students to examine the materials.

- ▸ Students examine the previous lesson's assessment (completed research tools) and the Conducting Independent Searches Checklist (with teacher feedback on Criteria #3 and #4 only).

- ⓘ The Conducting Independent Searches Checklist (Criteria #3 and #4) was used to assess the completed research tools. Prepare for the lesson ahead of time by giving feedback on the checklist (Criteria #3 and #4) for each student, based on individual students' completed research tools.

Inform students that today is the concluding lesson on independent searches. Remind students they will continue to research outside of class for homework. Share with students that they will be reflecting on the previous lesson's homework and assessment materials by thinking about how their Research Frame should change or stay the same before beginning to conduct more independent research in this lesson.

- ▸ Students listen.

Instruct students to reflect on the following questions by revising/refining their Research Frame accordingly:

What inquiry paths deserve more attention and further development?

What inquiry paths need to be discontinued or abandoned?

What new inquiry questions are emerging?

What inquiry questions can be discontinued or abandoned?

▸ Students reflect on the previous questions by revising/refining their Research Frame accordingly.

ⓘ Consider reminding students to use their completed research and teacher feedback, based on the previous lessons' assessments (Lessons 7 and 8) to support their revisions.

ⓘ Students can write their revisions directly on the current Research Frame, on an additional Research Frame, or another sheet of paper.

ⓘ Some students may not need to alter the Research Frame as a result of their research. Consider having these students peer review each other's Research Frames and research notes/tools to ensure no alterations are necessary.

ⓘ If students need more support, consider modeling for students how to revise/refine the Research Frame by using the model Research Frame developed in Lesson 6.

Instruct students to organize and file their research materials from the previous lesson's homework and assessment in the Research Portfolio.

▸ Students organize and file their research materials in the Research Portfolio.

Activity 3: Independent Searches   60%

Remind students of the search steps from Lessons 3–5 (plan searches, assess sources, annotate sources, and take notes). Also, remind students that at the end of this lesson they will be assessed on Criteria #5 and #5 on the Conducting Independent Searches Checklist. Transition students to independent searches.

▸ Students listen and transition to independent searches.

ⓘ Consider displaying the search steps from Lessons 3–5 for students to see.

ⓘ Consider using the media center or library for this lesson so students have access to librarians or media center teachers.

ⓘ   Students will need access to computers with Internet capacity for research purposes. Prepare for the lesson ahead of time by reserving space in classrooms with technology access for all students.

Circulate around the room to support students as they engage in the research process. Consider using the Conducting Independent Searches Checklist to monitor student progress as they research.

> ▸   Students independently search for sources using a current Research Frame and the steps from Lessons 3–5 (plan for searches, assess sources, annotate sources, and record notes).

ⓘ   Place students in heterogeneous groups of four to five that will remain consistent throughout the module. Consider forming groups ahead of time to maximize the range of different research topics and questions within each group. The goal of these groups is to create small communities of inquiry/research teams that provide support and accountability to each other. Students should know about their teammates' topics, research questions, central claims, etc. Students should share claims and evidence that arise from their individual inquiry and learn from each other's research processes, which they may use to potentially refine their own inquiry topics and questions.

ⓘ   Remind students to continue considering print and non-text media when researching and to think about how visuals or auditory media can provide or demonstrate information in ways different from text.

Activity 4: Closing   15%

Collect today's completed research tools, including Potential Sources Tools, Taking Notes Tools, and a current Research Frame.

> ▸   Students turn in today's completed research tools, including Potential Sources Tools, Taking Notes Tools, and a current Research Frame.

ⓘ   Use Criteria #5 and #6 outlined in the Conducting Independent Searches Checklist to assess individual student's research progress, based on their completed research tools. See the High Performance Response for more information.

ⓘ   Criteria #'s 1, 2, 3, and 4 have been previously assessed in the previous independent search lessons (Lessons 7 and 8). Criteria #'s 5 and 6 will be assessed for the first time in this lesson. All criteria may be self-assessed using the Independent Searches Self-Evaluation Tool.

ⓘ   Optional Activity: Have students complete a self-evaluation using the criteria from the Conducting Independent Searches Checklist. Explain how to complete the Independent Searches Self-Evaluation by explaining to students that they rate their progress on each search criterion. Explain the following rating scale: 1 = Fails to meet criteria, 2 = Somewhat meets criteria, 3 = Meets criteria, and 4 = Exceeds criteria. Explain to students they can rate themselves however they deem appropriate but

must provide an explanation for their rating with two examples (at least) from their research process. The examples provided should directly address the criterion's action. Copies of the Independent Searches Self-Evaluation Tool are provided at the end of the lesson.

Instruct students to organize this lesson's research in their Research Portfolios.

▸ Students organize this lesson's research mainly in Section 2 of their Research Portfolio.

Display and distribute the homework assignment. For homework, instruct students to continue conducting searches independently, following the steps taught in Lessons 3–5 (plan searches, assess sources, annotate sources, and record notes). Additionally, instruct students to organize the multiple sources and research tools by inquiry path in the Research Portfolio.

▸ Students follow along.

ⓘ Distribute additional tools as needed. Students should bring in annotated sources and completed research tools as evidence of their independent research.

Instruct students to examine their current Research Frames and Research Portfolios. Direct students to compile and organize all of their notes, annotated sources, and tools for each inquiry path by reorganizing Section 3 of the Research Portfolio by inquiry path, or by marking their notes, annotated sources, and tools by the inquiry path number that is located on the Research Frame. Remind students to put research information that is not useful or relevant in Section 4 of the Research Portfolio.

▸ Students follow along.

ⓘ Section 3 of the Research Portfolio is the Drawing Conclusions Section. Section 4 of the Research Portfolio is the Discarded Material Section.

ⓘ Students may have their own system for organizing their research materials by inquiry path. The goal is for students to organize their research materials by inquiry path so how that goal is achieved may look different for individual students.

ⓘ This homework requires students to take home the Research Portfolio.

Homework

Continue conducting searches independently, following the steps taught in Lessons 3–5 (plan searches, assess sources, annotate sources, and record notes). Additionally, organize the multiple sources and research tools by inquiry path in the Research Portfolio.

Optional Activity: Independent Searches Self-Evaluation Tool

Name:		Class:		Date:	

Instructions: Complete the following self-evaluation of your research work from Lessons 7–9 by rating each criterion and explaining why you gave yourself that rating, including two specific examples from your research work that supports the explanation of each rating.

The ratings are as follows:

- 1 = Fails to meet criteria
- 2 = Somewhat meets criteria
- 3 = Meets criteria
- 4 = Exceeds criteria

Conducting Independent Searches Criteria	Rating	Explanation and Examples From Research Work
1. Uses inquiry questions to drive research and identify sources.		
2. Determines if information is sufficient to address established inquiry paths and questions in the Research Frame and adjusts the search accordingly.		

Conducting Independent Searches Criteria	Rating	Explanation and Examples From Research Work
3. Makes decisions about the research direction based on reviews of annotation and notes and relevance to inquiry questions/paths. This may include discontinuing inquiry paths and adding inquiry paths/questions.		
4. Continually assesses sources for credibility; identifies the usefulness of a particular source and explains why a particular source does or does not help respond to an inquiry question.		
5. Reads sources closely, analyzes details and ideas, and records notes for each source to determine how it addresses inquiry questions.		
6. Marks key info in sources, takes notes of initial impressions, identifies additional research needs, and inserts codes to link to inquiry paths.		

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Model Optional Activity: Independent Searches Self-Evaluation Tool

Name:		Class:		Date:	

Instructions: Complete the following self-evaluation of your research work from Lessons 7–9 by rating each criterion and explaining why you gave yourself that rating, including two specific examples from your research work that supports the explanation of each rating.

The ratings are as follows:

- 1 = Fails to meet criteria
- 2 = Somewhat meets criteria
- 3 = Meets criteria
- 4 = Exceeds criteria

Conducting Independent Searches Criteria	Rating	Explanation and Examples From Research Work
1. Uses inquiry questions to drive research and identify sources.	4	I have used inquiry questions to drive my research and identify several sources. Two specific questions I used are: Does behavior imply thought? and How do animals show they are thinking? I used the above questions to find a source, "Animal Minds: Minds of Their Own" that provided information for both of these questions, including discussion of how researchers are teaching animals language to show they are capable of higher mental abilities.
2. Determines if information is sufficient to address established inquiry paths and questions in the Research Frame and adjusts the search accordingly.	4	I have read at least five academic sources and determined that they will provide me with enough information to fully address Inquiry Paths #1 and #2. I was able to answer most of my Inquiry Questions within these Inquiry Paths or at least ask new questions that would fit into the Inquiry Paths, based on the Inquiry Path topic. (Examples = To what extent are animal experiments valid if they do not take place in the animal's natural environment? How do we measure the difference between instincts and higher thinking?) I was able to answer some of the questions in Inquiry Path #3, including: Where does our perspective on animal intelligence come from? And How do humans view animal

		intelligence research? However, I had to abandon most of the questions because of lack of information. I was not able to find information on many questions including: How does our understanding of animal intelligence affect the way we treat animals? and What can animal intelligence research tell us about humans with disabilities?
3. Makes decisions about the research direction based on reviews of annotation and notes and relevance to inquiry questions/paths. This may include discontinuing inquiry paths and adding inquiry paths/questions.	4	I was able to eliminate an entire inquiry path (Inquiry Path #3) from my Research Frame when I realized it was not working and no information could be found (Why research animal intelligence?). I was able to add a new inquiry path in its place based on several Inquiry Questions that led to plentiful research. I changed Inquiry Path #3 to: How has animal intelligence research evolved over time? This question led to more information including a history of animal intelligence research.
4. Continually assesses sources for credibility; identifies the usefulness of a particular source and explains why a particular source does or does not help respond to an inquiry question.	4	See model tools in Lesson 4.
5. Reads sources closely, analyzes details and ideas, and records notes for each source to determine how it addresses inquiry questions.	4	See model tools in Lesson 5.
6. Marks key info in sources, takes notes of initial impressions, identifies additional research needs, and inserts codes to link to inquiry paths.	4	See model tools in Lesson 5.

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