Task-based Language Teaching: Integrating STEM and ELLs

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Goals

- ✓ Model The Launch Cycle of Design Thinking
- ✓ Present strengths of Task-Based Language Teaching
- ✓ Examine specific examples of language production focused on task
- ✓ Share STEM-based practices for ELLs

Benefits of TBLT

- Strengthens working memory.
- Builds cognitive creativity.
- Encourages noticing and attention.
- Recognizes aptitude.
- Promotes interaction-driven language learning.
- Provides an authentic learning context.
- Facilitates different types of talk that surround a task.

TBLT 101

"…utilizes task, as opposed to language, as the unit of instruction in language classrooms"

- Mackey, Ziegler, and Bryfonski (2017)

- Communication-driven.
- Simultaneously promotes language acquisition and usage of linguistic skills in meaningful interactions outside the classroom.
- Language is used in authentic tasks.

The TASK

"Certain tasks predispose or induce learners to engage in certain types of language use and mental processing that are known to be beneficial to language acquisition"

(Ellis 2000 in Tomlinson p. 104)

- Students negotiate meaning during interaction.
- Produce linguistic forms spontaneously.

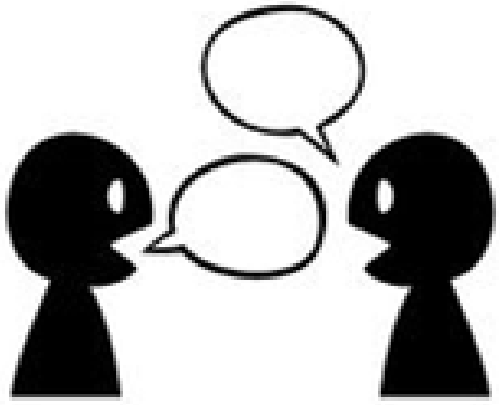
Requirements of the TASK

- Must have a clear time sequence from beginning to end.
- Tasks sequenced based on complexity of cognitive demand.
- Facilitate narrative, or retelling.
- Include opportunities to discover linguistic features of language.
- Provide interactional feedback techniques from the teacher – assists in metacognitive awareness of gaps in linguistic knowledge.

Developing Fluency

- Learners are required to "make meaning" and interpret an unknown and respond to it.
- Facilitates "noticing" – post-it notes.
- Requires production/language output.
- Drawing attention.
- Requires deeper levels than just comprehension.
- Teacher modifies output as needed but does not focus on correction.

Types of Talk

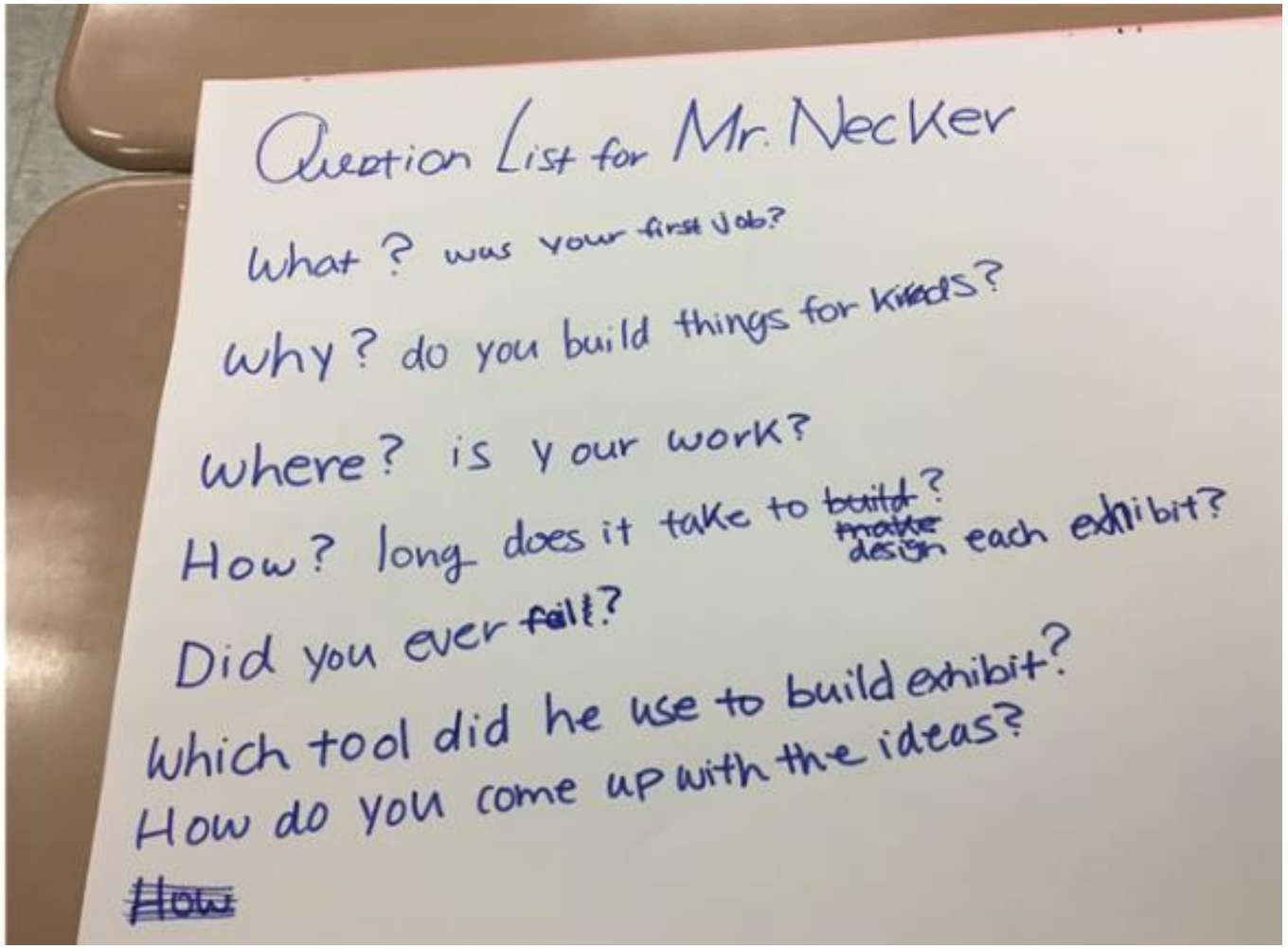


- ✓ Meaning-making and clarification.
- ✓ Interviewing and protocols.
- ✓ Contributing to a group discussion: discussion roles and power positions:

  Instigator, building, challenger, clarifier,

  prober, summarizer, note-taker
- ✓ Discussion dynamics and facilitation techniques: body language, turn-taking, giving feedback
- ✓ Giving and following directions.

Step 2: Ask Questions
Interview a Design Expert



Step 3: Understand the Process (Real-world Viewing)

- Video-as-text: View a demonstration and interview an expert with prepared questions.
- Create an idea list to build a crate in order to fill a need you see in our school environment.
- Document your learning in a blog response.

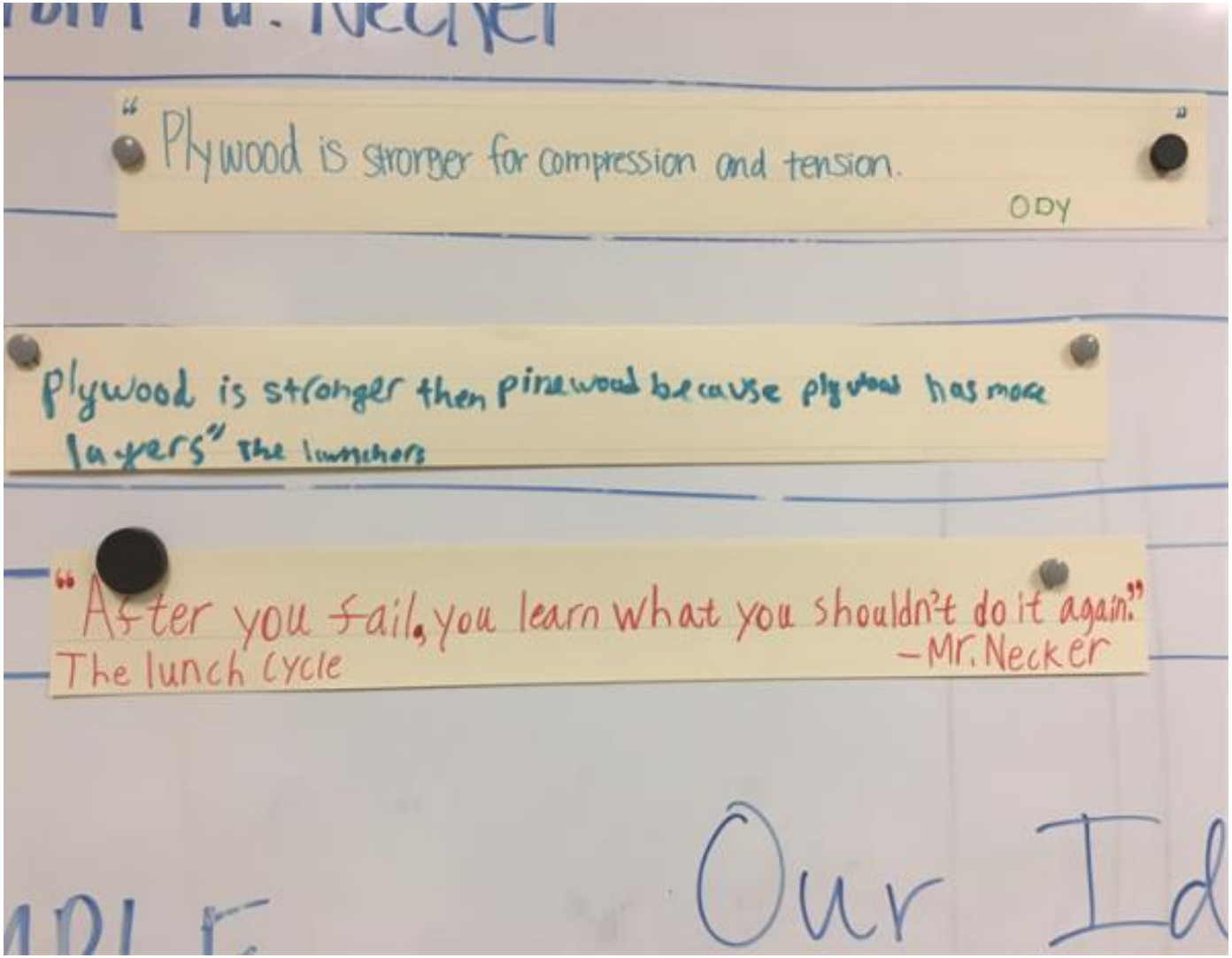
Start video at 3:18

Student blog response

(1) He show me how to build that crate. he show us step to step how to build he show us all the thing that can keep us safe when we build the crate. he show us what wood we need to use and how to use them.(in the right way).he show us that plywood stronger then regular wood.

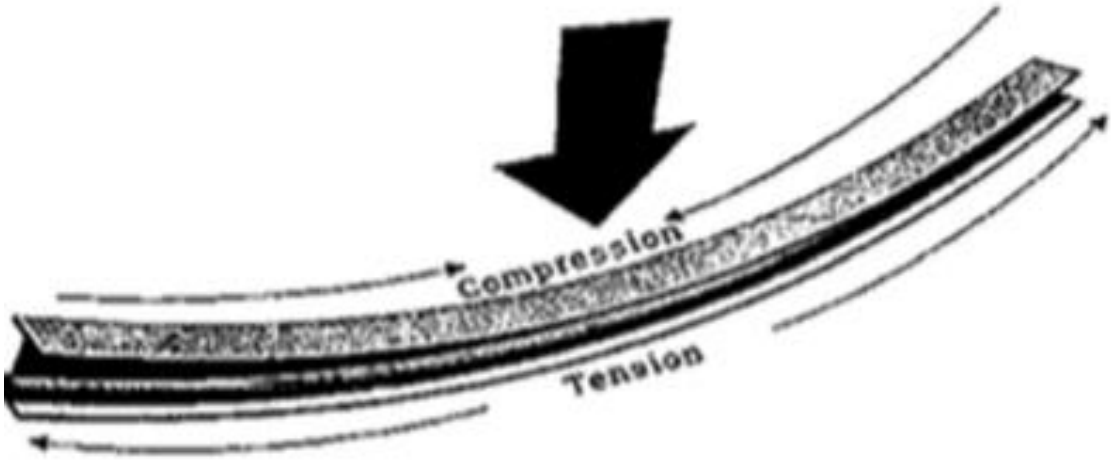
(2) I learned that before you succeed, you fail many times and you learn and get better.

Famous Quotes



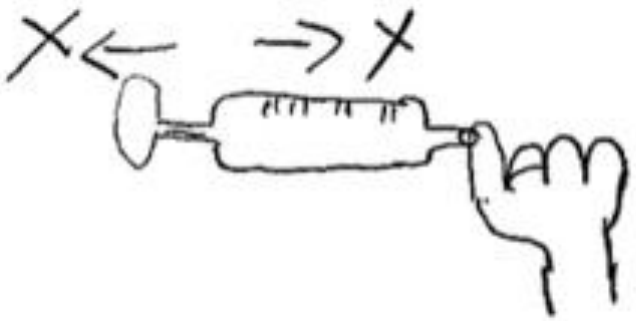
Vocabulary from authentic context

Tension- The plywood splintering because the tension.



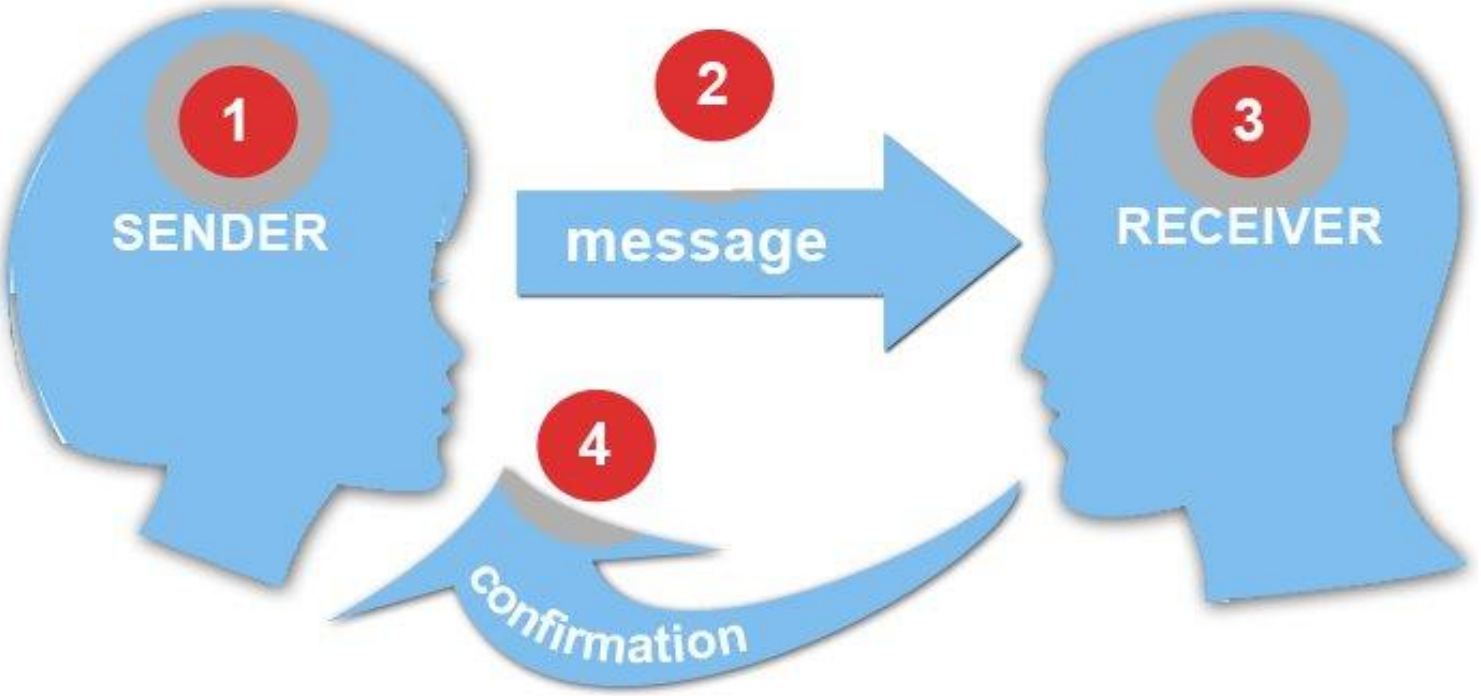
Explanation and illustration demonstrate a deeper understanding of concept

Vacuum- We need to leave a place in the crate, so the the crate not going have vacuum.

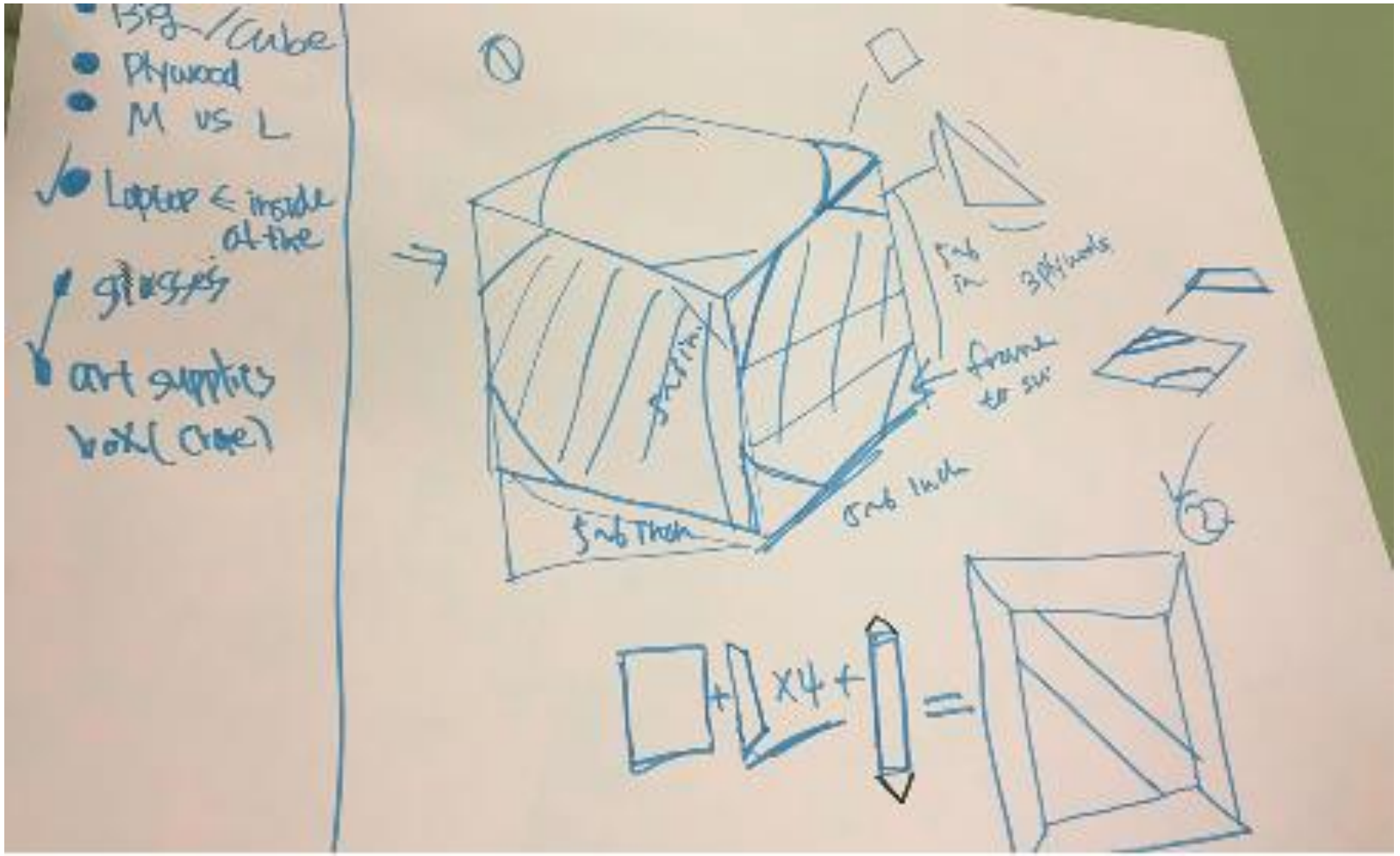


Production of Output

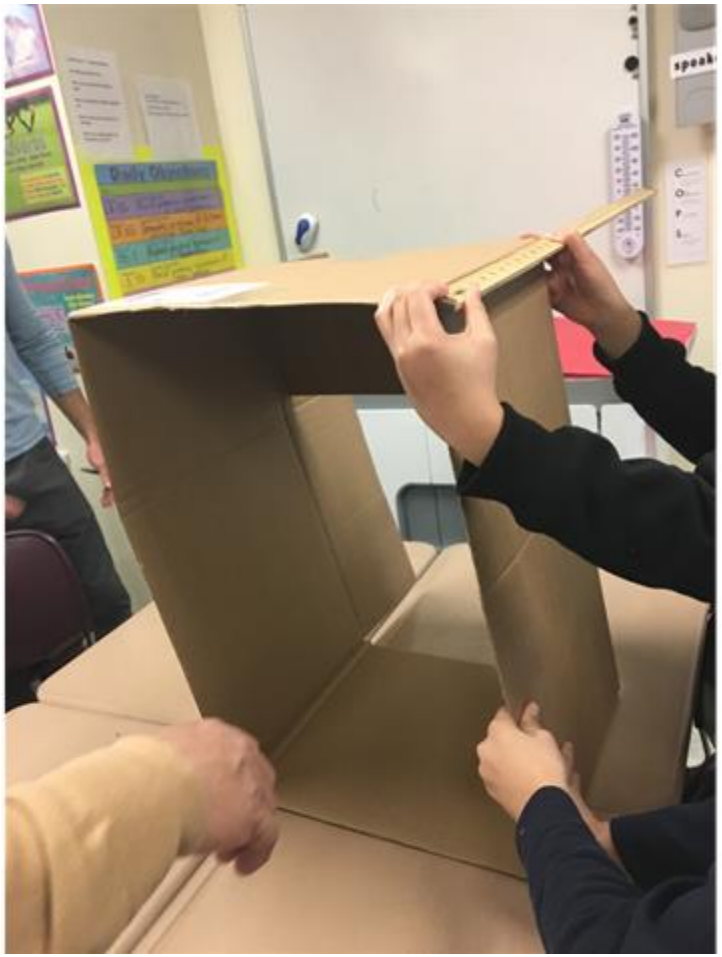
- In producing language, learners must attend to the linguistic form of their utterance (Swain 1995).
- Learners must maximize their comprehensibility (Izumi 2002).
- This leads to deeper syntactic processing (Tomlinson 2008).



Step 5: Create a Prototype

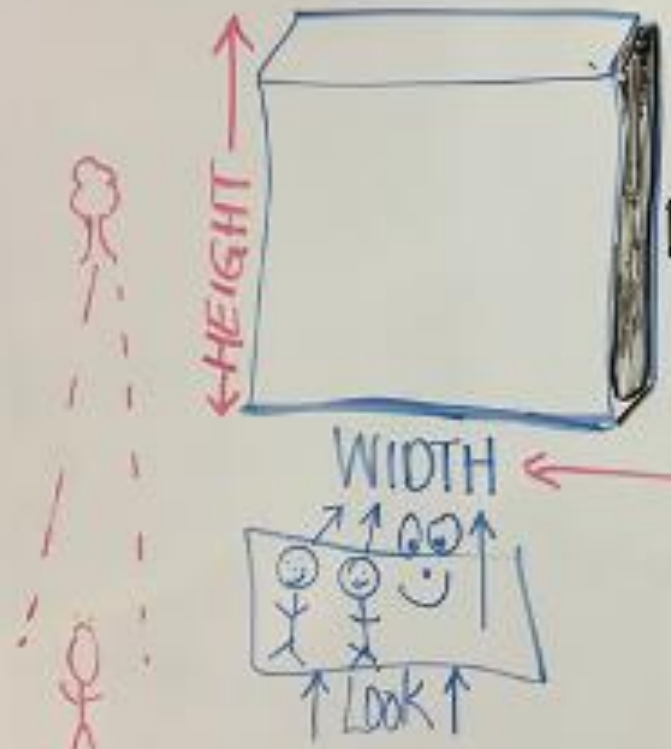


The importance of measurements



Aim: How can we think in 3D?

Stand on line – SAME perspective 3D Figure



DEPTH
(thickness of side)
Front to Back

Safety Quiz and Tour

Crate construction

Step 7: Launch to an Audience

Including Your School Team

- Principal ordered materials.
- Maintenance staff cut panels.
- Paraprofessionals assisted students in lab and with painting.
- Teachers and custodians were recipients of crates.
- Crate show & tell to the Board of Education.

SHOW CRATE MOVIE

Document the Process

Write a summary:

We built a crate to understand the steps of the launch cycle. I Built a crate for Ms.Churchill's decorations. Ms. Churchill's decorations are messy sos ehg could use a crate for storage. In order to build a caret you will need these materials plywood, wood glue, wood, nails,nail gun, mallet ,power drill, and screws. Once we had the materials we started following the steps in the stem lab. The first step is to put for wood supports on each panel of the crate. We repeated this step for time.

Oral language development

- Partner interviews (written and oral)
- Explain the launch cycle (podcast)
- Narrate the process (iMovie)

All summative activities were peer-supported.

Demonstrate evidence of self-repair in production.

Include recasts and explicit correction (teacher).

Build awareness of audience in language production.

Launch Cycle

Viewing and listening 4 square response:

- How can this impact your teaching?
- How can you bring your passion into the classroom?
- What strengths do you have?
- How can you create an experience that promotes language acquisition?