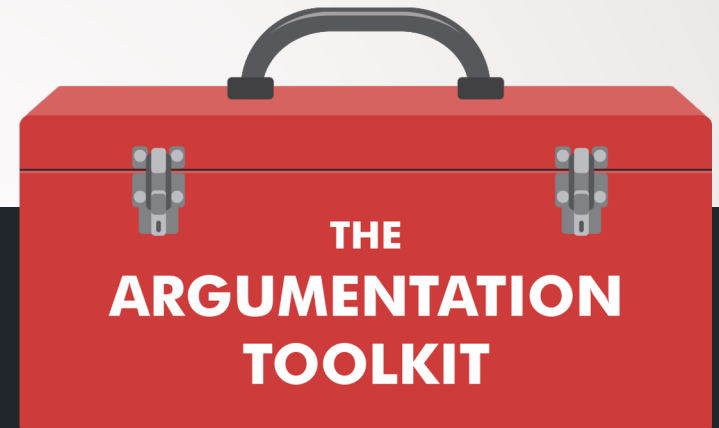


# Advanced Module on the Science Seminar



*Session #2: How do you prepare  
students for a science seminar?*

# Session #2 Agenda

*How do you prepare students for a science seminar?*

- Extension Discussion: *Try it!*
  1. Warm Up: Transcript Analysis
  1. Activity: Analyze Data for the Atacama Desert
  1. Video: Student Interactions in the Science Seminar
  1. Session Takeaways
- Extension – *Try it with your students!*

# Extension Discussion: *Try it!*

If you reflected on a classroom discussion:

1. What went well with the discussion?
2. What challenges do you think your students will face?

If you brainstormed opportunities for argumentation in your curriculum:

1. How could this unit incorporate argumentation?
2. What challenges will you face?

# 1. Warm Up: Analyze a Discussion

## **Directions:**

Review the transcript of a classroom discussion on the next slide. We will then have a discussion guided by the following questions:

1. What role does the teacher play?
2. How are students demonstrating their knowledge of the content in this discussion?
3. How do students interact with each other in this discussion?

# Discussion Transcript

*Jose:* I think one of the reasons the Atacama Desert is the driest place on earth is because of the mountains surrounding it. So even if there is some precipitation the water will go on the mountain, because it is like the rain shadow effect.

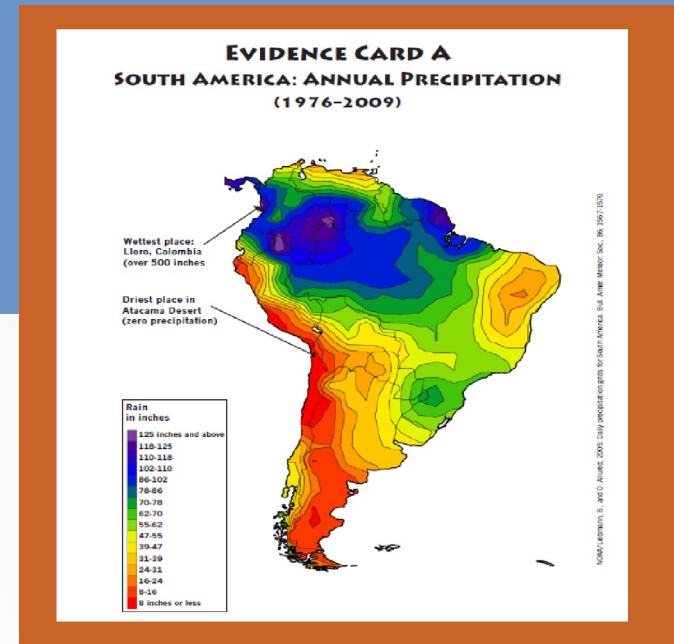
*Teacher:* Ahh. The rain shadow effect.

*Danny:* I agree and disagree. I disagree because when I was looking at the map I saw by the Atacama desert the ocean currents were cold so that means um the cold water and cold water doesn't evaporate and it is dense. And it was warm air. It has to be warm water to evaporate.

*Sheila:* I agree with Danny because if you can't have evaporation. If the water goes up and you have no evaporation, you can't - you don't have no water to support the clouds to make rain. So if the water, the cold water can't evaporate, you can't have rain. Because evaporation has to happen.

*Danny:* I agree. I agree, because like you can't have rain. Its not rain before. Rain happens by evaporation.

## 2. Activity: Analyze Data for the Atacama Desert



### The task:

- The goal of this activity is to analyze data about the Atacama Desert and determine which claim is best supported.
- You will work in small groups to analyze the data and complete the worksheet in preparation for the science seminar.

# Why Does the Atacama Desert Get So Little Precipitation?

## 3 Claims

**Claim 1:** Prevailing winds on the Pacific coast cause extremely low precipitation in the Atacama Desert.

**Claim 2:** The location of mountain ranges causes extremely low precipitation in the Atacama Desert.

**Claim 3:** Surface temperatures of the ocean cause extremely low precipitation in the Atacama Desert.

# Discussion

- What would it be like to do this type of activity with your students?
- How would this type of activity support student participation in the science seminar?
- What challenges would your students have with this type of activity?



# 3. Video & Discussion: Promoting Student Interaction in the Science Seminar



Watch the video below, which describes strategies for how to promote student interaction during the science seminar.

## Discussion Questions:

- Which of these strategies do you think will be most useful to your students?
- Which of these strategies do you think will be most challenging for you to implement?

# 4. Session Takeaways

In order to effectively engage in the science seminar, students need to know the content and expectations for interacting with their peers.

Prepare students for the science seminar by giving them the opportunity to analyze data.

Teachers can support student interaction in the science seminar by establishing norms for student interaction, supporting students in critiquing peer thinking, and encouraging the use of sentence starters.

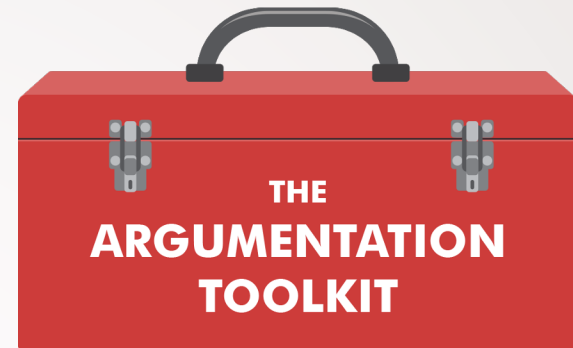


# Extension: *Try it with your students!*

- *Before the next session, engage your students in a classroom discussion utilizing one of these strategies for promoting student interaction.*
  - Set up norms for student interaction
  - Support students in critiquing peer thinking
  - Encourage use of sentence starters



The Learning  
Design Group



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