

# Supporting ELs in Argumentation

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# Agenda

- Why focus on argumentation?
- What is argumentation?
- How do we analyze argumentation?
- Let's practice

Why Focus on Argumentation?

# Argumentation in the New Standards

## Relationships and Convergences

Found in:

1. CCSS for Mathematics (practices)
- 2a. CCSS for ELA & Literacy (student capacity)
- 2b. ELPD Framework (ELA “practices”)
3. NGSS (science and engineering practices)

### Notes:

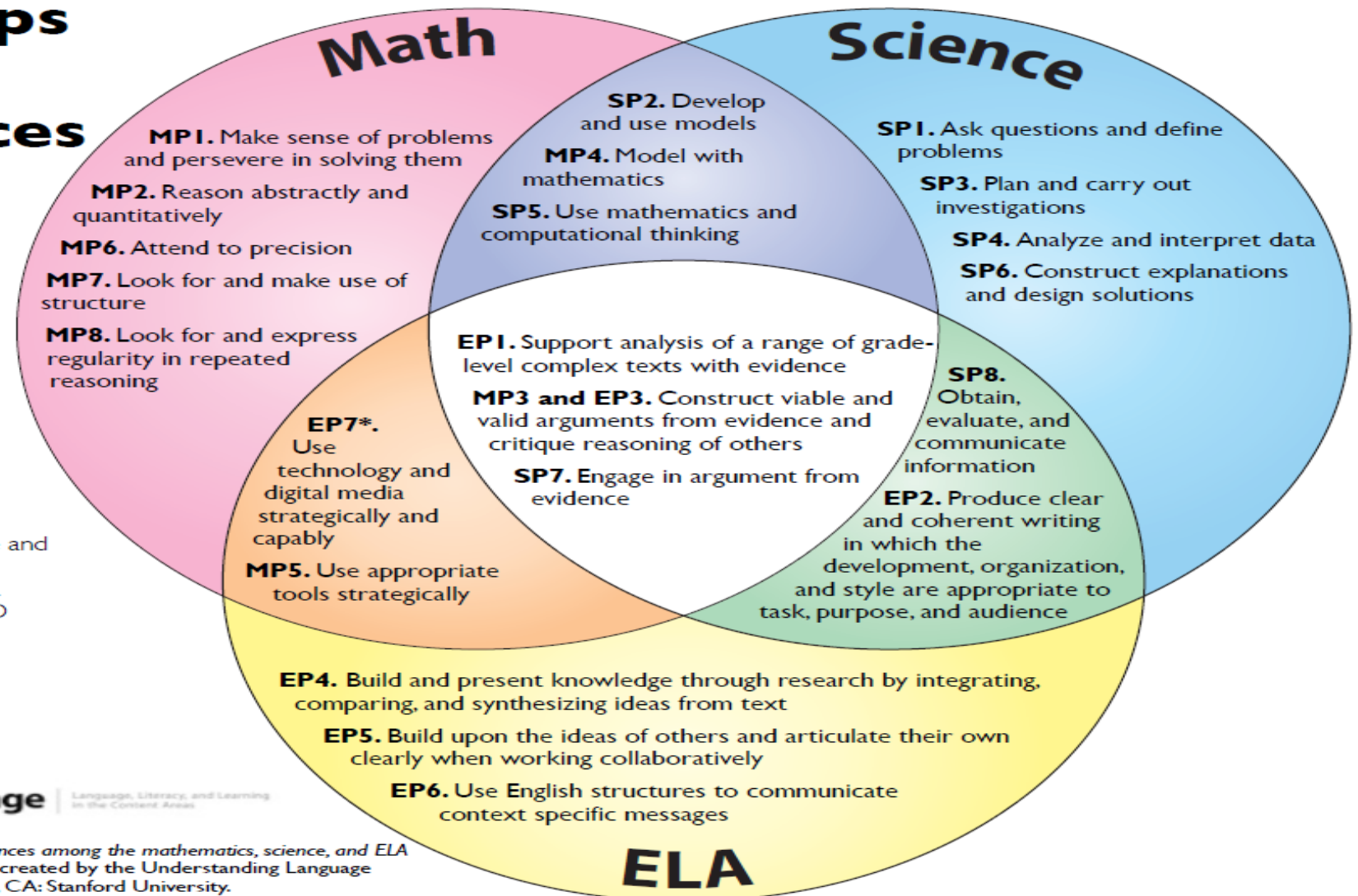
1. MPI–MP8 represent CCSS Mathematical Practices (p. 6–8).
2. SP1–SP8 represent NGSS Science and Engineering Practices.
3. EPI–EP6 represent CCSS for ELA “Practices” as defined by the ELPD Framework (p. 11).
4. EP7\* represents CCSS for ELA student “capacity” (p. 7).

**Stanford**  
GRADUATE SCHOOL OF  
EDUCATION

**Understanding Language** | Language, Literacy, and Learning  
in the Content Areas

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Cheuk, T. (2013). *Relationships and convergences among the mathematics, science, and ELA practices*. Refined version of diagram created by the Understanding Language Initiative for ELP Standards. Stanford, CA: Stanford University.



# What is argumentation?

- Critical Thinking
- Communicating ideas to others and justifying the *why* behind their ideas

# The Structure of an Argument

## What do you think?

That's your *claim*.

We define a claim as a statement that something yet to be proved is true or valid.

**Notes:** There is variation across disciplines in the extent to which a **claim** can be proved as "true." Some questions that seem settled to adults, such as whether a whale is a fish or a mammal, can be topics about which younger students can construct claims because, within the context of a given classroom, a statement that whales are mammals might not yet be proved as true or valid. At earlier grade levels or beginning English proficiency levels, new standards often use the term *opinion* instead of *claim*. In math, a claim might be a logical conjecture, a generalization, and/or a proposed solution strategy.

## What makes you think that?

That's your *evidence* or *grounds* for your claim.

**Notes:** The information used to support claims looks different in different disciplines. Textual **evidence** is particularly important in English language arts and history, though evidence extends beyond texts, as well. For example, in history, evidence might include photographs, audio recordings, and artifacts. Observational and experimental evidence play a crucial role in scientific argumentation. In math, procedural explanations, such as a list of steps used to solve a problem, often serve as the underlying **grounds** for a claim.

How do you know that this information (your evidence or grounds) supports your claim?

That's the *reasoning* behind or *justification* for your claim.

**Notes:** Again, the way that evidence or grounds are linked to claims differs across disciplines. For example, in history, the evaluation of evidence – considering the source of the evidence, understanding the historical context in which the evidence was created, and corroborating evidence – is a crucial practice. In science, assessing the accuracy and reliability of evidence is important. In math, particular types of **reasoning** offer stronger **justification** for claims than others. For example, use of principles and properties serve as stronger justification for claims than multiple non-strategic examples do.

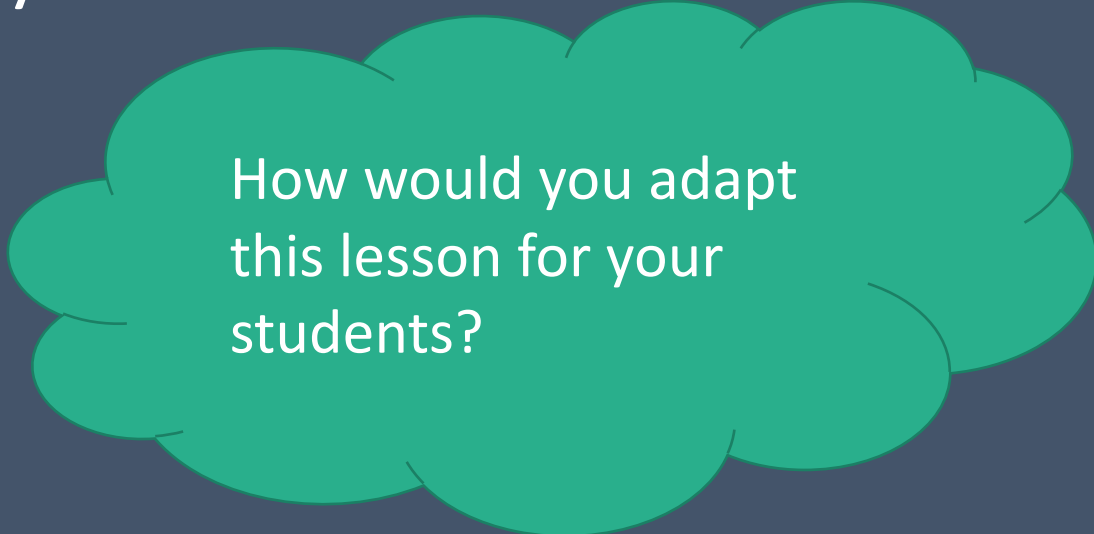


# Supporting Claims through Writing in Science

First Grade Dual Immersion Class  
Corvallis, Oregon

# Supporting Claims through writing in Science

- Which components of argumentation did you observe in this lesson?
- What strategies for supporting ELs did you see?
- What other strategies could you add?



How would you adapt this lesson for your students?



How do we analyze  
argumentation?

# Argumentation Analysis Tool (AAT)

Dimension 1: Makes a claim

Dimension 2: Provides support for the claim

Dimension 3: Uses language to convey key relationships among ideas

# Dimension 1: Makes a Claim

**Clearly demonstrates:** *Clearly articulates a claim, as appropriate for the given context.*

**Partially demonstrates:** *Attempts to articulate a claim but the claim may be vague.*

**Begins to demonstrate:** *Does not articulate a claim, but a claim or position is suggested in the evidence/reasoning provided.*

**Does not demonstrate:** *Does not attempt to make a claim and a claim cannot be inferred.*

## Dimension 2: Provides support for the claim

**Clearly demonstrates:** Provides *strong support* for the claim.

**Partially demonstrates:** Provides some support for the claim.

**Begins to demonstrate:** Provides *minimal support* for the claim.

**Does not demonstrate:** Provides *no support* for the claim.

Minimal support	Some support	Strong support
<ul style="list-style-type: none"> <li>An attempt to provide support for the claim is made, but the support does not clearly relate to the claim.</li> </ul> <p>For grades 6-12:</p> <ul style="list-style-type: none"> <li>The <b>quality of the support for the claim</b> (i.e., reliability, accuracy, source) is not evaluated.</li> </ul> <p>For grades 9-12:</p> <ul style="list-style-type: none"> <li><b>Counterclaims</b> are not considered.</li> </ul>	<ul style="list-style-type: none"> <li><b>Only evidence/grounds</b> (“What makes you think that?”) <b>OR reasoning/justification</b> (“How do you know that your evidence/grounds supports your claim?”) <b>is provided.</b></li> <li>The evidence/grounds selected clearly relates to the claim, but the relationship is not explicitly described through reasoning/justification.</li> </ul> <p>For grades 6-12:</p> <ul style="list-style-type: none"> <li>An attempt to evaluate the <b>quality of the support for the claim</b> (i.e., reliability, accuracy, source) may be made, but key questions are not addressed.</li> </ul> <p>For grades 9-12:</p> <ul style="list-style-type: none"> <li><b>Counterclaims</b> are not considered or are given minimal attention.</li> </ul>	<ul style="list-style-type: none"> <li><b>Evidence/grounds</b> is provided. (The question, “What makes you think that?” is answered.)</li> <li><b>Reasoning/justification</b> is provided. (The question, “How do you know that your evidence/grounds supports your claim?” is answered.)</li> <li>The evidence/grounds selected clearly relates to the claim, <b>and</b> the relationship is explicitly described through reasoning/justification.</li> </ul> <p>For grades 6-12:</p> <ul style="list-style-type: none"> <li>The <b>quality of the support for the claim</b> (i.e., reliability, accuracy, source) is evaluated.</li> </ul> <p>For grades 9-12:</p> <ul style="list-style-type: none"> <li><b>Counterclaims</b> are considered.</li> </ul>

## Dimension 3: Uses language to convey key relationships among ideas

**Clearly demonstrates:** *Effectively conveys key relationships among ideas and makes his or her argument and support clear, using appropriate linguistic markers or alternative expressions that signal coherent reasoning.*

**Partially demonstrates:** *At times conveys key relationships among ideas and his/her argument and support clear. However, the student may *rely on a limited number of linguistic markers, alternative expressions, and/or convey only one type of relationship among key ideas.**

## Dimension 3: Uses language to convey key relationships among ideas

**Begins to demonstrate:** *Attempts to convey key relationships among ideas and makes his/her argument and support clear. However, linguistic markers or alternative expressions may be used erroneously and/or the relationship among key ideas may be unclear.*

**Does not demonstrate:** *Does not convey key relationships among ideas or make his or her argument and support clear.*

# Linguistic markers that convey relationships among ideas

- Cause-effect: because, so, when, as a result of, therefore
- Contrastive: but, although, however, on the other hand
- Conditional: if, then, would, could, might, may



Let's Practice!

# Let's analyze a student argument!

## 2nd grade Science

1. In pairs, read the Context, Objective, Prompt and Transcript
2. Fill out the Structure of an Argument Chart
3. Rate the student argument
  - Dimension 1: Makes a Claim
  - Dimension 2: Provides support for the claim
  - Dimension 3: Uses language to convey key relationships among ideas

# Dimension 1: Makes a claim

[We think the mung bean is a] soind because it is hard and if you put a srew in a cup full of mung bean it would not sink because it is a soind.

**Formative Assessment:** Clearly demonstrates

**Rationale:** *The claim, “we think the mung bean is a solid”, is clearly articulated. Solid is misspelled, but not enough to cause any confusion about the claim.*

## Dimension 2: Provides Support for the Claim

[We think the mung bean is a] solid because it is hard and if you put a screw in a cup full of mung bean it would not sink because it is a solid.

**Formative Assessment:** *Partially demonstrates*

**Rationale:** *The student provided evidence (“because it is hard and if you put a screw in a cup full of mung bean it would not sink”) but lacks reasoning/justification. The claim lacks a connection between a key property of a solid -objects do not sink when placed on solids- and the evidence.*

## Dimension 3: Uses Language to Convey Relationships Among Ideas

[We think the mung bean is a] soind because it is hard and if you put a srew in a cup full of mung bean it would not sink because it is a soind.

**Formative Assessment:** *Clearly demonstrates*

**Rationale:** *The student uses a variety of linguistic markers to establish cause/effect (because) and conditional relationships (if). The linguistic markers are appropriate and effectively convey key relationships among ideas.*

¡Gracias!

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# Constructing Arguments in HS History

