



Harnessing the Power of Conversations to Foster Language, Content, Thinking, & Writing Across Disciplines

Jeff Zwiers

October 23, 2017

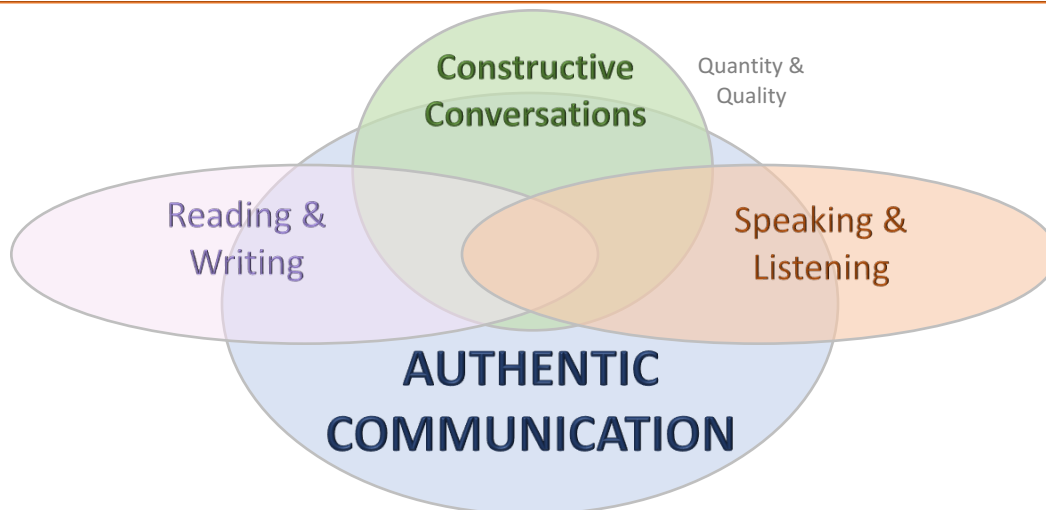
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jzwiers@stanford.edu

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

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Overview



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

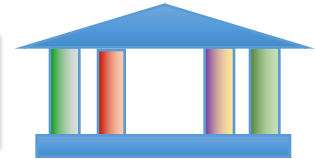
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2. Build up Authentic Communication Features (for Accelerating Language Development)

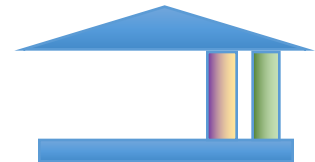
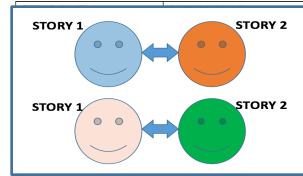
___ **Useful & engaging purpose.** Students use language to do/build/change something beyond just answering questions for praise or points. Clarity matters. Agency.

Decide how Columbus
Co-design an experiment that helps you measure gravity



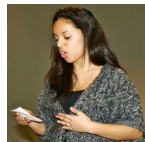
+

___ **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.

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



Speaking & Conversations: Overlap & Differences



Speaking

is one-way, one-time, clear & strong communication of ideas & thinking.


Think-pair-shares,
Answering teacher questions, Jigsaws,
Gallery walks,
Oral presentations

Conversations

are back-and-forth interactions in which participants *build on* one another's ideas to *build up* ideas that weren't in their minds before talking.



Warming up
speaking and listening
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,

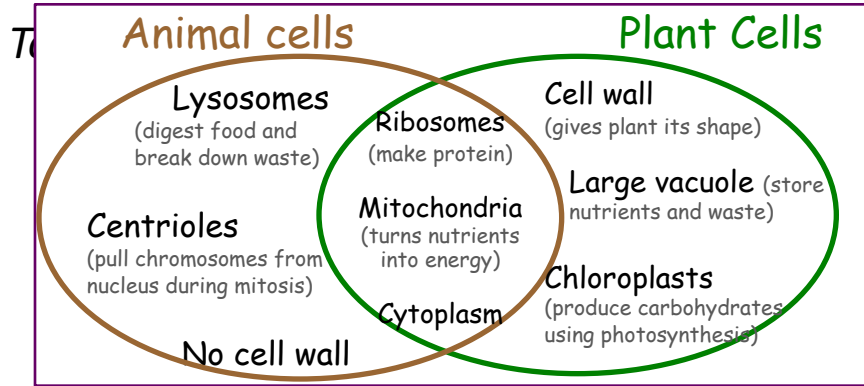
~~but~~

Frames:

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

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: Two Views w/ Evidence

Views: Patriots
Loyalists



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

~~but~~

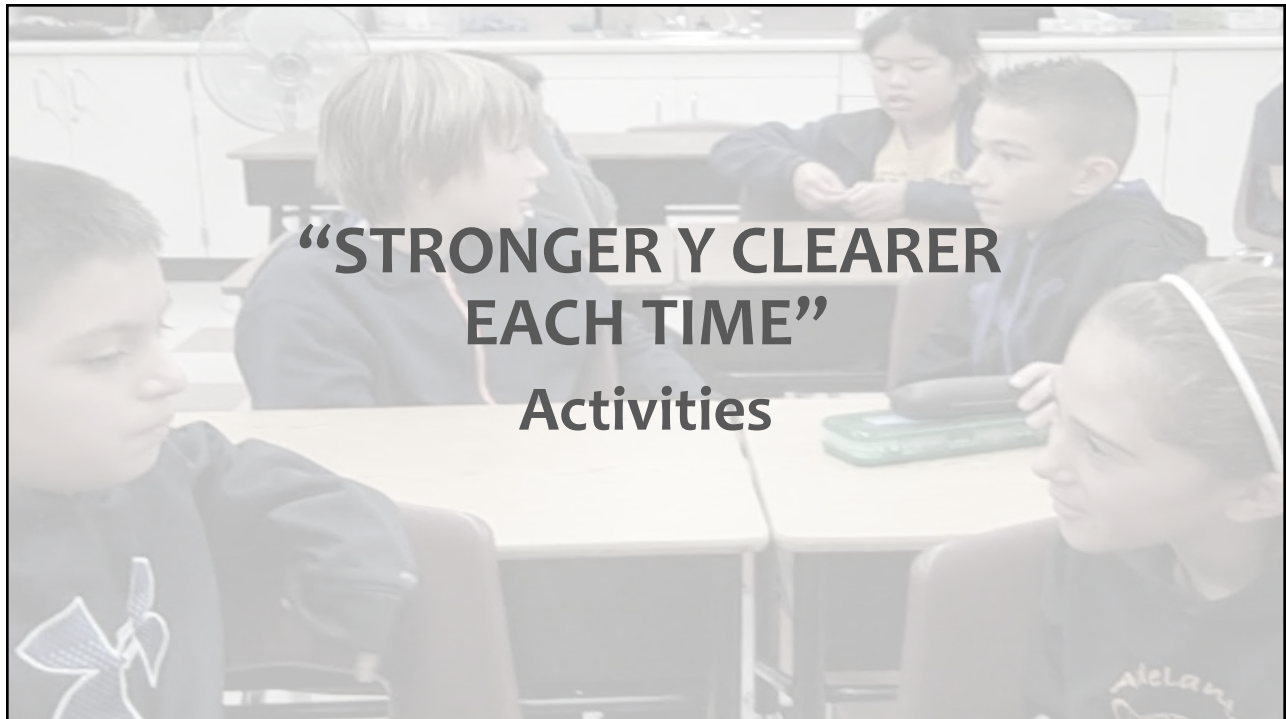
Frames: The ____ thought that ...
Many ____ believed that...
A different perspective held by ____ was that...
In the eyes of ____...

Transition Improv Activity: Math Situations

Topics: Addition-Subtraction, Area-Perimeter, mm-km
 Multiplication-Division, Volume-Surface Area
 Fractions-Decimals, Integral-Derivative

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...



Designing “Stronger & Clearer Each Time” Activities



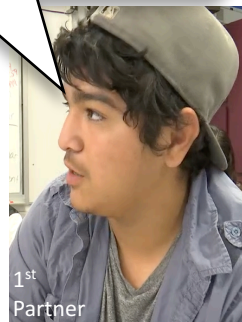
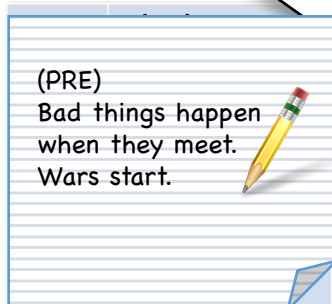
1. Prompt for an **original response**
2. Successive partners: **borrow and use the language, ideas, and evidence** each time-->
 - **Stronger** (often longer) with better supporting evidence and examples, and
 - **Clearer** with more precise terms and linked, organized, complete sentences.
3. Scaffolds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



What happens when cultures meet and why?

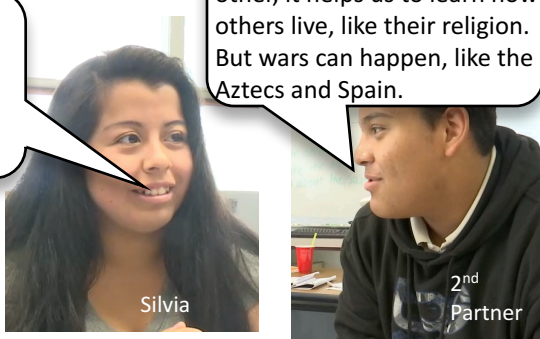
“Stronger & Clearer Each Time” Grid

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

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

1.	Mario	both, learn
2.	Juan	religion, Aztecs,
3.	Spain	
Me		

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



Silvia
2nd Partner

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

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?

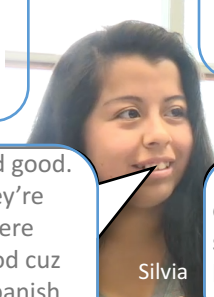
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“Stronger & Clearer Each Time” Grid

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

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

When cultures meet, is bad and good. Bad cuz they fight wars, like they're different. Spain thought they were better than the Aztecs. And good cuz you can learn languages, like Spanish, and new religion.



Silvia

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

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.

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

(POST)
When cultures meet, is both bad and good. Bad cuz they fight, like the Aztecs and Spain. Spain thought they were better so they took over. Good cuz of new food and languages and religion.

What happens when cultures meet and why?

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Looking at Student Work (Before & After Grid Partners)

PRE

INTERVIEW TIME!
(Listen in, Share out, Create together)

QUESTION: Why should I care about biodiversity?

MY ANSWER: Because the food chain

POST

I should care about biodiversity because without the variety of living things there wouldn't be anything to provide for us for example(s) the rosy periwinkle provides a medicine that treats certain cancers including leukemia.

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Stronger & Clearer Activity

Context

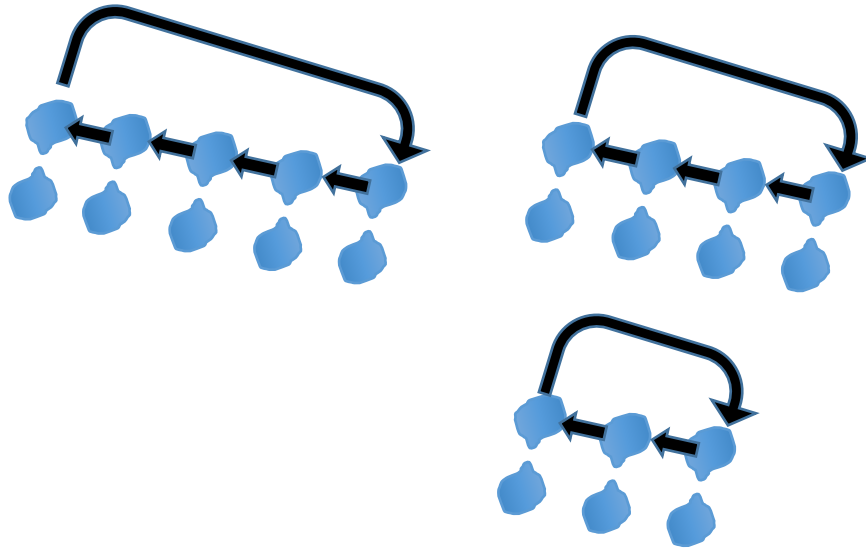
- 4th grade
Science class
- Early Advanced speakers.
- Have read and discussed energy conversion
- Focus on stronger and clearer messages using examples.



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 it important to learn about history through primary source documents?	<i>You are a historian trying to convince a history textbook author to include primary sources. He has not read in and to know look for it.</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	<small>(just two or three key words, if any)</small>	
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...?”



WHY: The Power of Collaborative Conversations

CONTENT: Clarify, Use, & Reinforce

LANGUAGE: (Input + Output) & Literacy

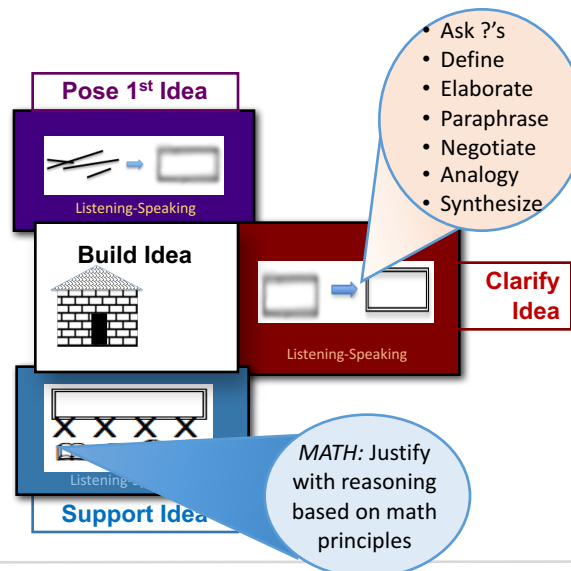
FORMATIVE ASSESSMENT

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?

Constructive Conversation Skills (Build one Idea)



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

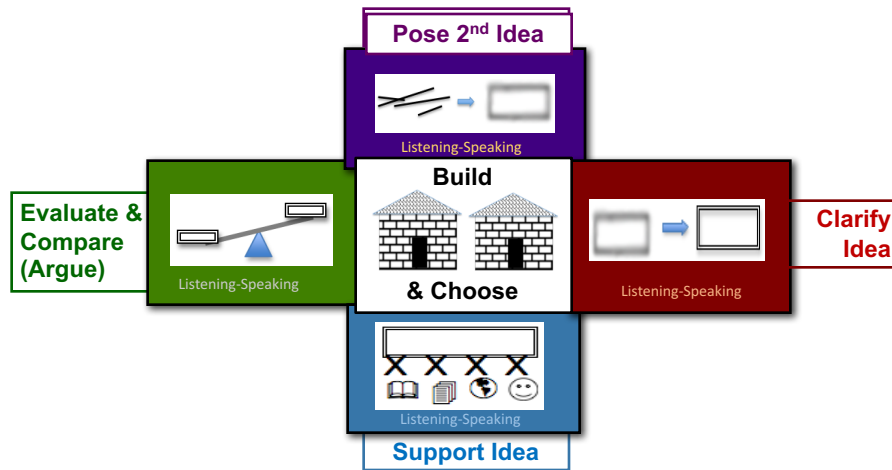
- Sheltered 9th grade English class
- Intermediate and early advanced speakers.
- Have read *To Kill a Mockingbird* and *Of Mice and Men*
- Focal conversation skill: supporting your ideas with examples from a text.
- Some prompts are on the board



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?")

3. Teach Constructive Conversation Skills: Collaborative Argument



Hand motions

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.

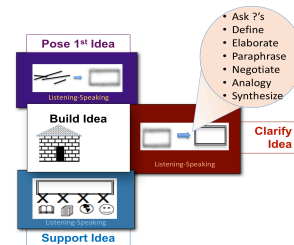


Manny: I think we should use a table, like yesterday.
 Sara: I hate those things. They're so boring.
 Manny: So, what should we do?
 Sara: Maybe just times it.
 Manny: Why?
 Sara: Cuz that's what we did yesterday.

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

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. Quickly decide on one theme and build it up.

Use 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

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

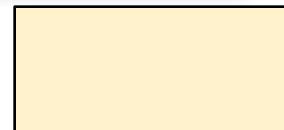
Show that you are listening with your eyes, nods, posture

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.

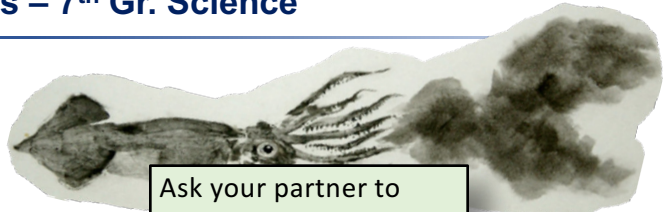
I'd rather be unseen, and if
 then shunned by everyone,
 than to be a pleasant-smelling flower,
 growing in clusters in the fertile valley,
 where they're praised, handled, and
 plucked by greedy, human hands.

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

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

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 (Option 2)

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.

Building collaborative
argumentation skills with the

ARGUMENT BALANCE SCALE



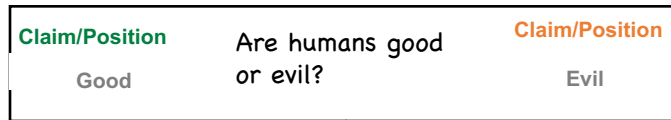
Structuring Collaborative Argument Conversations: Argument Scale

Claim

vs.

**Opposite or
Different Claim**

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



Structuring Collaborative Argument Conversations: Argument Scale

Litter in parks

Reason/Evidnc/Exp
Healthcare costs

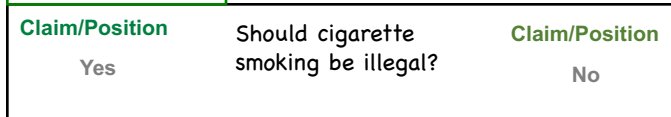
Smoker dies every 8 seconds

Reason/Evidnc/Exp
Secondhand smoke kills

Cost of healthcare

Reason/Evidnc/Exp
Smoker dies every 8 sec

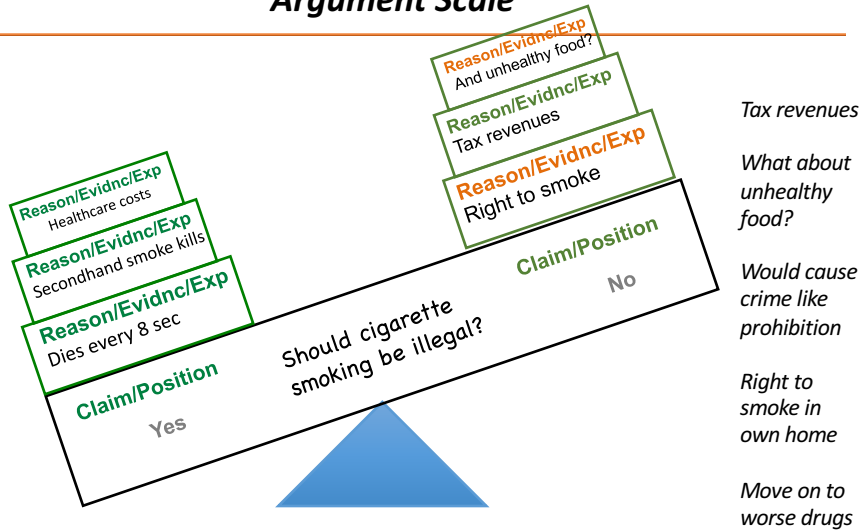
Makes you cough



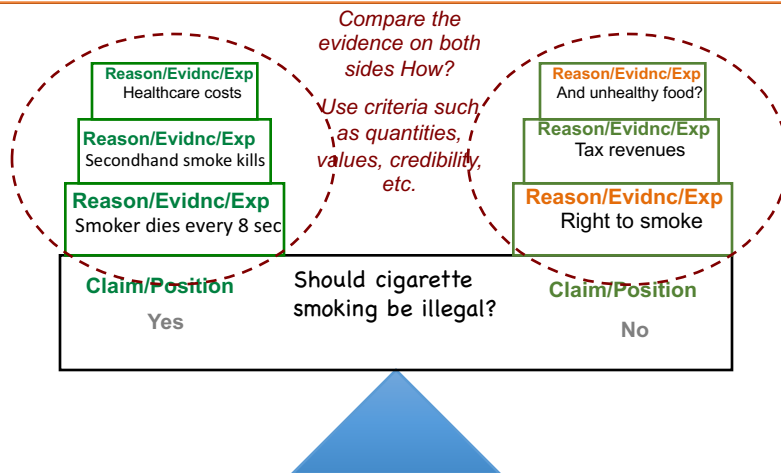
Secondhand smoke kills



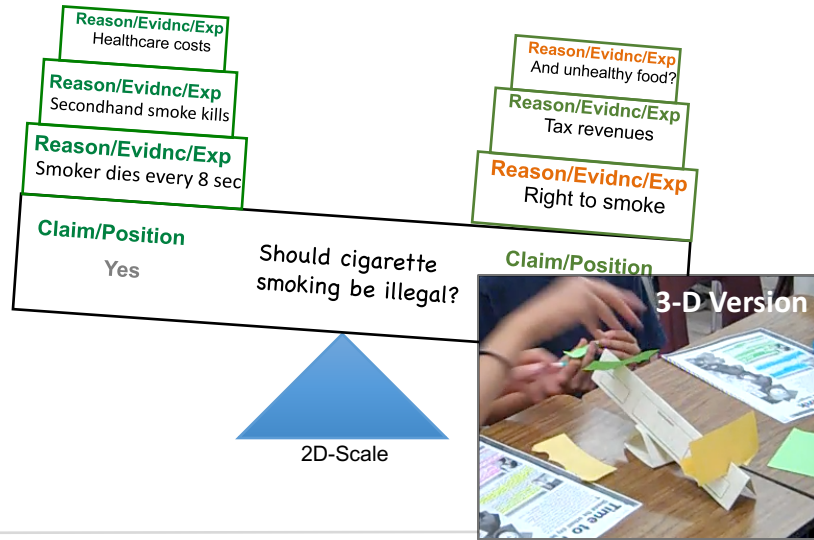
Structuring Collaborative Argument Conversations: Argument Scale



Structuring Collaborative Argument Conversations: Argument Scale



Structuring Collaborative Argument Conversations: Argument Scale



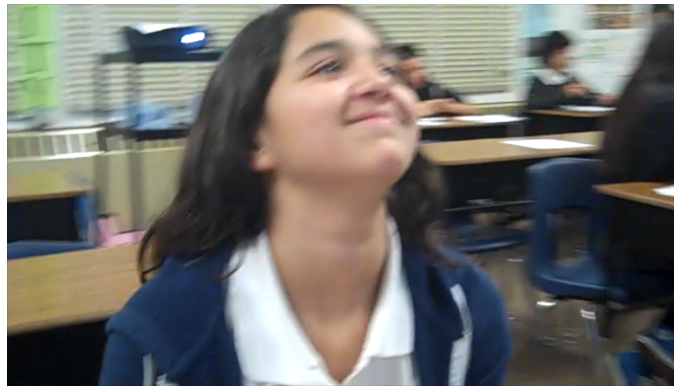
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Constructive Conversations in 8th ELA

Context

- 8th grade English class
- Early Intermediate to Early Advanced speakers.
- Have read articles on smoking
- Focal conversation skill: supporting your ideas with examples and evaluating them.



This Clip

- Each student chose a side to argue on whether or not to ban smoking.
- They use balance scale visual and paper clips to show "weight" of evidence
- They prompt each other to support and evaluate with "Why?" questions

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8th History – Using the Argument Scale

Mayra: One side is industrialization was bad.

Ben: What do you mean 'bad'?

Mayra: There was crime and it was dangerous. You saw the pictures, right?

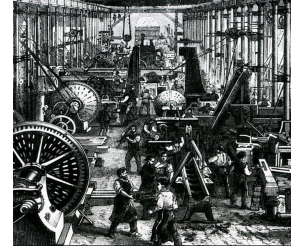
Ben: Yeah, they had sick people, too.
And people got hurt and died, in factories.

Mayra: I think a lot of people got sick and some did crime cuz machines took their jobs.

Ben: And there was lots of pollution.

Mayra: Say more about that. Like how did industrialization make pollution more bad?

Ben: The factories just dumped it into rivers.



8th History – Using the Argument Scale

Mayra: And lots of smoke in the air, too.

Ben: Yeah, so what about the good side of it?

Mayra: On this card it says it helped people buy cheaper things.

Ben: How?

Mayra: The factories made lots of things in a day, so they could cost less.
For example, cars.

Ben: And people got jobs in factories so they got work and got paid.

Mayra: And they maybe had better lives at home with inventions they made in factories.

Ben: OK, so which side is stronger or heavier?

Mayra: I dunno. Like the job thing is on both sides/

Text: Schoolgirl loses veil legal case



A 12-year-old schoolgirl has failed in a legal challenge to her school's ban on a full-face veil. Justice Silber had been told that the girl's three older sisters had attended the same school and had worn the niqab with no problems. But the school told the girl it was not acceptable because teachers believed it would make communication and learning difficult. About 120 of the school's 1,300-plus pupils are Muslims. About half of them wear the hijab headscarf, which is permitted.

In his judgement, Justice Silber stressed that he was dealing with one particular case - not the wider issue of whether the niqab should be worn, in schools or anywhere else. He said the ban was "proportionate" in the light of certain factors:

- the veil prevented teachers from seeing facial expressions - a key element in effective classroom interaction
- the necessity to enforce a school uniform policy under which girls of different faiths would have a sense of equality and identity
- security - the head teacher had said an unwelcome visitor could move around the school incognito
- the need to avoid peer pressure on girls to take up wearing the veil

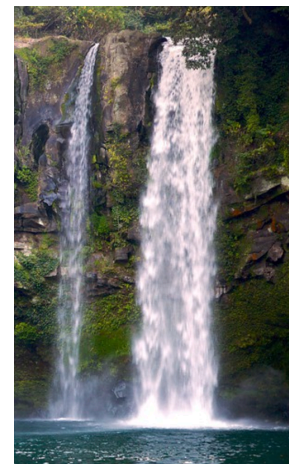
The girl's lawyer, Shah Qureshi, said: "It's surprising that he decided that the school had not infringed my client's freedom to manifest her religion given the fact that she entered the school on the understanding that the wearing of the veil was allowed when being taught by male teachers." Costs in the case were awarded against the family.

9. Use the Math Paired Conversation Protocol

Suppose it takes the Almond River 4 years, by itself, to fill a reservoir, and Campbell Creek, on its own, 6 years to fill it. If both are flowing into the reservoir, how long will it take to fill it? Work with your partner to come up with two or more ways to solve this, justifying ideas along the way.

PROBLEM:

Paraphrase and clarify problem for one another (in pairs) <i>(Talk about what is asked; what is given; what happens; what the units are, etc.)</i>			
<input type="checkbox"/> TALK			
Estimate the answer <i>(Each partner generate and justify your own estimate; then compare them)</i>			
<input type="checkbox"/> TALK			
METHOD A (name it)	Justify method <input type="checkbox"/> TALK	METHOD B (name it)	Justify method <input type="checkbox"/> TALK
Visuals, Drawings, Charts, Symbols, Calculations, Solution	Justify what you do <input type="checkbox"/> TALK	Visuals, Drawings, Charts, Symbols, Calculations, Solution	Justify what you do <input type="checkbox"/> TALK



NEXT STEPS



Jeff Zwiers | jzwiers@stanford.edu | jeffzwiers.org/october23

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