Workshop Overview

3:30-4:00  Analyzing a Student Presentation

4:00-4:30  Engaging in Scaffolding Student Presentations

4:30-4:35  Break

4:35-5:15  Concept Mapping (Follow-up)

5:15-5:25  Reflecting on Teacher Experiences/Logistics

5:25-5:30  Evaluating the Workshop/Adjourn
Advancing Student Thinking Through Design-based Instruction

Move students from a natural, casual curiosity and engagement to the more systematic and sustained inquiry and design that is characteristic of scientists and engineers.
Improving Student Learning

Analyzing a Student Presentation
How many presentations do you think students teams will do over the course of the Alarm System Unit?

10+
How can we make all these presentations more than just talk?
Task 1.1.1 Uses of Alarms

Analyzing a Student Presentation
Task 1.1.1: Student Presentation Video

• As you watch the video, write what you notice during the presentation. Follow along with the attached transcript. Please use evidence from the transcript to support your observations. Cite the line number(s).

• Be prepared to share your observations.
Norms for Watching the Video

- Only a “snapshot”
- Not evaluating the teacher or students
- A learning opportunity
- Designated lens
- The Golden Rule
The First Look

• What did you notice?

• Turn and Talk to a partner about what you noticed. (Remember to cite evidence from the transcript.)

• Be prepared to share your observations.
Unit Goals vs. Content Goals

What do you think is the purpose of Task 1.1.1?
Task 1.1.1
Task-Specific Learning Goals

Students:
• differentiate what the alarm detects from how it gets attention
• understand that technology is used to solve everyday problems
  – needs refer to the problems that are solved by using the alarm system, not the things that the alarm needs to work properly
Alarm Unit Learning Goals

Students:
• understand the Task-Specific Content Goals (TSCG)
• justify their design decisions using evidence
• press other students to justify their design decisions using evidence
A Second Look
Using the Presentation Planning/Observation Tool

Complete question 1a on the Presentation Planning and Observation Tool

– Write the **specific behaviors** you would **want** to see or hear from students
Norms for Watching the Video

• Only a “snapshot”
• Not evaluating the teacher or students
• A learning opportunity
• Designated lens
  – Task-Specific Content Goals for Task 1.1.1
• The Golden Rule
Complete question 1b on the Presentation Planning and Observation Tool.

– Write the **specific behaviors** you actually **saw** and heard.
Comparing First Look vs. Second Look

What accounts for the differences and similarities between your first look observations and your second look observations?
Since we have a lot of presentations to do, we want them to be productive to advance students thinking.
Generating Specific Interventions

Using the Presentation Planning/Observation Tool

• Complete question 2 on the Presentation Tool.

  – What **specific interventions** might you try in order to facilitate the learning of the content goals?

  – Cite the opportunity from the transcript in which your intervention would be productive
Possible Alternative Outcomes

• How might these specific interventions effect the outcome of student learning?

• How to accomplish this?
Productive talk advances student thinking

All talk is not productive to advancing student thinking.

Accountable Talk is talk that has been shown to improve student learning. It has various formats and structures, but is **always tied to a central, important instructional goal**.
Teacher Intervention Moves

Fosters “Accountability in a Thinking Curriculum” in the context of design

– Pressing for Reasoning
– Pressing for Accuracy
– Expanding Reasoning
– Linking Contributions
Break
Improving Student Learning

Engaging in the Practice of Scaffolding Presentations
Thinking Through a Lesson
Thinking Through a Lesson

• Break up into groups by unit
• Use the task from your unit that students will present. Complete the planning/observation tool.
• You may use the TTAL protocol to think about your task
• Be prepared to share.
Task-Specific Content Goals

Did knowing the academic purpose of the task help you anticipate:

– What students might present?
– How you might facilitate their learning?
– How to connect other presentations to build the classes knowledge?
Practicing Scaffolding Presentations

Complete questions on the Presentation Planning and Observation Tool

- Write the specific behaviors you would want to see or hear during the presentation

- Write specific interventions might you try in order to facilitate the learning of the content goals?
Possible Alternative Outcomes

• How might these specific interventions effect the outcome of student learning?
Move students from a natural, casual curiosity and engagement to the more systematic and sustained inquiry and design that is characteristic of scientists and engineers.
Concept Mapping
Workshop Evaluation
Thank You