A Collaborative Process for Teaching Standards Based Argumentation Skills to English Learners

Canby School District

Supporting English Language Learners under New Standards

A Massive Open Online Course (MOOC)

Offered by Oregon State University & Stanford University
October 2014

Targets for Today

1. Develop an understanding of argumentation (especially with ELs) using CCSS and NGSS.
2. Increase strategies for teaching argumentation
3. Collaborate with colleagues to analyze samples of argumentation.

When we hear argumentation...

We think…

Share with your table what your definition of argumentation is.

An argument uses/contains…

What does an argument look like/sound like?

What is argumentation?

- a disagreement?
- a conflict?
- a confrontation?
- an understanding?
- a line of reasoning?
- a proposition?
- a negotiation?

Argumentation doesn't have to have a negative connotation.

It's about critical thinking and communicating our ideas to others.

It's teaching students to justify their positions (claims).

Course Description

CCSS in ELA & Mathematics, the NGSS, & new English Language Proficiency Standards all include a focus on argumentation.

Students are required to construct claims supported by evidence and/or reasoning.

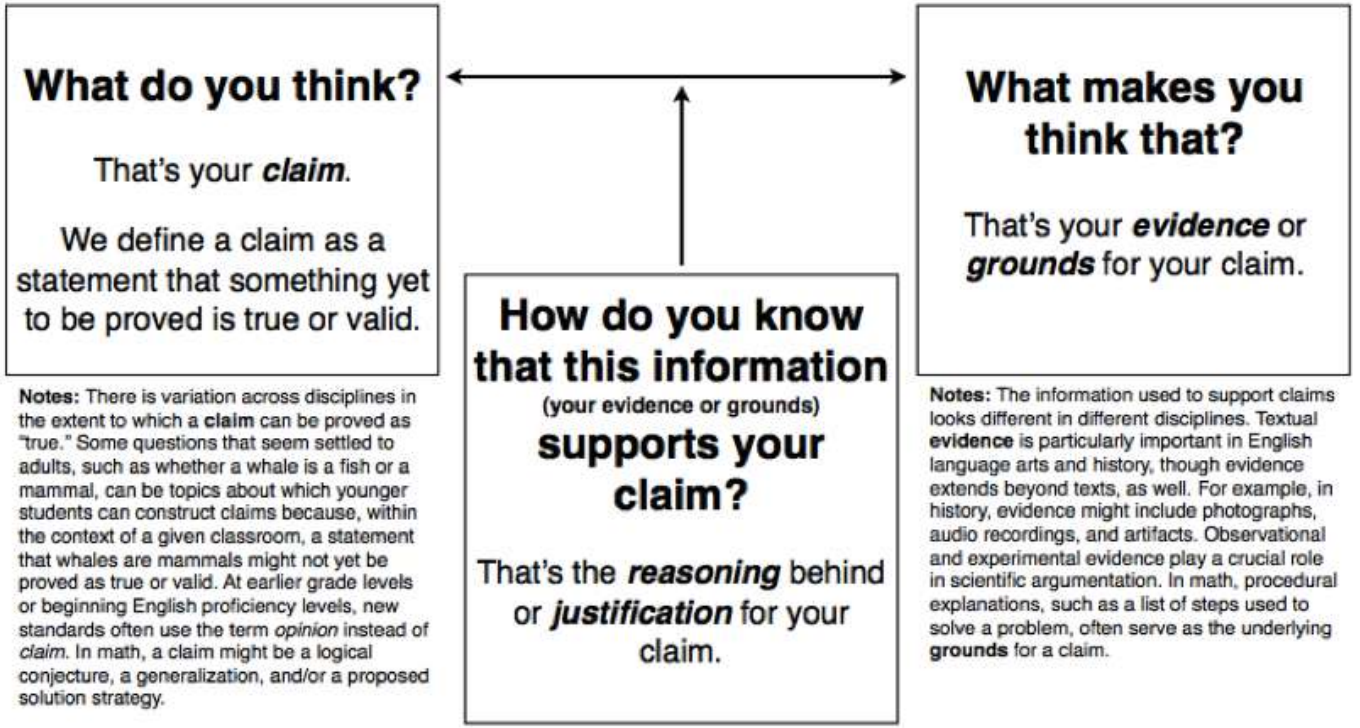
We will explore how to support all students, particularly English language learners, in engaging in this key, cross-disciplinary practice.

Features of Argumentation

- ★ Claims (What do you think?)
  - This can be things that adults would consider facts (because kids don't know them to be fact yet)
- ★ Evidence/grounds (What makes you think that?)
  - Quote
  - Picture
  - Steps to solve a math problem
- ★ Reasoning/justification (How do you know that information supports your claim?)
- ★ Students connect their evidence to their claim. They don't just provide a quote, but they interpret it as well.

Working Draft

The Structure of an Argument

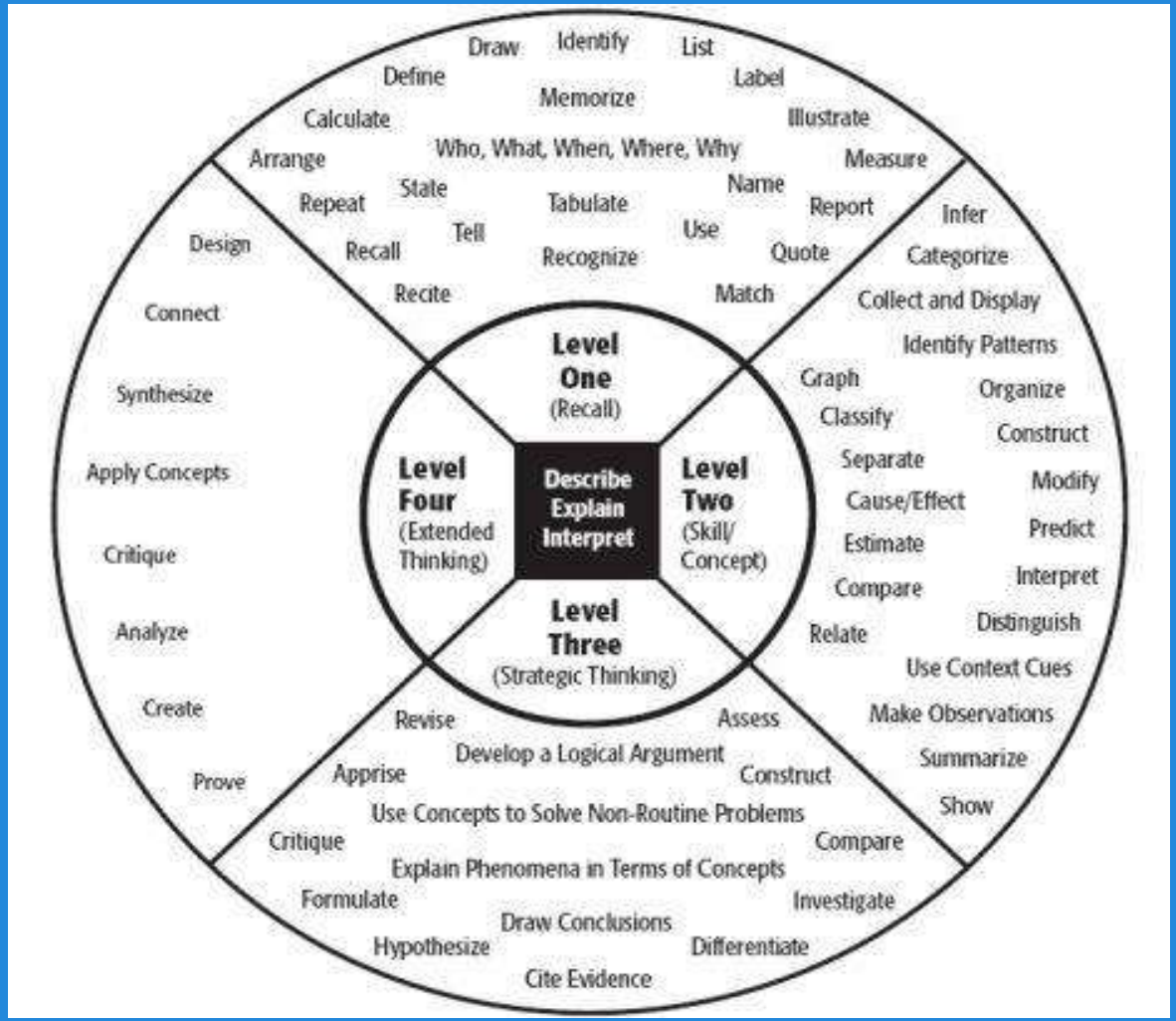


Notes: There is variation across disciplines in the extent to which a **claim** can be proved as "true." Some questions that seem settled to adults, such as whether a whale is a fish or a mammal, can be topics about which younger students can construct claims because, within the context of a given classroom, 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.

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.

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.

· Thompson, K. & Rutherford-Quach, S. (2014 September). Sources used in developing this framework include Erduran, Simon, & Osborne (2004), McNeill & Krajcik (2012), Osborne (2010), and Toulmin (1958). We thank Tina Cheuk, Jack Dieckmann, Mark Freed, Kenji Hakuta, Amanda Kibler, Claudia Rodriguez-Mojica, Diego Román, and Mark Smith for feedback on this framework.


Level One
(Recall)
Level Two
(Skill/ Concept)
Level Three
(Strategic Thinking)
Level Four
(Extended Thinking)
Describe
Explain
Interpret
Draw
Identify
List
Define
Label
Memorize
Calculate
Illustrate
Who, What, When, Where, Why
Arrange
Measure
State
Name
Repeat
Tabulate
Report
Tell
Use
Recall
Recognize
Quote
Recite
Match
Infer
Categorize
Collect and Display
Identify Patterns
Graph
Organize
Classify
Construct
Separate
Modify
Cause/Effect
Predict
Estimate
Interpret
Compare
Distinguish
Relate
Use Context Cues
Make Observations
Summarize
Show
Compare
Investigate
Differentiate
Cite Evidence
Draw Conclusions
Hypothesize
Formulate
Explain Phenomena in Terms of Concepts
Critique
Use Concepts to Solve Non-Routine Problems
Apprise
Construct
Develop a Logical Argument
Revise
Assess
Prove
Create
Analyze
Critique
Apply Concepts
Synthesize
Connect
Design

What is the role of argumentation in the new standards?

In table groups, look at the standards (for any grade level or subject) and find key words or phrases that use or relate to argumentation.

CCSS (ELA and Math)

ELP Standards at a Glance

(Argumentation is critical thinking…)

Argumentation is embedded throughout the standards--ELA.

CCSS.ELA-Literacy.CCRA.R.1
Read closely to determine what the text says explicitly and to make logical inferences from it; **cite specific textual evidence when writing or speaking to support conclusions drawn from the text**.

CCSS.ELA-Literacy.SL.3.1.a
Come to discussions prepared, having read or **studied required material**; **explicitly draw on that preparation** and other information known about the topic to explore ideas under discussion.

CCSS.ELA-Literacy.SL.5.1.b
Follow agreed-upon rules for discussions and carry out assigned roles.

CCSS.ELA-Literacy.CCRA.R.3
Analyze how and why individuals, events, or ideas **develop and interact** over the course of a text.

CCSS.ELA-Literacy.CCRA.W.9
Draw evidence from literary or informational texts **to support analysis**, reflection, and research.

CCSS.ELA-Literacy.CCRA.R.6
Assess how point of view or purpose shapes the content and style of a text.

CCSS.ELA-Literacy.SL.3.1.c
Ask questions to check understanding of information presented, **stay on topic**, and **link their comments to the remarks of others.**

CCSS.ELA-Literacy.SL.4.1
Engage effectively in a range of **collaborative discussions** (one-on-one, in groups, and teacher-led) with diverse partners on *grade 4 topics and texts*, **building on others' ideas** and **expressing their own clearly.**

CCSS.ELA-Literacy.CCRA.SL.2
Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

CCSS.ELA-Literacy.CCRA.W.8
Gather relevant information from multiple print and digital sources, **assess the credibility and accuracy** of each source, and **integrate the information** while avoiding plagiarism.

Argumentation is embedded throughout the standards--Math and Science.

CCSS.Math.Practice.MP3 **Construct viable arguments** and **critique the reasoning of others.**

CCSS.Math.Content.1.NBT.C.6
Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), **using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction**; **relate the strategy to a written method and explain the reasoning used.**

3-LS2-1. **Construct an argument** that some animals form groups that help members survive.

CCSS.Math.Content.5.OA.B.3
Generate two numerical patterns using two given rules. **Identify apparent relationships between corresponding terms.** Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane.

CCSS.Math.Content.4.NBT.A.2
Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. **Compare two multi-digit numbers** based on meanings of the digits in each place, using >, =, and < symbols to r**ecord the results of comparisons.**

5-LS1-1. **Support an argument** that plants get the materials they need for growth chiefly from air and water.

CCSS.Math.Content.K.CC.B.4
Understand the relationship between numbers and quantities; **connect counting to cardinality.**

3-ESS3-1. **Make a claim** about the merit of a design solution that reduces the impacts of a weather-related hazard.

5-ESS1-1. **Support an argument** that the apparent brightness of the sun and stars is due to their relative distances from Earth.

K-ESS2-2. **Construct an argument supported by evidence** for how plants and animals (including humans) can change the environment to meet their needs.

5-PS2-1. **Support an argument** that the gravitational force exerted by Earth on objects is directed down.

ELP Standards

Argumentation is specifically addressed in:

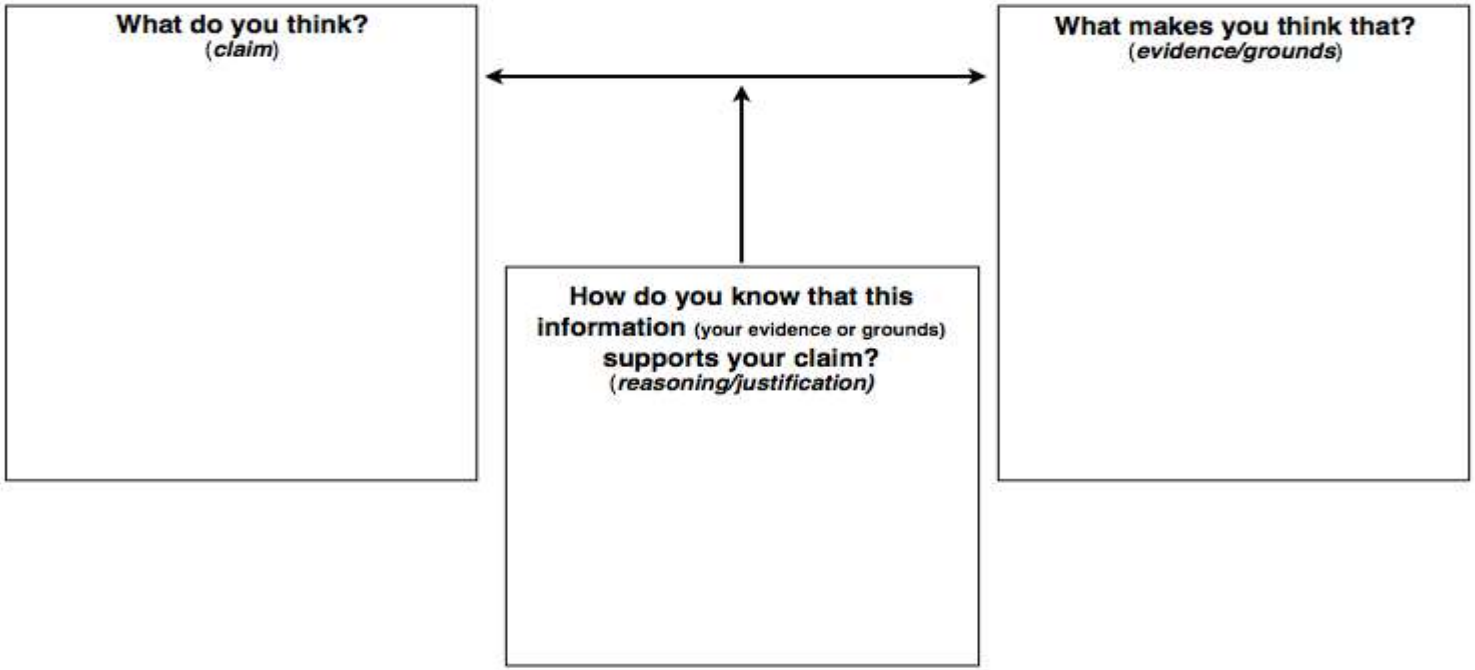
ELP 4--Construct grade appropriate oral and written claims and support them with reasoning and evidence.

Argumentation

- Promotes relevant discussion
- Bridges real-world importance and application
- Emphasizes levels three and four of the depth of knowledge wheel

Working Draft

The Structure of an Argument: Note-taking Sheet



Relationships among ideas (e.g., cause-effect, contrastive, conditional):

Linguistic markers or alternative expressions used to convey relationships among ideas (e.g, *and, or, so, but, when, if, because, as a result of, one reason that, despite the fact that*):

How can we set the stage for argumentation in our classrooms?

Rigorous academic purposes

- Select key concepts for student learning
- Consider big ideas you want them to tackle
- Choose a topic which really matters to students
- Design an instructional task which will support the accomplishment of these purposes

Culture of trust

Community Circle/Tribes activities
Modeling: What does trust look like?

Norms for Equitable and Respectful Participation

Stable Routines & Talk Formats

- Establish routines
- Specific talk formats
- Determine whether activity is teacher guided **OR** students take the responsibility to explore, solve, plan, respond...

Talk Formats

- Socratic Circle

The focus of the Socratic method is on giving students questions rather than answers. By posing and responding to questions, students examine and reevaluate their beliefs on a particular topic.

- Philosophical Chairs

Learning occurs when students use critical thinking to resolve conflicts which arise when presented with alternative perspectives, ideas, or contradictions to what they have previously believed or learned.

Teacher Moves

- Marking: “That’s an important point.”
- Challenging: “What do YOU think?”
- Modeling: “Here’s what good readers do.”
- Recapping: “What have we discovered?”

Accountability

- Accountability to accurate information: “Where can we find that?”
- Pressing for reasoning: “Why do you think that?”
- Wait Time: “Take your time; say more.”
- Reflection: “How did it go? What went right? What could have been improved?”

Engaging ELs in Argumentation

- Build background knowledge
- Design worthy tasks/meaty questions
- Provide engaging and supportive materials
- Create time, space and scaffolds
- Foster classroom culture of distributed knowledge

What constitutes strong support for a claim?

- Assessing the quality of evidence/evaluating the evidence
- Bringing in some research or data from other sources
- Anticipating/addressing counter claims

Constructing Counterclaims

Video-Constructing Counterclaims

(from the Teachers College Reading and Writing Project)

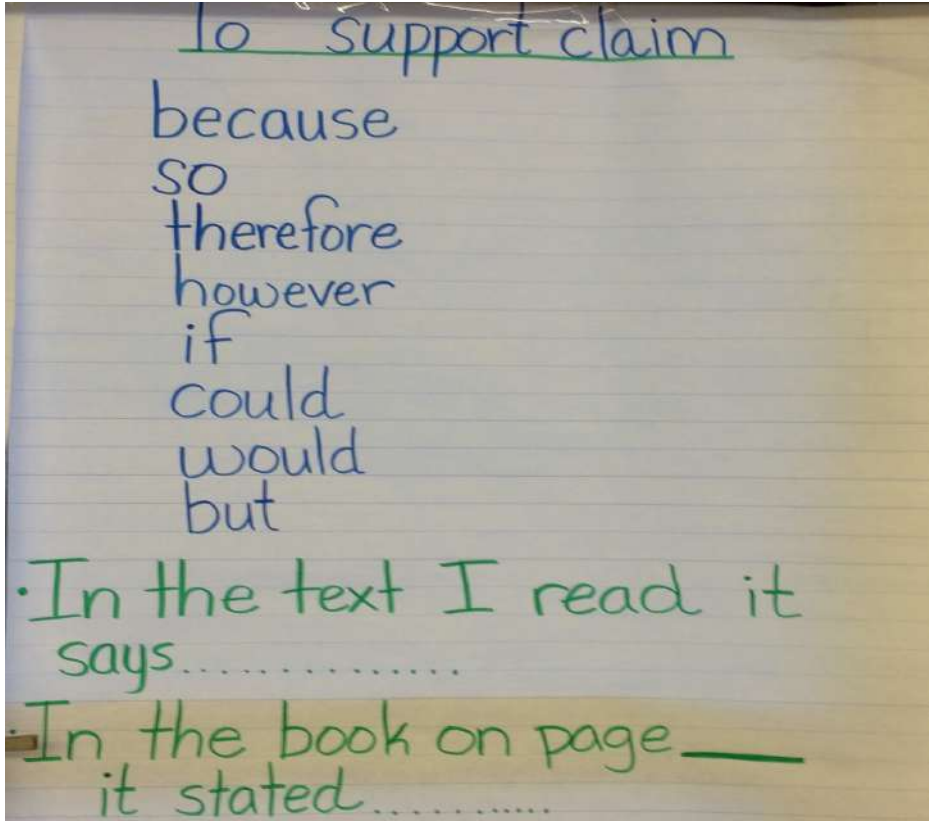
Constructing Counterclaims

Questions to consider include:

- What language does the teacher use to describe counterclaims/rebuttals to her students?
- What scaffolds – including materials, participation structures, and teacher moves – support students?
- What do you notice about the counterclaims/rebuttals that students construct?

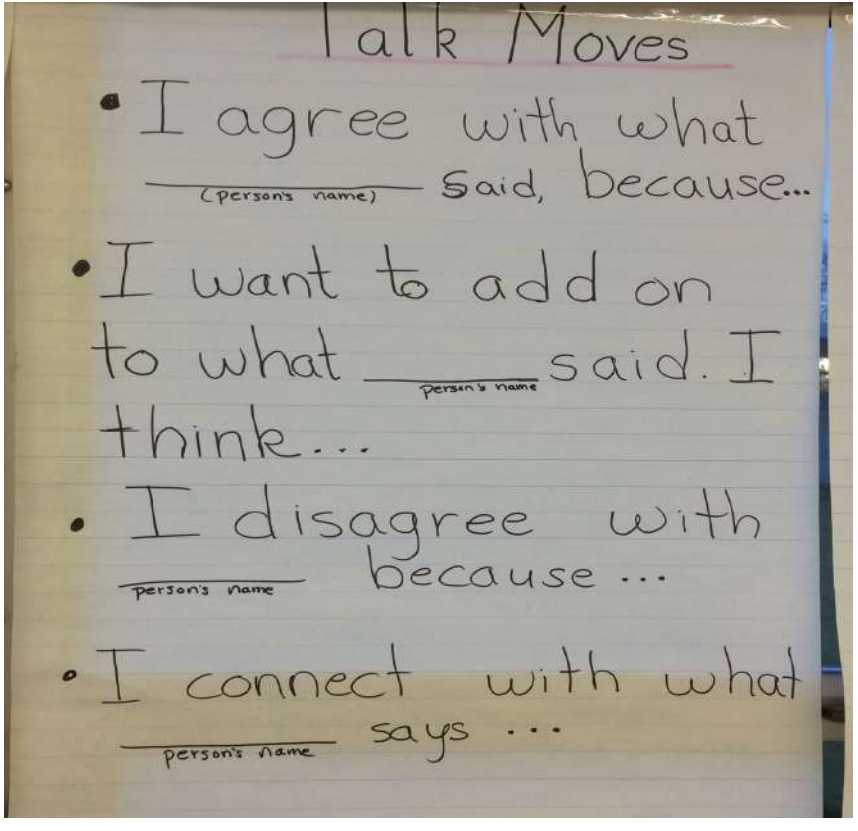
Share Your Claim & Anticipate/Refute Potential Counterclaims

- While some people believe… I think…
- The way I see it,
- Based on… I have come to the conclusion that…
- In my opinion,
- There is ample evidence to suggest that…



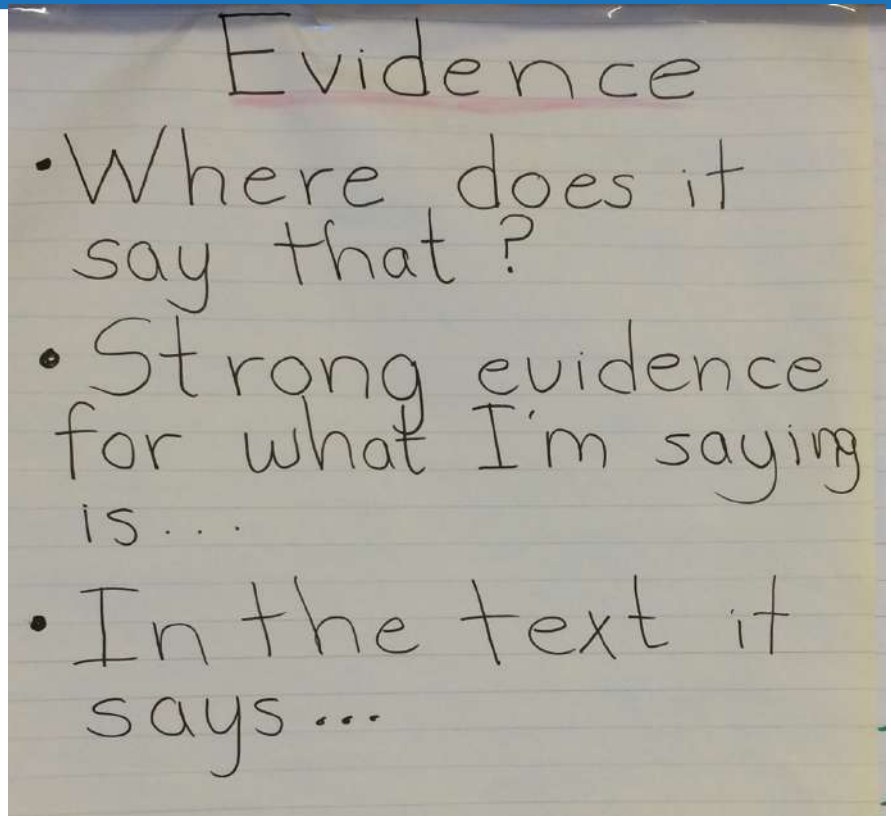
Build on the Claims of Others

- So, what you're saying is…
- I have also experienced what you describe when you claim that…
- What you said about… made me think of…
- That was a great point because…
- I agree with your argument there, because…
- That's a fascinating point. It connects to what I was thinking about…



Respectfully Disagree with the Claims of Others

- I respect what you claim about…, however, in my opinion…
- You propose that… I'm going to have to disagree for the following reasons…
- You make a solid point about…, but the other side of it is…
- While you make a great point, I'm going to have to disagree because…

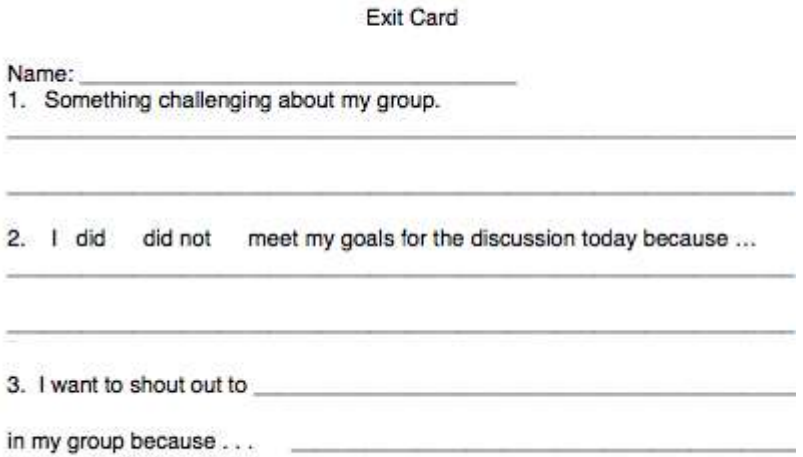


Exit Card

1. Something challenging about my group.

2. I did did not meet my goals for the discussion today because …

3. I want to shout out to _____in my group because . . . _____.



Exit Card

Name: _____

1. Something challenging about my group.

_____

_____

2. I did did not meet my goals for the discussion today because …

_____

_____

3. I want to shout out to _____

in my group because . . . _____

How can we support students in learning the language of argumentation?

1. How can we ensure all students have an “entry” point into the conversation?
2. What are some of the skills that will need to be explicitly taught for effective argumentation?
3. How do we hold students accountable for using the skills in oral and written argumentation?

Claim

1492- Was It possible for Columbus to reach India or Asia by crossing the Atlantic Ocean?

Analyzing an Oral Argument

In groups of three, discuss the following questions as they relate to the sample oral argumentation.

1. How clearly is the claim articulated?
2. What evidence or reasoning is supported for the claim?
3. What language are the students using to convey relationships among ideas?
4. What would have made this a stronger argument?

Summary of New Learning

*Argumentation needs to be explicitly taught and provide students opportunities to practice.

*The language of argumentation, including linguistic markers, needs to be modeled, taught, and practiced.

*Argumentation is a part of all content areas and involves critical thinking, active listening, collaboration, and effective communication (written and oral).

*Developing a safe, respectful classroom environment is essential to allow students opportunities to engage in argumentation and classroom discussions.

Course Reflections

This course has helped us:

Understand the role that argumentation has in the new standards

Develop strategies to support ELs in both oral and written argumentation.

Through the coursework

It has become apparent that students can state a claim, but still struggle with utilizing evidence and anticipating counterclaims.

The Argument Analysis Tool (AAT) is a great formative assessment tool that can provide teachers with feedback on what parts of argumentation students need additional support with.

In addition, argumentation is a part of all content standards and supports students in many different aspects of school and life.

Bibliography

Here are links to some of the information we presented today…

Socratic Circles and the Common Core

Scaffolded Text Dependent Questions

Sentence Starters for Argumentation

Additional Resources

Engaging ELs in Academic Conversation--A wealth of information and videos

Academic Conversations--by Jeff Zwiers and Marie Crawford

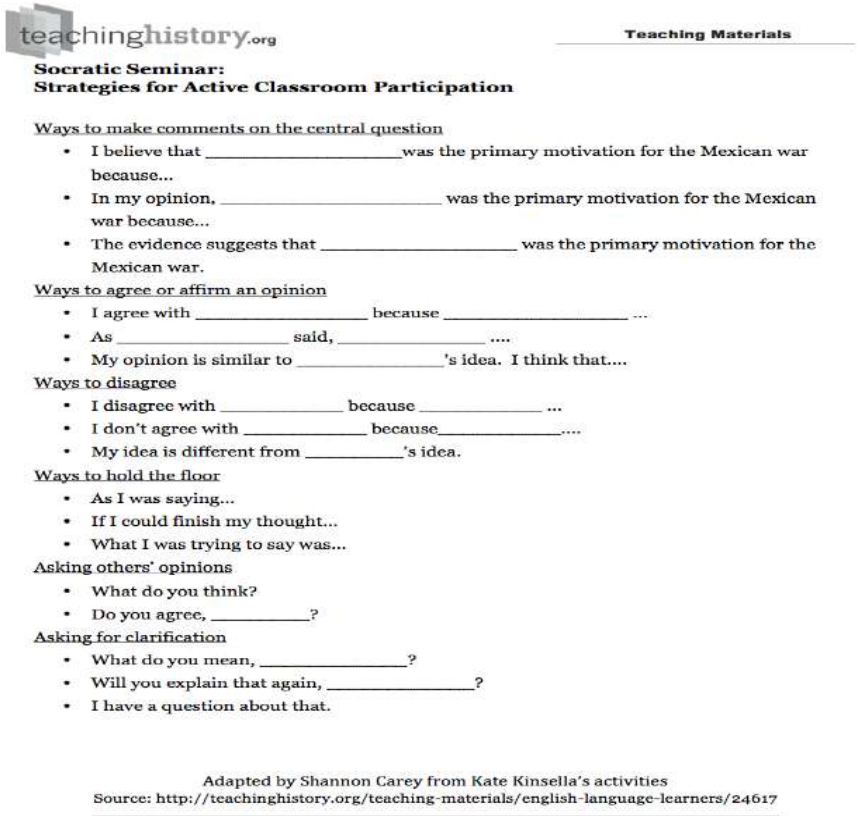
Supporting English Learners in the Primary Classroom--Basic tips for working with ELs

Improving Participation with Talk Moves--A short video that demonstrates this used in an elementary math lesson

Socratic Seminar--An overview of what it is and how it works in a classroom

Strategies for Active Classroom Participation

Sentence Stems



teachinghistory.org

Teaching Materials

Socratic Seminar:
Strategies for Active Classroom Participation

Ways to make comments on the central question

- I believe that _____was the primary motivation for the Mexican war because...
- In my opinion, _____ was the primary motivation for the Mexican war because...
- The evidence suggests that _____ was the primary motivation for the Mexican war.

Ways to agree or affirm an opinion

- I agree with _____ because _____ ...
- As _____ said, _____ ....
- My opinion is similar to _____'s idea. I think that....

Ways to disagree

- I disagree with _____ because _____ ...
- I don't agree with _____ because_____....
- My idea is different from _____'s idea.

Ways to hold the floor

- As I was saying...
- If I could finish my thought...
- What I was trying to say was...

Asking others' opinions

- What do you think?
- Do you agree, _____?

Asking for clarification

- What do you mean, _____?
- Will you explain that again, _____?
- I have a question about that.

Adapted by Shannon Carey from Kate Kinsella's activities
Source: http://teachinghistory.org/teaching-materials/english-language-learners/24617

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