



Building Students' Academic Language, Literacy, & Conversation Skills for and by Content Learning

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Understanding Language | Language, Literacy, & Learning in the Content Areas

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AGENDA

- I. Overview
- II. Conversation Skills
- III. Conversation Support Activities
- IV. Conversation-focused Inquiry
- V. Next Steps & Next Time



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4 Dimensions

4. Constructive Conversations

- Quantity & Quality
- Practice the skills

2. Reading & Writing

3. Speaking & Listening

- Provide space to talk and listen
- Peer helps (clarify, support, give idea seeds)

1. AUTHENTIC COMMUNICATION

0 1 2 3 4 5

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Build up Authentic Communication Features (for Accelerating Language Development)

___ **Useful & engaging purpose.** Students use language to do/build/change something beyond just answering questions for praise or points. Clarity matters. Agency.

+

___ **Information gap(s).** Students get or give information that they want, need, or don't have. (natural or created) (students need one another)

___ **Attention to language in service of communication?** There is extra work on language used.

Decide how Columbus

Co-design an experiment that helps you measure gravity

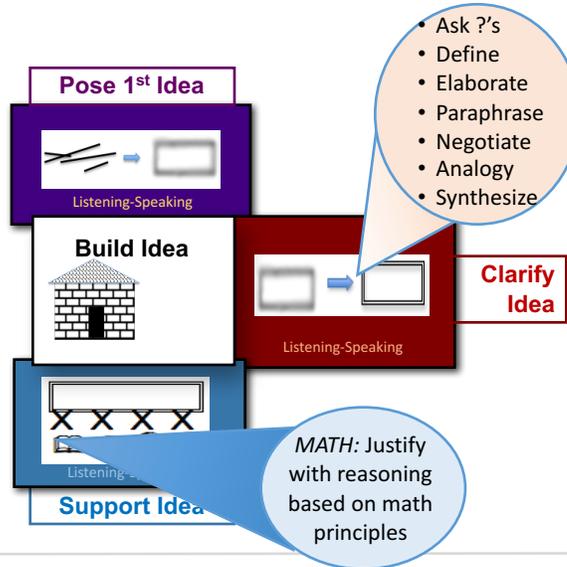
- Language modeling & scaffolding (e.g., sentence frames)
- Practice
- Formative feedback

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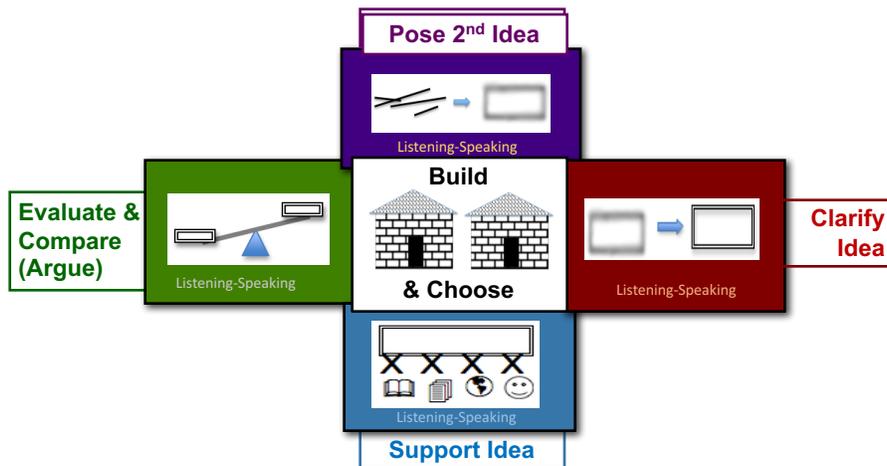
Constructive Conversation Skills (Build one Idea)

Students (w/o teacher) collaboratively build an idea (e.g., claim, answer, solution, interpretation)—not just answer questions—using the skills on the right:

(Notice that these are not “natural” in many students and eventually need to be “automatic”):



Constructive Conversation Skills: Collaborative Argument



Hand motions



Conversation Support Activities

Building Speaking and Listening Skills with

Transition Improv Activities

Transition Improv Activity: **Pro-Con**

Topics:

Social media's influence on language development

(You will make recommendations to teachers and students about the uses of social media)

Transitions: **However,**
On the other hand,
Then again,

~~but~~

Frames:

One advantage is ... For example, ...
Another positive of ... is... because...
A negative aspect of ___ is ...
In spite of the positives of _____,

Listeners can & should:
- Prompt for clarification & support
- Help with "What about...?"
Two-text variation
Follow w/ conversation

A & B, Lean?

Transition Improv: **For-Against**

Topics: Genetic engineering, electoral college, nuclear energy, social media, human-caused climate change, wolf reintroduction, de-extinction, zoos, year-round schools, corn as fuel, extraterrestrial life, desalination, going to college (2 texts)

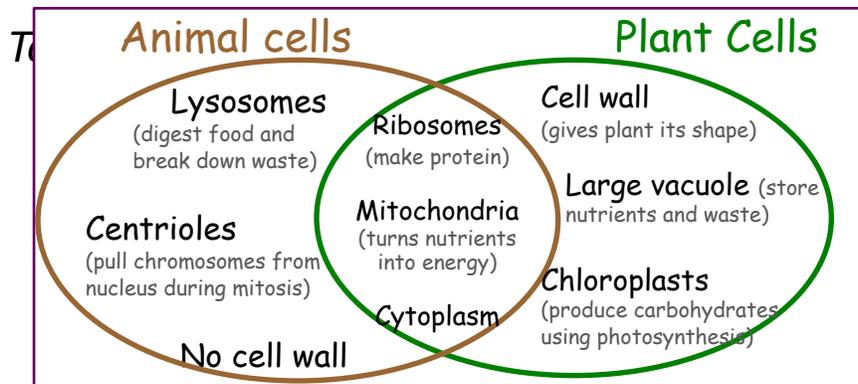
Transitions: **However,**
On the other hand,
Then again,

~~but~~

Frames: One reason for ... is ... For example, ...
 Evidence that supports ... is... because...
 A reason against ... is ... For example, ...
 Evidence that does not support ... is ... because ...

A & B,
 Lean?

Transition Improv: **Similar-Different**



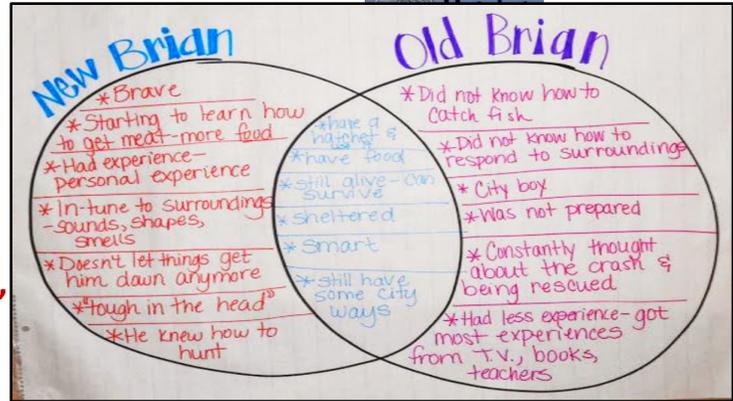
However,
On the other hand,
Then again,

SD Frames: Unlike animal cells, plant cells have ____, which ...
 Plant & animal cells both have ____, which serve to...
 ... are similar to ____ in that they both ____
 Animal cells differ from plant cells in that ____

Transition Improv: **Similar-Different**

Topic: old Brian & new Brian

Transitions: **However,**
On the other hand,
Then again,



Frames:

Unlike the old Brian, new Brian ____, which came from
Both new and old Brian ____, which ...
New Brian differs from old Brian in that ____
An important trait that didn't change in Brian was ...

Transition Improv: **Two Views w/ Evidence**

Views: Patriots
Loyalists



Transitions: **However,**
On the other hand,
Then again,

~~but~~

Frames:

The __ thought that ...
Many __ believed that...
A different perspective held by __ was that...
In the eyes of __...

Transition Improv: Math Situations

Topics: Addition-Subtraction, Area-Perimeter, Multiplication-Division,
Sine-Cosine, Volume-Surface Area, Linear-Quadratic
Fractions-Decimals, Integral-Derivative, Constant-Variable

Transitions: **However,**
On the other hand,
Then again,

~~but~~

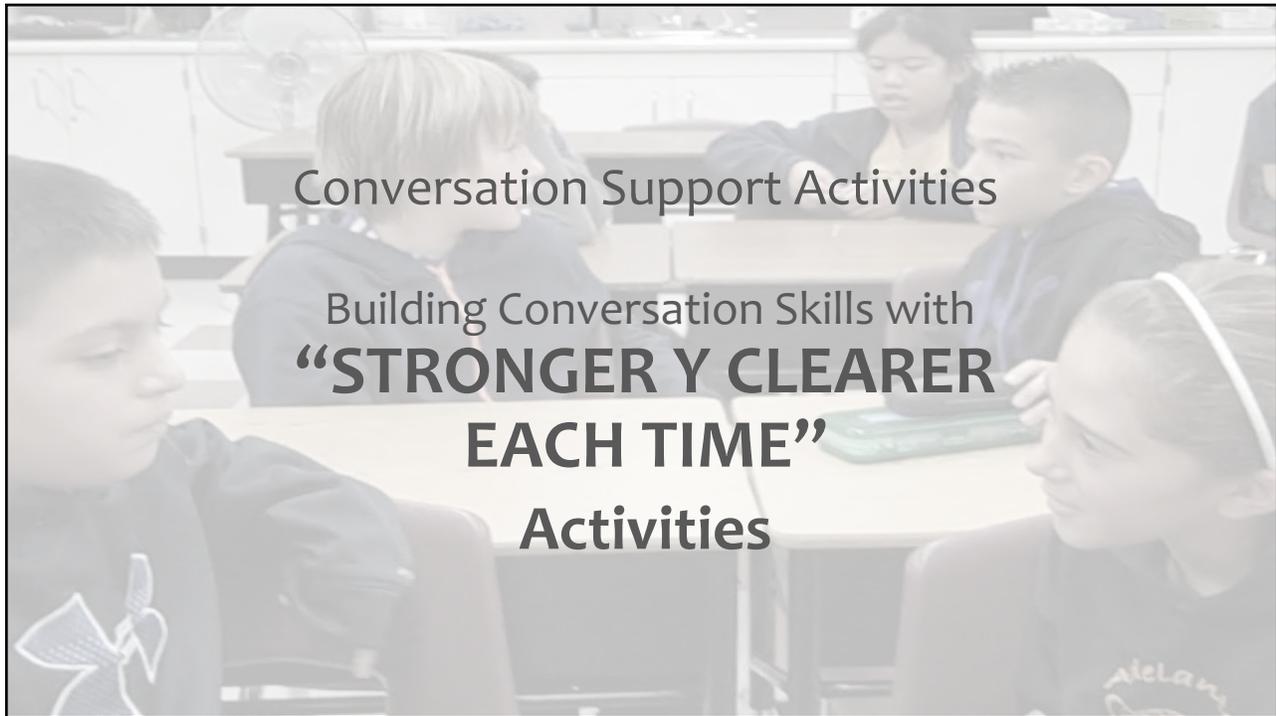
Frames: You need to add when ... because...
When you ... you need to subtract because...
You need to calculate volume when... because...
When you ... you need to use decimals because...

*Director can prompt
for clarification
and/or spark ideas,
if needed.*

APPLICATION TIME



Think about how you might support conversation skills using **Transition Improv activities** in your upcoming units or lessons.



Designing “Stronger & Clearer Each Time” Activities



1. Prompt for an **original response**
2. Successive partners: **borrow and use the language, ideas, and evidence** each time-->
 - **Stronger** (often longer) with better supporting evidence and examples, and
 - **Clearer** with more precise terms and linked, organized, complete sentences.
3. Listeners **push for clarification & evidence**, and offer ideas
4. Scaffolds **are reduced during** the activity.

“Stronger & Clearer Each Time” Grid

I think bad things happen when cultures meet, like wars.

Switch partners!
Don't forget to use examples; Stronger + clearer!

I think it's both good and bad. Like you learn from each other, but also you can fight.

(PRE)
Bad things happen when they meet.
Wars start.

Silvia

1st Partner

What happens when cultures meet and why?

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“Stronger & Clearer Each Time” Grid

I think bad things happen when cultures meet, like wars.

Switch partners!
Don't forget to use examples; Stronger + clearer!

I think it's both good and bad. Like you learn from each other, but also you can fight.

Cultures meet and bad things happen like war. But good things, too, like you can learn other language.

Silvia

2nd Partner

1. Mario	<i>both, learn</i>
2. Juan	<i>religion, Aztecs,</i>
3. Spain	
Me	

When cultures meet each other, it helps us to learn how others live, like their religion. But wars can happen, like the Aztecs and Spain.

What happens when cultures meet and why?

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Stronger & Clearer Activity

Context

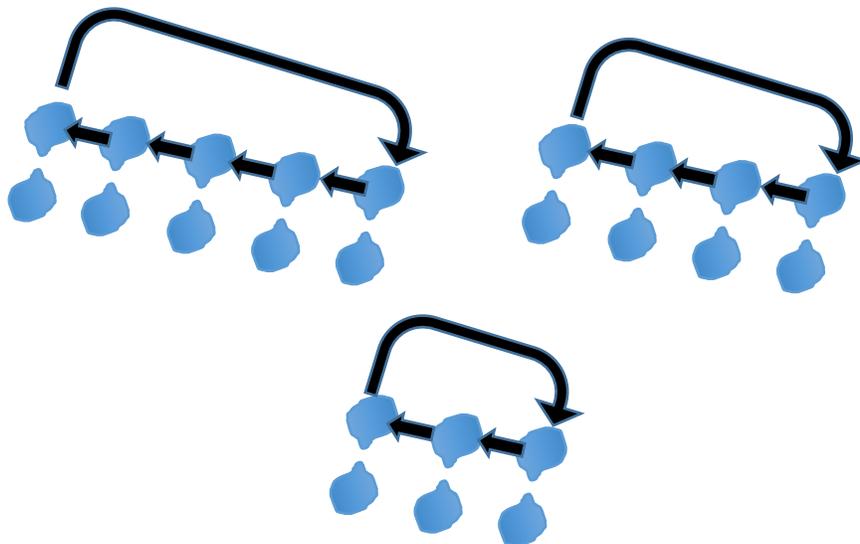
- 4th grade
Science class
- Early Advanced speakers.
- Have read and discussed energy conversion
- Focus on stronger and clearer messages using examples.



This Clip

- Prompt is: What is energy conversion?
- Daniel talks to three different partners
- Look for if and how his response becomes stronger (idea-wise) and clearer (language-wise)
- *Reflect on ways to improve his response and/or the activity.*

Interaction Mini-Lines



“Stronger & Clearer Each Time” Grid

Name	Why is poetry important to the human experience?	<i>You are an author trying to convince a textbook company to include poetry.</i>
Me	(just two or three key words, if any)	
1.		
2.		
3.		
Me		

“Stronger & Clearer Each Time” Grid

Name	How can developing students’ oral language (speaking, listening, conversing) influence reading and writing?	<i>You will present to colleagues on this topic.</i>
Me	(just two or three key words, if any)	
1.		
2.		
3.		
Me		

One way in which oral language influences reading is...because...
 A student with a strong command of oral language can read...
 Even though.....
~~I disagree with you...~~

Listeners can & should:
 - Prompt for clarification & support
 - Help with “What about...?”
 15 sec “take w/ me”
 Jigsaw variation
 Follow w/ conversation

APPLICATION TIME



Think about how you might plan using Stronger & Clearer Each Time activities—and/or adaptations to similar activities such as Gallery Walks and Jigsaws in your upcoming units or lessons.

CONSTRUCTIVE CONVERSATIONS



WHY: The Power of Collaborative Conversations

**CONTENT: Clarify,
Use, & Reinforce**

**LANGUAGE:
Input + Output**

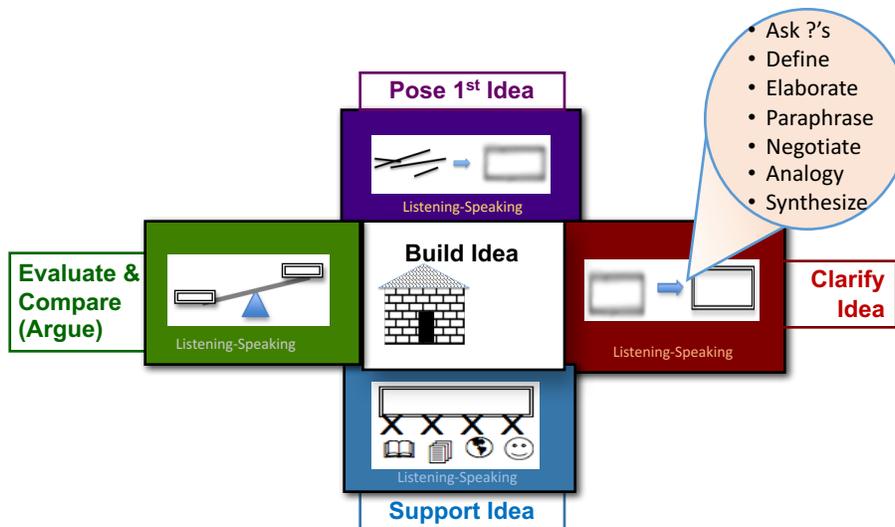
FORMATIVE ASSESSMENT

**ACADEMIC THINKING:
Critical & Creative**

**Social Skills, Relationships
Empathy, Equity,
Agency, Identity, Belonging**

Much of this happens naturally—which is nice—but how do we maximize these?

REVIEW: Constructive Conversation Skills (Build one Idea)



Hand motions

Conversation (Build 1 Idea)

Alicia: Rosa Parks. Marcos said all she did was sit down, but I think she was a hero.

Paty: I agree. She has a book about her.

Alicia: Why do you think a whole book?

Paty: She was so brave to go to jail, and it was like just cuz she sat down on a bus.

Alicia: Jail is scary, I think. They put you in the bars with ...ladrones and//

Paty: //Yeah, and I think she knew it would happen. That's a hero cuz she knew they would put her in jail.

Alicia: And she started the...what's that word?

Paty: Boycott. They stopped using the buses.

Alicia: Boycott, so it, it changed those racism rules. All cuz of Rosa! ... Where's Marcos?



Constructive Conversations in 9th ELA

Context

- Sheltered 9th grade English class
- Intermediate and early advanced speakers.
- Have read *To Kill a Mockingbird* and *Of Mice and Men*
- Focal conversation skill: supporting your ideas with examples from a text.
- Some prompts are on the board



This Clip

- Prompt: "What do you think an important theme in this book is?"
- How do they clarify and support ideas? ("What does courage mean?" "Can you elaborate on that?" "Can you give an example from another book?" "How does this apply to our life?")

Formative Assessment Tools: (e.g., Conversation Observation & Analysis Tool (COAT))

PROMPT:

Useful & Engaging Purpose Need to talk + Unique ideas Clear and Helpful Directions

QUANTITY

of Turns Length of turns Equity

QUALITY

Use conversation skills:

Pose Clarify Support Evaluate
to authentically build and argue useful ideas

OTHER KEY SKILLS

Listening Speaking Thinking Content Nonverbal Valuing Ideas

Improving Conversations

Laura: I think air has weight. Remember the balloon?

Eli: I respectfully disagree with you.

Laura: Why?

Eli: Cuz I can't feel it. Put your hand out. Do you?



Lisa: I think the dog was his best friend in the story.

Edgar: I would like to add to your idea. My dog ran away last year and we found him in the park.

Lisa: Which park?

Edgar: The one by the train station.

Lisa: I took a train to San Jose last week.



Improving Conversations

Alex: What caused the fall?
 Carlos: The book said disease and war.
 Alex: It also said crops and politics.
 Carlos: All of them, I guess.



Manny: I think we should use a table, like yesterday.
 Sara: I hate those things. They're so boring.
 Manny: So, what should we do?
 Sara: Maybe just times it.
 Manny: Why?
 Sara: Cuz that's what we did yesterday.

$$\frac{3a}{3c-6} \cdot \frac{9ab}{c^2-4} =$$

Conversation in 5th Gr. ELD



Context

- 4th Gr ELD class
- Had read *The True Story of the Three Little Pigs*

This Clip

- After reading *The True Story of the Three Little Pigs*, students discuss whether the wolf was guilty or not.

Silent Cards for a Conversation - 5th Gr. ELA/ELD



Context

- 5th grade Language Arts/ELD class
- Advanced and early intermediate

This Clip

- After reading an allegory for the Holocaust, students discuss what could have happened if the animals had stood together.
- They practice stating opinions, paraphrasing, and clarifying

Silent Cards for a Conversation – 1st Gr.



Context

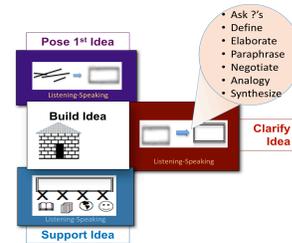
- 1st grade Language Arts/ELD class
- Advanced and early intermediate

This Clip

- After reading
- They practice

Your Turn (Triads)

"[...] If you don't want a house built, hide the nails and wood. If you don't want a man unhappy politically, don't give him two sides to a question to worry him; give him one. Better yet, give him none. Let him forget there is such a thing as war. If the government is inefficient, topheavy, and tax-mad, better it be all those than that people worry over it. Peace, Montag. Give the people contests they win by remembering the words to more popular songs or the names of state capitals or how much corn Iowa grew last year. Cram them full of noncombustible data, chock them so damned full of 'facts' they feel stuffed, but absolutely 'brilliant' with information. Then they'll think they're thinking, they'll get a *sense* of motion without moving. And they'll be happy, because facts of that sort don't change. Don't give them any slippery stuff like philosophy or sociology to tie things up with. That way lies melancholy. (Bradbury, 1953)



Work with a partner to co-construct what you think is the most important theme from this text and how it might connect to today. You can build up one theme or build up two and then decide which is stronger, etc.

Conversation Prompts

- There is an engaging purpose** for conversing that (a) **connects to lesson objectives**, and (b) **requires thinking & doing something with ideas**
(e.g., create, clarify, argue => consensus), decide, rank, solve, evaluate, combine, compare, choose, fortify, build, & transform) (+ *Agency*)
- There is a need to talk**
(info gaps; bring unique ideas)
- There are clear & helpful directions** for how to converse (language use, thinking, content concepts...)

ELA Literature: Collaboratively decide

ELA Expository: Decide whether or not to

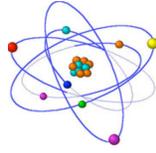
ELA Literature: Work with a partner to co-

History: You will co-author a letter to a history journal. Converse with your partner to decide if Lincoln was more interested in abolishing slavery or more interested in preserving the Union. Use evidence to support the claims on each side and evaluate the value of the evidence, along with any bias that might exist in the sources. Use historian language such as "This is strong evidence because..."

Know the Types of Conversations in Different Disciplines



- Deciding between two or more sides of a controversial issue
- Collaborating to agree on interpretations in literature
- Collaborating to agree on the best ways to communicate ideas to others



- Collaborating to interpret data and generate scientific explanations
- Solving problems & deciding between two sides of controversial science issues
- Role-based improv conversations



- Deciding between two sides of an issue or account
- Collaborating to solve social problems and challenges
- Collaborating to explain events, systems, and people



- Collaborating to solve a problem
- Collaborating to create new math problems
- Modeling math concepts and experimenting with numbers, symbols, & shapes

Craft a prompt

Conversation Prompts

- ❑ **There is an engaging purpose** for conversing that (a) **connects to lesson objectives**, and (b) **requires thinking & doing something with ideas**
(e.g., create, clarify, argue (=>consensus), decide, rank, solve, evaluate, combine, compare, choose, fortify, build, & transform) (+ Agency)
- ❑ **There is a need to talk**
(info gaps; bring unique ideas)
- ❑ **There are clear directions** for how to converse (language use, thinking, content concepts...)

ELA Literature: Collaboratively decide

ELA Expository: Decide whether or not to

Math: Work with your partner to create a

Science: In your conversation, compare

History: You will co-author a letter to a history journal. Converse with your partner to decide if Lincoln was more interested in abolishing slavery or more interested in preserving the Union. Use evidence to support the claims on each side and evaluate the value of the evidence, along with any bias that might exist in the sources. Use historian language such as "This is strong evidence because..."

Conversation Prompts

Math: Work with your partner to create a word problem that requires the solver to solve it using two equations. Both of you contribute ideas and then decide which would make for the most interesting problem for your classmates to solve. Make sure the problem is clear; it can contain extra information and numbers, if you want to be tricky. Make sure to set up what is happening and use consistent units.

ELA Literature: Collaboratively decide

ELA Expository: Decide whether or not to raise the max number of hours per day that teenagers should use screens. Engage in a collaborative argument conversation in which you and your partner build up both sides of the issue and. Use evidence and discuss the credibility of sources. Discuss and negotiate types of screen time, if necessary, for your final decision. Use evaluation language such as *outweigh*, *weak/strong because*, *credible*, etc.

Conversation Prompts

History: You will co-author a letter to a history journal. Converse with your partner to decide if Lincoln was more interested in abolishing slavery or more interested in preserving the Union. Use evidence to support the claims on each side and evaluate the value of the evidence, along with any bias that might exist in the sources. Use historian language such as “This is strong evidence because...”

ELA Literature: Collaboratively decide

ELA Expository: Decide whether or not to

Math: Work with your partner to create a

Science: In your conversation, compare the data that you got in the lab with that of your partner. If the data are different, jointly come to possible explanations for this; if similar, explain why. Make sure your explanations are clear and use scientific language such as: We believe that differences in the data are due to...” Come up with a final conclusion that describes what you learned—or were supposed to learn—from the lab.

Building collaborative
argumentation skills with the

ARGUMENT BALANCE SCALE



**Structuring Collaborative Argument Conversations:
*Argument Scale***

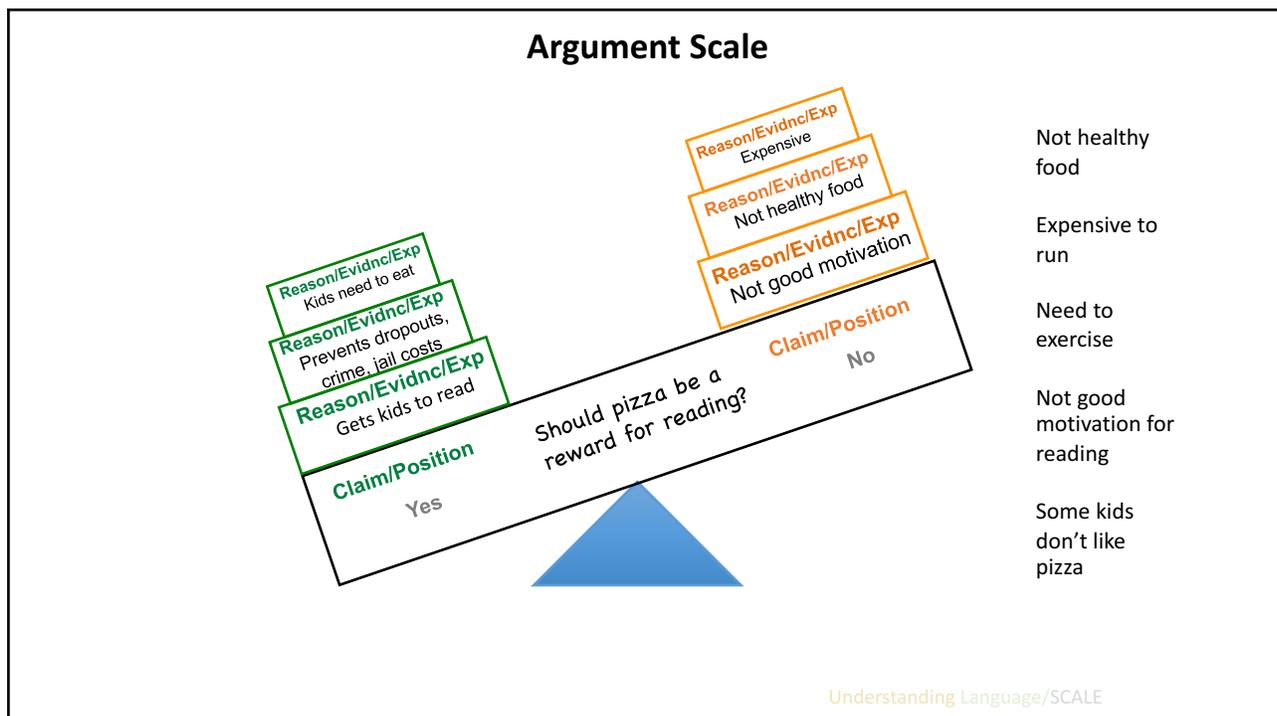
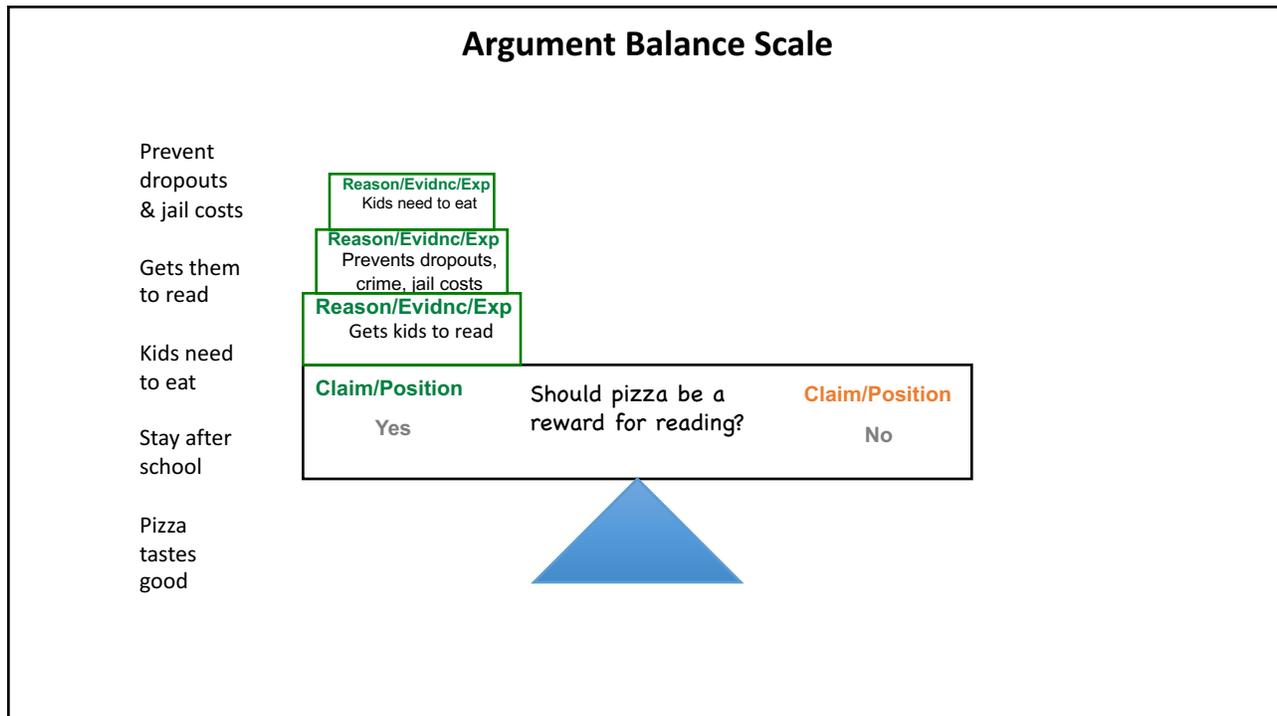
Claim **vs.** **Opposite or
Different Claim**

Which claim's reasons, evidence, and
explanations weigh the most?

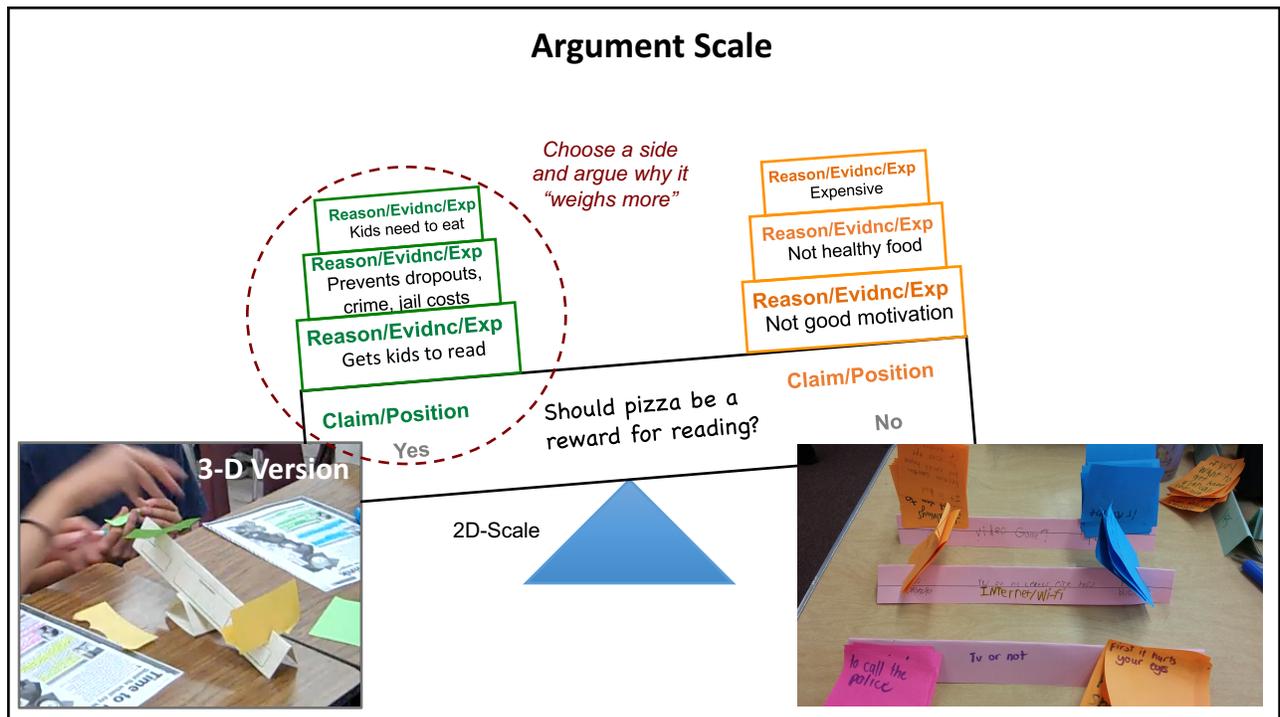
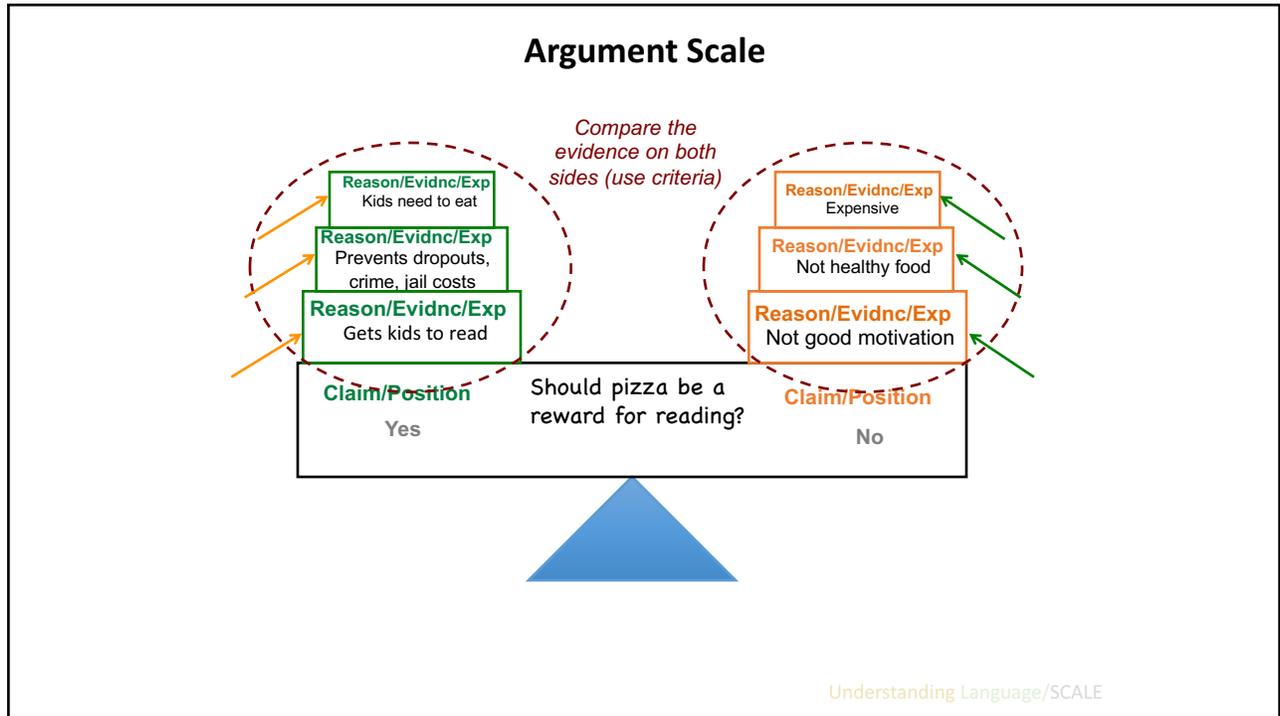
Claim/Position	Are humans good or evil?	Claim/Position
Good		Evil



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Understanding Language/SCALE



Video Example

CONTEXT

5th grade Language Arts/ELD class Advanced and early advanced partners.

After reading an article on a program that gives pizza as reward for reading, students discuss their opinions on the issue.



THIS CLIP

- Watch for supporting opinions, building on ideas, and clarifying
- Notice if and how the balance scale helps students to extend talk
- Consider next steps based on this conversation

7. Use Silent Support Cards (from the COAT)

Ask for an (another) example to support the idea

Paraphrase what your partner said

Ask your partner to clarify (Why...How...)

Build up the first idea first

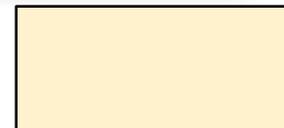
Show that you are listening with your eyes, nods, posture

Pose an alternative idea and start to build it up

Stay focused on the conversation prompt/purpose

Encourage your partner to talk more

Summarize the conversation up until now



Using the Cards – 5th Gr. ELA

- A: So, what do you think the poem is about?
 B: I think maybe something like, You gotta be yourself. What do you think?
 A: I think it's about being out in nature, that it's good to see plants...
 Oh, OK, So, why do you think it's about 'be yourself'?
 B: Cuz it says he doesn't want to be growing in clusters in the valley, and stand alone, and like not stuck in a pot of dirt.
 A: I like that. And the title is "Identity"
 B: Yeah...
 How does that help us?
 A: Identity means how you're different...

Identity (excerpt, by Julio Noboa Polanco)

Let them be as flowers,
 always watered, fed, guarded, admired,
 but harnessed to a pot of dirt.

Build up the first idea first

...ly weed,
 an eagle
 ... high, jagged rocks.

I'd rather be unseen, and if
 then shunned by everyone,
 than to be a pleasant-smelling flower,
 growing in clusters in the fertile valley,
 where they're praised, handled, and
 plucked by greedy, human hands.

How does the title support the idea?

...ould stand alone, strong and free,
 ...ather be a tall, ugly weed.

Using the Cards – 7th Gr. Science

- 1 Karla: So, why do squids have ink?
 2 Maya: For writing.
 3 Karla: What do you mean?
 4 Maya: Ink is for writing.
 5 Karla: Squids can't write...
 OK, so what do you mean that they write?
 6 Maya: Not with pens like us, but like maybe on a rock. Like to mark their place.
 7 Karla: I don't understand that, but I th...
 8 Maya: OK...
 How do they escape with ink?
 9 Karla: They let it out and it makes a cloud so they, you know, can swim away.
 10 Maya: And maybe it poisons the fish?
 11 Karla: I don't know; I think jellyfish have poison.
 12 Maya: I hate jellyfish: the poison ones.
 13 Karla: People die from their stings, I think.



Ask your partner to clarify (Why...How... What do you mean by)

Ask your partner to clarify (Why...How... What do you mean by)

Stay focused on the conversation prompt/purpose

Using the Cards – 2nd gr. SS

1A: What do firefighters need most? (*prompt*)

2B: Air.

3A: Can you give an example?

4B: Like a tank of air like the picture.

5A: Why do they need it most?

6B: So they won't die.

7A: Why?

8B: When they go in burned buildings. Smoke kills so they need air. Air is most important.

9A: I think they need water most.

10B: Why?

11A: They need it to put out the fire. That's what they do.

12B: But they can't use the water if they die from smoke.

13A: OK, yeah. Air is most important.



Your Turn: Using the Silent Support Cards

PROMPT: Come to a consensus with your partner on why the painter painted the painting in this way: why he included certain figures, their composition, postures, movements, gazes. Include what the painter wanted the viewer to feel or think, empathize, and learn from the painting. Try to agree on how accurate a depiction you think this is and why.



First landing of Columbus on the shores of the New World, at San Salvador, W.I., Oct. 12th 1492. (1862) Dióscoro Puebla, Spanish painter

Using the Silent Support Cards

PROMPT: Come to a consensus and a clear explanation of where you think the mass of trees (think Redwoods) comes from. Discuss why many people often get this answer wrong.



So where does a tree's mass come from?

The 1648 potted willow experiment of Johannes Helmont is widely discussed in biology teaching because it is the first known quantitative experiment in biology. He wrote, "But I have learned by this handicraft-operation that all vegetables do immediately, and materially proceed out of the element of water only. For I took an earthen vessel, in which I put 200 pounds of earth that had been dried in a furnace, which I moistened with rainwater and I implanted therein the stem of a willow tree, weighing five pounds; and five years being finished, the tree did weigh 169 pounds. And least the dust that flew about should be commingled with the Earth, I covered the lip or mouth of the vessel with an iron-plate covered with tin, and easily passable with many holes. I computed not the weight of the leaves that fell off in the four Autumns. At length, I again dried the Earth of the vessel, and there were found the same two hundred pounds, wanting about two ounces. Therefore 164 pounds of Wood, Barks, and Roots, arose out of water only" (1622). And if the tree is using soil for its mass, then there must be less soil around it. And yet, it turns out that if you ask new Harvard graduates this question, the vast majority of them answer some variant of "It comes from the soil." The answer, it turns out, is blowing in the wind.

Using the Silent Support Cards

PROMPT: Read the excerpt from *Huckleberry Finn* (Twain, 1885) and come to an agreement on what the most important theme in the passage seems to be. Make sure to clarify and support idea(s) along the way as you build or choose your final main theme idea and prepare to present it to others.

Excerpt from *The Adventures of Huckleberry Finn* (Twain, 1885)

It made me shiver. And I about made up my mind to pray, and see if I couldn't try to quit being the kind of a boy I was and be better. So I kneeled down. But the words wouldn't come. Why wouldn't they? It warn't no use to try and hide it from Him. Nor from ME, neither. I knowed very well why they wouldn't come. It was because my heart warn't right; it was because I warn't square; it was because I was playing double. I was letting ON to give up sin, but away inside of me I was holding on to the biggest one of all. I was trying to make my mouth SAY I would do the right thing and the clean thing, and go and write to Jim's owner and tell where he was; but deep down in me I knowed it was a lie, and He knowed it. You can't pray a lie—I found that out.

So I was full of trouble, full as I could be; and didn't know what to do. At last I had an idea; and I says, I'll go and write the letter—and then see if I can pray. Why, it was astonishing, the way I felt as light as a feather right straight off, and my troubles all gone. So I got a piece of paper and a pencil, all glad and excited, and set down and wrote:(text continues on handout)

NEXT STEPS



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Free Online PD Courses (Conversations | Language in Math) --> ell.stanford.edu