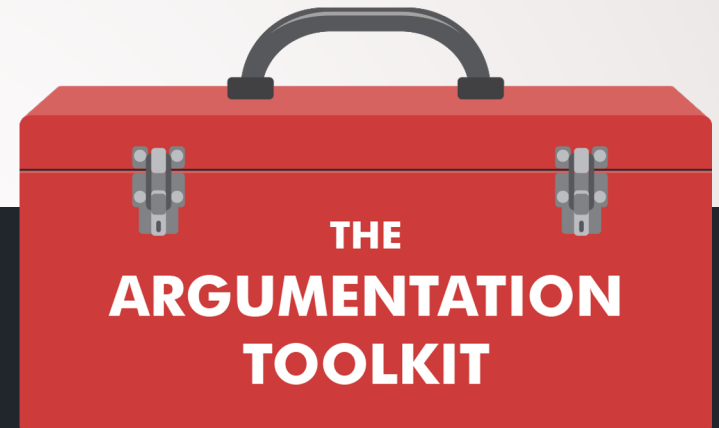


Designing Rich Argumentation Tasks Module



How can you support students to revise their thinking given new evidence?

Agenda

How can you support students to revise their thinking given new evidence?

- Extension – Discussion about *Try it with your students!*
 1. Video & Discussion: Using an anticipation guide
 1. Activity: Anticipation guide Part 1
 1. Activity: Examining new evidence
 1. Activity: Anticipation guide Part 2
 1. Connection back to design criteria
- Extension – *Preparation for work session*

Extension Discussion: *Try it with your students!*

Share the argumentation task you developed to focus on evaluating the quality of evidence, as well as any student artifacts you may have.

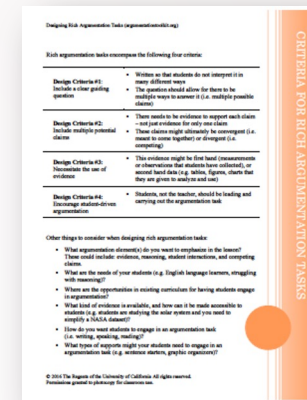
Discussion Questions:

1. What went well with the argumentation task? Why do you think it went well?
2. What was challenging with the argumentation task? Why do you think it was challenging?

Designing rich argumentation tasks

Key criteria:

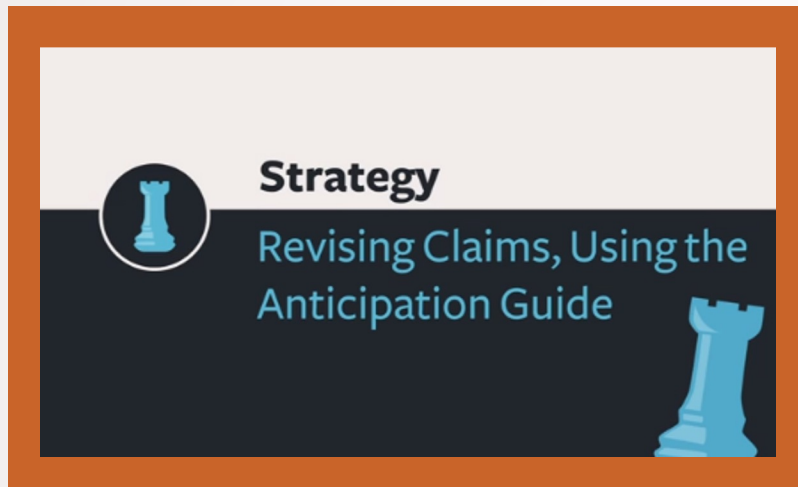
1. Include a clear guiding question
2. Include multiple potential claims
3. Necessitate the use of evidence
4. Encourage student-driven argumentation



Other things to consider:

- What argumentation elements do you want to emphasize in the lesson?
- What are the needs of your students?
- What are the opportunities in existing curriculum for having students engage in argumentation?
- What kind of evidence is available, and how can you make it accessible to students?
- How do you want students to engage in an argumentation task?
- What types of supports might your students need?

1. Video & Discussion: Using an anticipation guide



Watch the video below, which provides an introduction to the anticipation guide

Discussion Questions:

- In what ways does the anticipation guide mirror the work of scientists?
- How might an anticipation guide support deeper learning for students?

2. Activity: Anticipation guide Part 1

The Task:

- Read each of the claims in the anticipation guide and check whether or not you agree with them in the “Before” column.
- When you are done, share your current thinking with a partner. Remember, it is okay to be unsure at this point because you will be able to revise your thinking once you examine new evidence.

Designing Rich Argumentation Tasks (argumentationtoolkit.org) – Anticipation Guide

Anticipation Guide – What are fossils?

Directions:

- Read the claims below. If you agree with a claim, write an *A* in the “Before” column. If you disagree with a claim, write a *D* in the “Before” column.
- You will return to these claims later in the session. At that time, you will think about whether you still agree or disagree with each claim (writing your decision in the “After” column). If you disagree with the claim, you will write a revised claim in the space provided. You will also include evidence that supports all of these claims.

Before	Claim	After
	1. Fossils are footprints made by dinosaurs. Revised claim: Evidence:	
	2. Plants do not leave fossils. Revised claim: Evidence:	
	3. Fossils are all shapes and sizes. Revised claim: Evidence:	
	4. Fossils can only be made by organisms that lived on land. Revised claim: Evidence:	
	5. While some fossils are of the actual body of an organism, others are impressions left by the organisms. Revised claim: Evidence:	

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3. Activity: Examining new evidence

The Task:

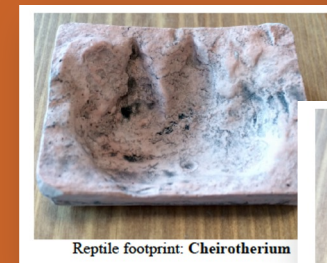
- Work in pairs or small groups to examine the Fossil Evidence Cards, keeping in mind the claims from the anticipation guide.
- When you are done, discuss how your understanding of fossils has changed, or deepened after examining the cards.



Coral: *Acervularia*



Trilobite: *Calymene*



Reptile footprint: *Cheirotherium*



Dinosaur tooth: *Albertosaurus*

4. Activity: Anticipation guide Part 2

The Task:

- Re-read each claim, check whether or not you agree with it in the “After” column, and revise the claim (if needed) given the fossil evidence just examined.
- Make sure to add evidence in support of each claim, regardless of whether or not you revised the claim.

Designing Rich Argumentation Tasks (argumentationtoolkit.org) – Anticipation Guide

Anticipation Guide – What are fossils?

Directions:

- Read the claims below. If you agree with a claim, write an *A* in the “Before” column. If you disagree with a claim, write a *D* in the “Before” column.
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Before	Claim	After
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Discussion about the anticipation guide

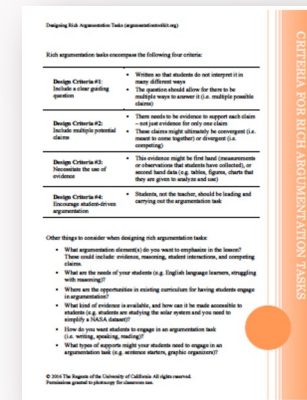
- Were there any claims that you found difficult to revise? Why?
- How can you envision your students engaging in this activity? What would work well? What challenges would they have?



Designing rich argumentation tasks

Key criteria:

1. Include a clear guiding question
2. Include multiple potential claims
3. Necessitate the use of evidence
4. Encourage student-driven argumentation



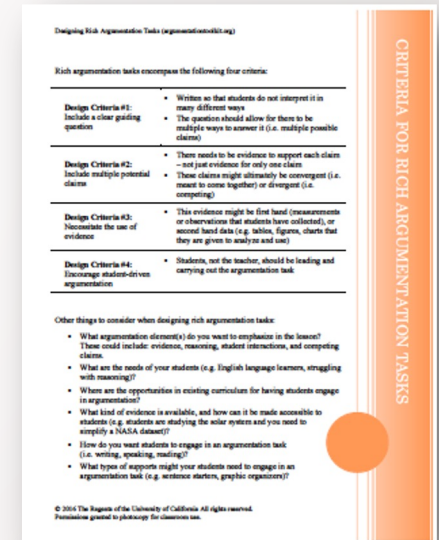
Other things to consider:

- What argumentation elements do you want to emphasize in the lesson?
- What are the needs of your students?
- What are the opportunities in existing curriculum for having students engage in argumentation?
- What kind of evidence is available, and how can you make it accessible to students?
- How do you want students to engage in an argumentation task?
- What types of supports might your students need?

5. Connection back to design criteria

Think-pair-share:

- In the activity you just completed, which design criteria do you think the argumentation task aligned with well?
- Which design criteria do you think the argumentation task did not align with?
- How could you redesign the argumentation task to better align?

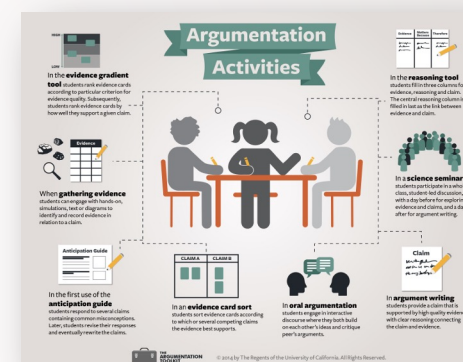


Extension: *Preparation for work session*

Bring a lesson with an argumentation task from existing curriculum that you would like to revise. This could be the lesson you examined for the Extension Activity of Session #1.

Before the next meeting, look through the planning tool and mark which argumentation element you would highlight for each activity.

Keep these activities in mind since you could incorporate one into the lesson you choose to revise.



Designing Rich Argumentation Tasks (argumentationtoolkit.org) - Argumentation Activities Planning Tool

Argumentation Activities Planning Tool

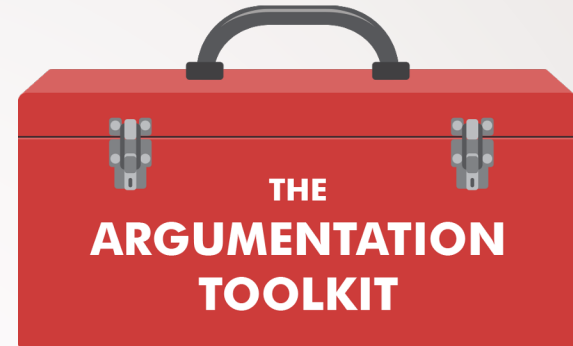
Directions: Considering your students and curriculum, which argument element do you think you might highlight for each activity? Include a brief rationale for your decision. Review the Argumentation Activities handbook if you need a reminder of what each activity entails. Keep these activities in mind as you redesign a lesson during the work session.

Argumentation Activity	Evidence	Reasoning	Student Interaction	Competing Claims
Evidence Card Sort				
Evidence Gradient Tool				
Reasoning Tool				
Science Seminar				
Anticipation Guide				

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The Learning
Design Group



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