

Communicating to Learn: Practices and Activities for Developing Academic Speaking, Listening, and Conversation Skills Across Disciplines

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What ideas are you looking to build? Are you open to building ideas you hadn't planned on building?

### **AGENDA**

- I. Authentic Communication as a Foundation
- II. Conversation Skills
- **III. Conversation Skills Support Activities**
- IV. Conversation Modeling and Scaffolding
- V. Next Steps



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### **Students of Concern**

Do you have any students who want to learn, but who:

- · aren't motivated enough by points and grades?
- · have learned to "play" school?
- · do the bare minimum?
- have adeptly figured out how to talk as little as possible in activities that require talk?
- · feel like they don't belong?
- struggle academically because of language?
- · lack social skills?



Understanding Language

Jeff Zwiers

# Individual piling up right answers, paying for points, & playing school SHIFT from... Collaborating, understanding, building, using, & communicating whole ideas

### "Standard" for Today

OQ.7b.9A.243.x. Educators will understand how communication affects the brain



Bio-electrical nerve impulses travel along the axons of your brain's neurons, carrying information to other neurons. Brainwaves are produced by synchronized electrical pulses from masses of neurons communicating with each other.

Communication has been found to influence brainwaves. By recording cerebral electrical activity, researchers found that the neuronal activity of two people involved in communication "synchronize" in order to allow for a "connection" between both subjects. The rhythms of the brainwaves corresponding to the speaker and the listener adjust according to the physical properties of the sound of the verbal messages expressed in a conversation. "The brains of the two people are brought together thanks to language, and communication creates links between people that go far beyond what we can perceive from the outside. We can find out if two people are having a conversation solely by analyzing their brain waves." We call it neural synchrony. Using electroencephalography (EEG), the scientists measured their brainwaves simultaneously and confirmed that their oscillations took place at the same time.

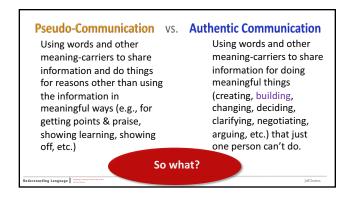
### Activities

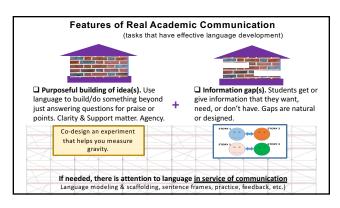
### 1. Think-Pair-Share

Share with your partner a summary of how communication with others affects the brain. (This will show me how well you have learned the standard.)

### 2. Think-Pair-Share

How might neural synchrony inform how you might teach and assess students in your setting? (You are building up this idea in order to present it at a staff PD day.)



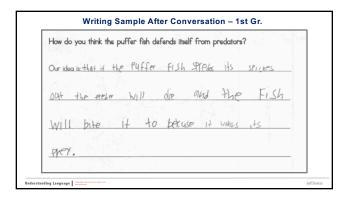


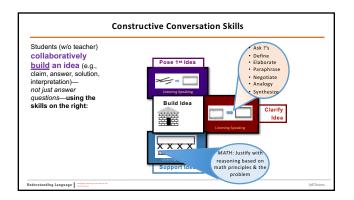
Focus Learning on Building Ideas (from the start)

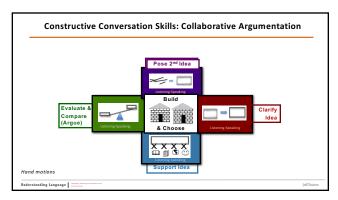
Context

1 st grade science
English learners
First day of the unit on animals

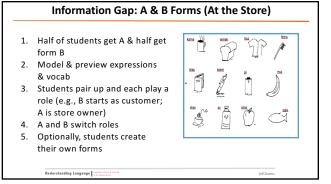
This Clip
After looking at pictures in the beginning of the unit, students are asked "What helps the slow pufferfish stay alive?"

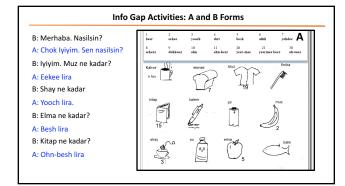


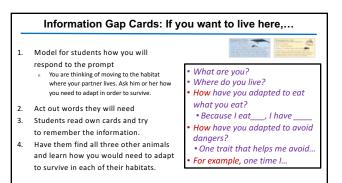




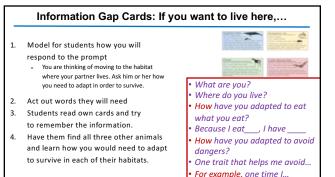


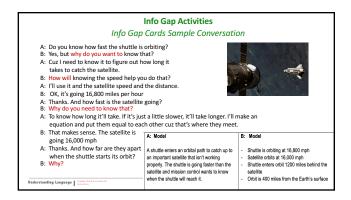






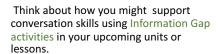


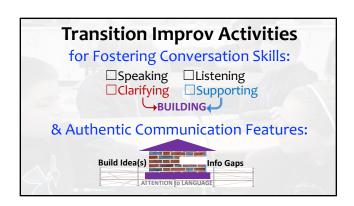


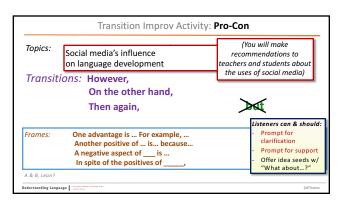




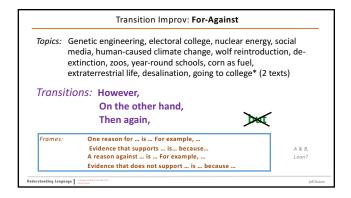


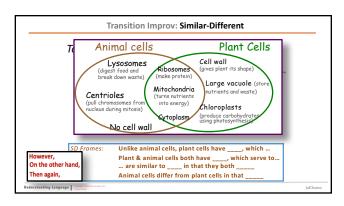


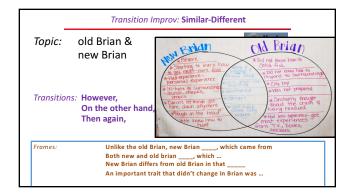


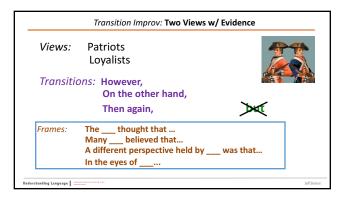




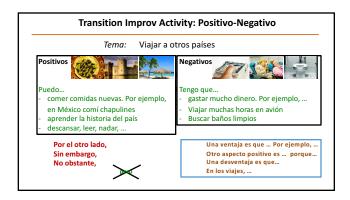


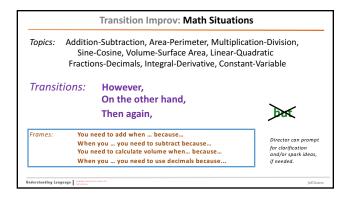
















Think about how you might support conversation skills using Transition Improvactivities in your upcoming units or lessons.



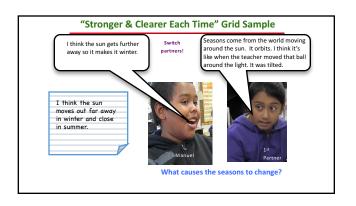
1. Prompt for an original response
2. Successive partners: borrow and use the language, ideas, and evidence each time-->

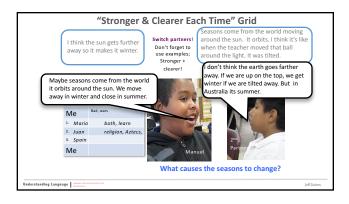
1. Stronger (often longer) with better supporting evidence and examples, and

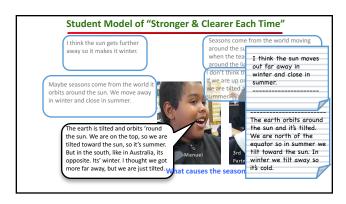
2. Clearer with more precise terms and linked, organized, complete sentences.

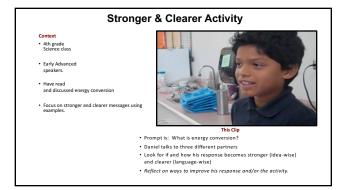
3. Listeners push for clarification & support, and offer ideas

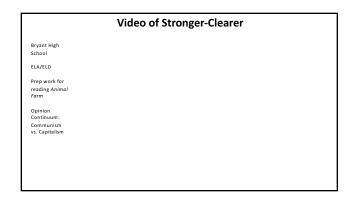
4. Scaffolds are reduced during the activity.

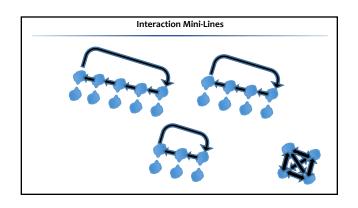


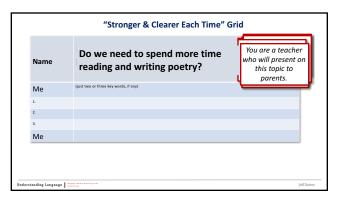


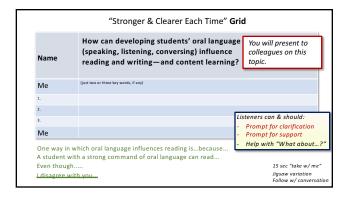


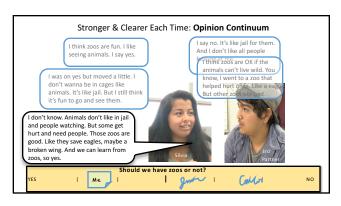


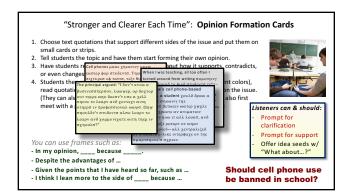


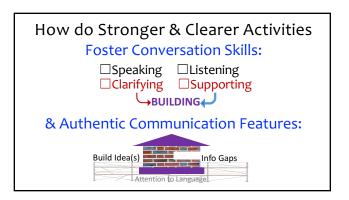










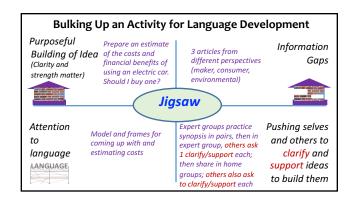


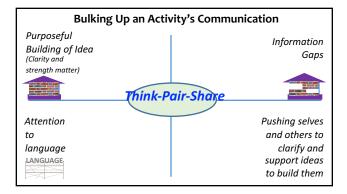


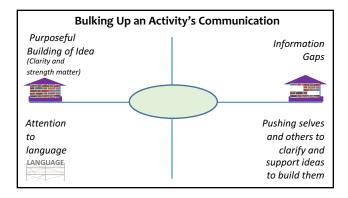
Think about how you might plan using Stronger & Clearer Each Time activities—and/or adaptations to similar activities such as Gallery Walks and Jigsaws in your upcoming units or lessons.





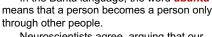


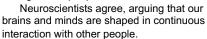


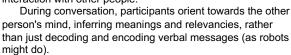




### Conversation In the Bantu language, the word ubuntu

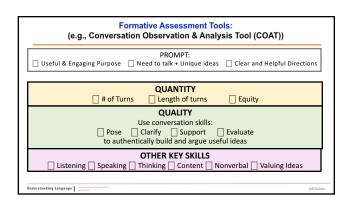




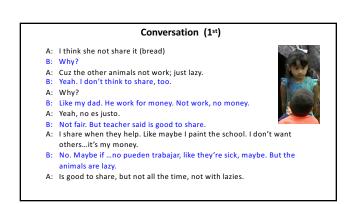


(Hari & Kujala, 2007. Brain Basis of Human Social Interaction: From Concepts to Brain Imaging)

## The Power of Collaborative Conversations (Why face-to-face communication is worth it) CONTENT: Clarify, Use, & Reinforce Input + Output FORMATIVE ASSESSMENT Social Skills, Relationships Voice, Empathy, Equity, Agency, Identity, Belonging

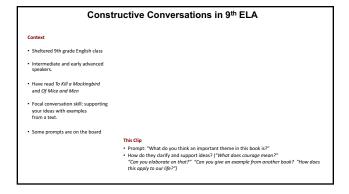


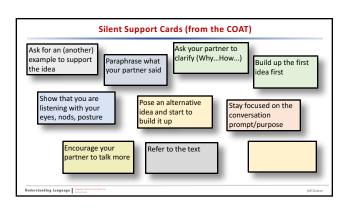
**Improving Conversations** Laura: I think the theme is we gotta forgive others Eli: I respectfully disagree with you. Laura: Why? Cuz it's not fair. People should be punished. Eli: Build up the first idea first!!!!!! Leo. We should be able to vote. Edgar: I agree. And drive cars around, you know, get licenses Leo: I drove my uncle's car in Mexico when I was 12. Edgar: Where'd you go? On the roads by his house, but then into a pond. Leo: Edgar: Maybe you shouldn't get a license yet.

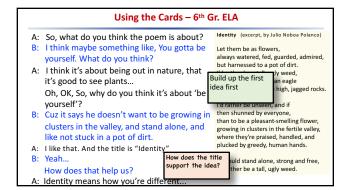


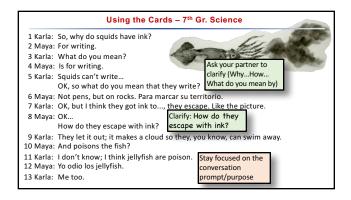
Conversation (5th) Alicia: Rosa Parks. Marcos said all she did was sit down but I think she was a hero. Paty: I agree. She has a book about her. Why do you think a whole book? She was so brave to go to jail, and it was like Paty: iust cuz she sat down on a bus. Alicia: Jail is scary, I think. They put 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. Boycott, so it, it changed those racism rules. All cuz of Rosa! ... Alicia: Where's Marcos?

Conversation (Math) A boat steers straight across a river at 3 meters per second. Ana: What do we need to find? Ben: How far the boat goes down the river. The river is flowing at 5 m/s. If the river is 30 meters wide, how far downstream will the boat end up on the other Ana: So. how? Maybe figure out the time to cross Ben: it, like straight, like this (a). Ana: I think we should just add the speeds together. OK, I guess. So that's 5 plus 3 equals 8. Then what? Ben: Ana: We need to use the other number, 30. So divide? Ben: Why not? OK, so 30 divided by 8 is 3.75. Ana: 3.75 what? Meters, I think, but that doesn't look right. Ben: Ana: No, so what do we do? Ben: I don't know. Maybe go back to my idea?

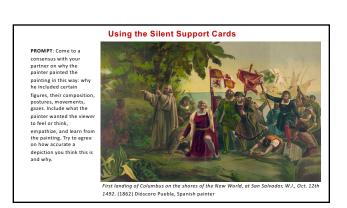












### **Using the Silent Support Cards**

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.

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### 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 moystened 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 co-mingled 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" (1822). 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)

### **Using the Silent Support Cards**

With your partner, clarify what is happening, estimate the answer, and come up with two ways of solving it, justifying ideas and choices along the way.

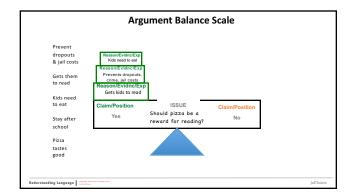
Suppose it takes the Almond River 6 months to fill a reservoir, by itself, and it takes Belfair River 10 months to fill it, on its own. If both are flowing into the reservoir, how long will it take to fill it?

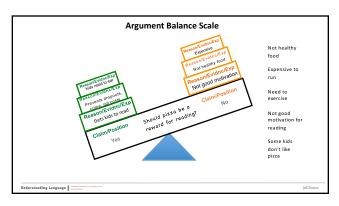


### Structuring Collaborative Argument Conversations: Argument Scale Claim vs. Opposite or Different Claim

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

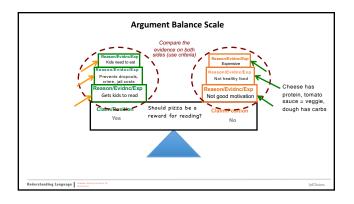
Claim/Position Are humans good Good or evil? Claim/Position

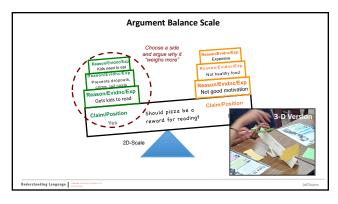




FLOWERS FOR ALGERNON

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### 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, turn-taking, and clarifying
   Notice if and how the balance scale helps students to extend talk
- Consider next steps based on this conversation

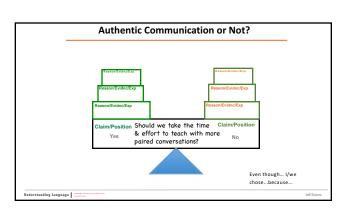
### 8th ELA - Using the Argument Scale

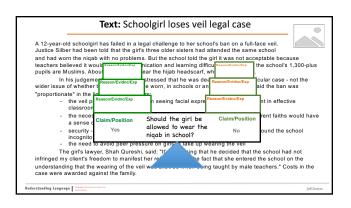
- A: Why do you think the author wrote this story?
- B: Maybe teach us we should be who we're born to be.
- A: What do you mean?
- B: You know, in the story Charlie wants to be smart, and his operation makes him smarter. But it's not natural. And he wasn't happy, even after he's smart.
- A: Yeah. And he was kinda like a science experiment. I don't think they should experiment on people. It's maybe like when they experiment on animals.
- B: Yeah. It's messed up. What about the other side?
- A: Maybe it's that we can be smart, all of us. And maybe it's OK when science helps? Science helps people be better in lots of ways.
- B: What's an example?
- A: Like drugs. When we are sick, they help cure us. I took pills last year when I had a infection and they made me better.

### 8th ELA – Using the Argument Scale

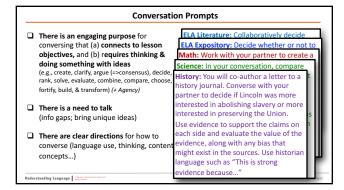
- B: I guess. And I think it's good to see, like, people like him could be smart.
- A: What do you mean?
- B: Like I see people like him, like at school, and I think they're just, I don't know, broken. But inside they're like us, maybe smarter than us.
- A: Maybe, OK, so are we done with both sides?
- B: Yeah. Now we gotta decide which is heaviest.
- A: I can't decide. I don't think it's natural and it was like an experiment on a person//
- B: //But it also, like I said, it helps us see inside people like Charlie
- A: I think the author wanted us to think that more. Maybe it wasn't natural, and that's bad, but the author, I don't know, is, more wants us not to think they're broken. What do you think?
- A: I agree. At the end of the book I thought that a lot more than being mad about the experiment. If he died from that experiment, then it'd be different, but he didn't.

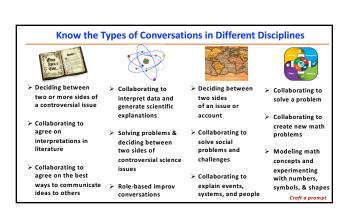
B: OK.

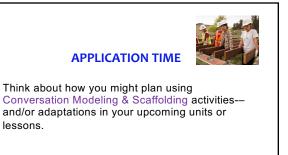


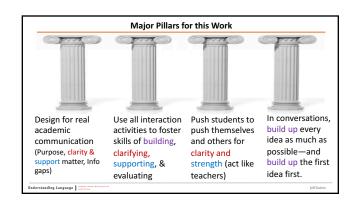












### **NEXT STEPS**



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