Science Communication Workshop

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WELCOME!!

• Purpose: Build strategies for effective oral communication

• Agenda: Some discussion and brainstorming, then DEMOS

• Audience participation is required!

• Grab some food to start!
ACTIVITY #1: IMPORTANCE AND CHALLENGES OF SCIENCE COMMUNICATION

• Grab an index card and a marker or pen

• Provide info for the following prompts:

• 1. Why is effective science communication important?

• 2. What is a challenge that prevents effective science communication?

(discuss with your neighbors any overlapping ideas)
DISCUSSION: COMPLEXITY VS. CLARITY

- The complexity of scientific concepts often makes effective communication difficult.
- Unique challenge for graduate students; self-pressure to ‘sound smart’.
DISCUSSION: COMPLEXITY VS. CLARITY

- The complexity of scientific concepts often makes effective communication difficult.
- Unique challenge for graduate students; self-pressure to ‘sound smart.’ (puts you on the wrong side of the curve!)
DISCUSSION: COMPLEXITY VS. CLARITY

- The complexity of scientific concepts often makes effective communication difficult.
- Takes real intelligence (and creativity!) to clearly communicate complicated topics.
DISCUSSION: COMPLEXITY VS. CLARITY

- The complexity of scientific concepts often makes effective communication difficult.
- Takes DECEPTION to make a simple topic sound complex.
PLANNING FOR COMMUNICATION

• Always have a plan for WHAT you’re trying to communicate (we can work on the how together)

• Divide your overall goal into easy-to-understand ‘sound bites’

• Make your points as directly as possible (and STOP once you’ve made your point!)

• A good trick is to practice on a friend and ask THEM what point you’re making...
ACTIVITY #2: HOW SIMPLE CAN WE GET?

• Grab an index card and a marker or pen

• Write a 1-3 sentence (at most!) description of your research or a concept relevant to your field.

• Trade cards with your neighbor

• Access https://splasho.com/upgoer5/ to rewrite their description using only the most common words

• Show your neighbor how well you did!
ACTIVITY #3: SIMPLLE SCIENCE PICTIONARY

• Break out into groups of ~5

• Pass ALL of your cards to the neighboring group.

• Take turns communicating the content of the new cards using only drawings (2-minute timer!).

• Have the group give their best guess at the research topic

• Share the most interesting ones with everyone!
DEMO #1: FIREPROOF BALLOON

• Demonstration

• How to develop dialogue

• What is the primary goal of the demo? Is it effectively communicated?

• Try it for yourselves!
DEMO #2: NON-BURNING DOLLAR BILL

• Demonstration

• Can multiple concepts be discussed from a single demo? How to prioritize to keep dialogue clean?

• Can you develop a theme to link multiple demos?

• Try it for yourselves!
DEMO #3: POLYURETHANE FOAM

• Structure the discussion to suit your needs/goals
• What is the (simple!!) message you want to convey?
• Deepen the thematic link between multiple demos
• Everyone try!
DEMO #4: COLORED SOLUTIONS OF DRY ICE

• Really stretching the limit of how a demo can be tailored to fit a narrative

• Several (!) phenomena are present and COULD be discussed.

• Keep your overall goal in mind. “Think like a scientist.”
DEMO #5: FLOATING SOAP BUBBLES AND FOG

• Demonstration

• What did we see? What is the audience experiencing?

• How can we create dialogue to be consistent with the theme we’ve been developing throughout the demos?
FINAL ACTIVITY: CREATE YOUR OWN DEMO

• Pick one aspect or concept from your own research that can be communicated using a demo with props

• Doesn’t have to be an overly ‘sciency’ concept. The focus is on using a demo as a communication vehicle

• Let’s brainstorm some ideas!!!