

SCI 100 Project 2 Guidelines and Rubric

Overview

In Project 1, you selected a news story on a natural science topic. You described the science topic, identified the thesis, and described the evidence that supported the thesis. Additionally, you posed questions that a natural scientist might be interested in based on the thesis and supporting evidence, and you then identified resources where you might research the topic and questions.

In Project 2, you will complete a question development worksheet based on the Project 1 news story and natural science topic. In the Project 2 worksheet, you will explain why you selected the news story, what you already know about the topic, and how it relates to other natural science topics in the course. At the end of the worksheet, assuming the role of a natural scientist, you will pose your own question to study. The work you do on Project 2 will directly support your work on Project 3 (a presentation), due later in the course.

Project 2 will assess the following course outcome, which you will focus on throughout Theme 2:

• Develop questions about fundamental aspects of the natural world that inform personal assumptions, beliefs, and values using empirical evidence

Prompt

In Project 1, you selected a news story and completed the topic exploration graphic organizer. Use this information to assist with completing the <u>Question</u> <u>Development Worksheet Template</u>, addressing the following **critical elements**:

- I. Why did you select this **news story** for scientific and personal study? In other words, what was it about the news story that interested you or made you curious?
- II. What **prior knowledge** and assumptions about the science topic did you have before viewing this news story? In other words, describe what you already knew about the topic.
- III. How does this news story relate to the **natural science concepts** covered in the course? In other words, which principles of natural science are relevant to the news story you selected?
- IV. What **question** related to the topic in the news story would you, assuming the role of a natural scientist, like to study? Use your previous responses and the list of questions that you posed in your topic exploration graphic organizer to select one question that interests you.



Review the **Question Development Worksheet Sample** for an exemplar.

Supporting Work and Resources

Throughout Theme 2, you will have these opportunities to work directly on different elements of this project:

- 1. In Learning Block 3-1, you will review the news story you chose to complete the topic exploration graphic organizer from Theme 1, give a summary of the news story, and explain why you selected it for scientific and personal study.
- 2. In Learning Block 3-2, you will answer the question "What question related to the topic in the news story you chose would you, assuming the role of a natural scientist, like to study?"
- 3. In Learning Block 3-4, you will answer the question "What prior knowledge and assumptions about the science topic in your article did you have before viewing this news story?"
- 4. In Learning Block 4-1, you will think about the contemporary natural science issue that is addressed in the news story. What natural science concepts and ideas are relevant to this news story?
- 5. In Learning Block 4-2, you will explore bias in your chosen news story.

Project 2 Rubric

Guidelines for Submission: Your submission for this project is your completed question development worksheet, based on the provided template.

Critical Elements	Exemplary (100%)	Proficient (85%)	Needs Improvement (55%)	Not Evident (0%)	Value
News Story	Meets "Proficient" criteria, and explanation demonstrates insight into connections between scientific and personal study	Explains why news story was selected for scientific and personal study	Explains why news story was selected for scientific and personal study, but with gaps in clarity or detail	Does not explain why news story was selected for scientific and personal study	23.75
Prior Knowledge	Meets "Proficient" criteria, and description demonstrates insight into science topic	Describes prior knowledge and assumptions about science topic before viewing news story	Describes prior knowledge and assumptions about science topic before viewing news story, but with gaps in clarity or detail	Does not describe prior knowledge and assumptions about science topic before viewing news story	23.75



Natural Science	Meets "Proficient" criteria, and	Explains relationship between	Explains relationship between	Does not explain relationship	23.75	
Concepts	explanation demonstrates	news story and natural science	news story and natural science	between news story and natural		
	strong grasp of empirical	concepts covered in course	concepts covered in course, but	science concepts covered in		
	evidence		with gaps in accuracy, detail, or	course		
			relevance			
Question	Meets "Proficient" criteria, and	Poses question related to topic	Poses question related to topic	Does not pose question related	23.75	
	relationship between question	in news story for further study	in news story for further study	to topic in news story for		
	and topic exploration	from perspective of natural	from perspective of natural	further study from perspective		
	demonstrate insight into	scientist, basing question on	scientist, but question is not	of natural scientist		
	natural scientific study	previous responses and	based on previous responses or			
		questions posed in topic	questions posed in topic			
		exploration graphic organizer	exploration graphic organizer			
Articulation of	Submission is free of errors	Submission has no major errors	Submission has major errors	Submission has critical errors	5	
Response	related to citations, grammar,	related to citations, grammar,	related to citations, grammar,	related to citations, grammar,		
	spelling, syntax, and	spelling, syntax, or organization	spelling, syntax, or organization	spelling, syntax, or organization		
	organization and is presented in		that negatively impact	that prevent understanding of		
	a professional and easy to read		readability and articulation of	ideas		
	format		main ideas			
Tota						