

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!

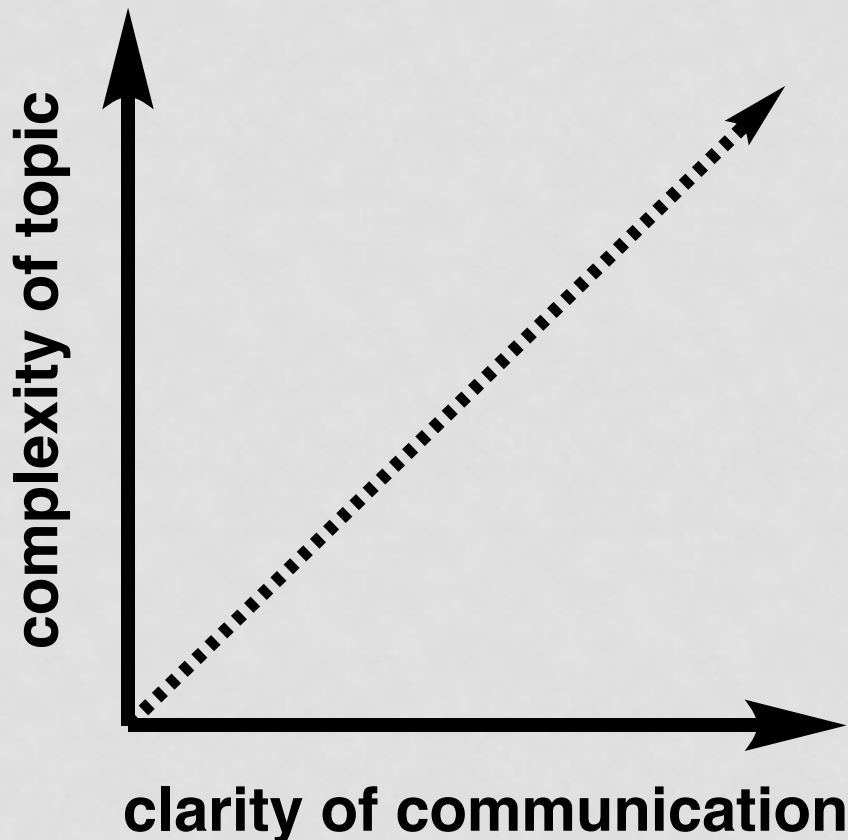


ACTIVITY #1: IMPORTANCE AND CHALLENGES OF SCIENCE COMMUNICATION

- 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?

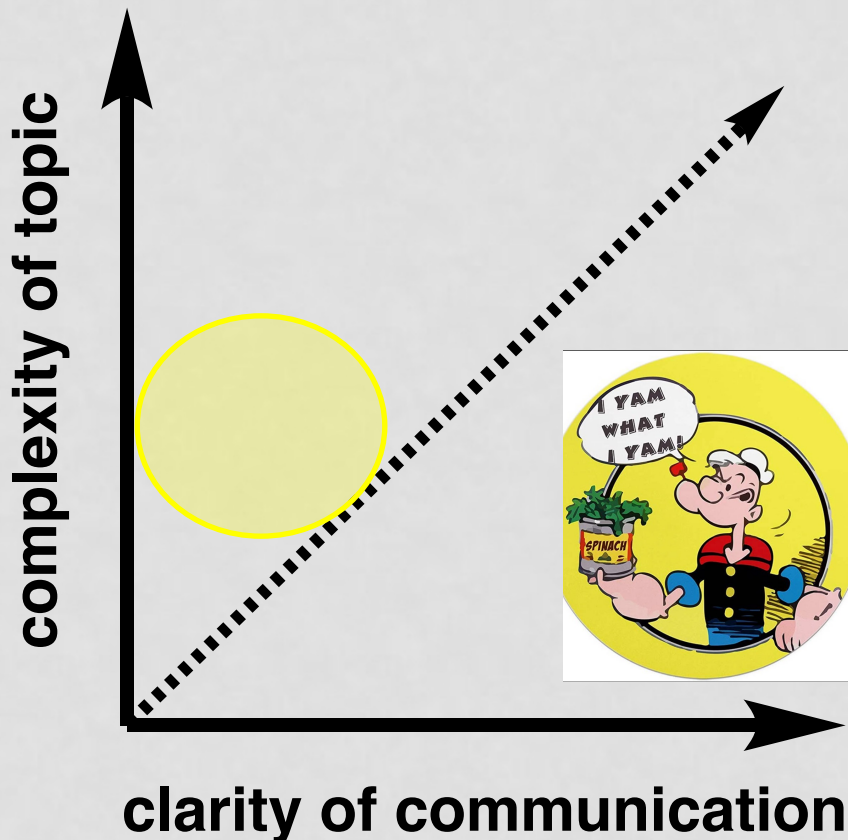
(discuss with your neighbors any overlapping ideas)

DISCUSSION: COMPLEXITY VS. CLARITY



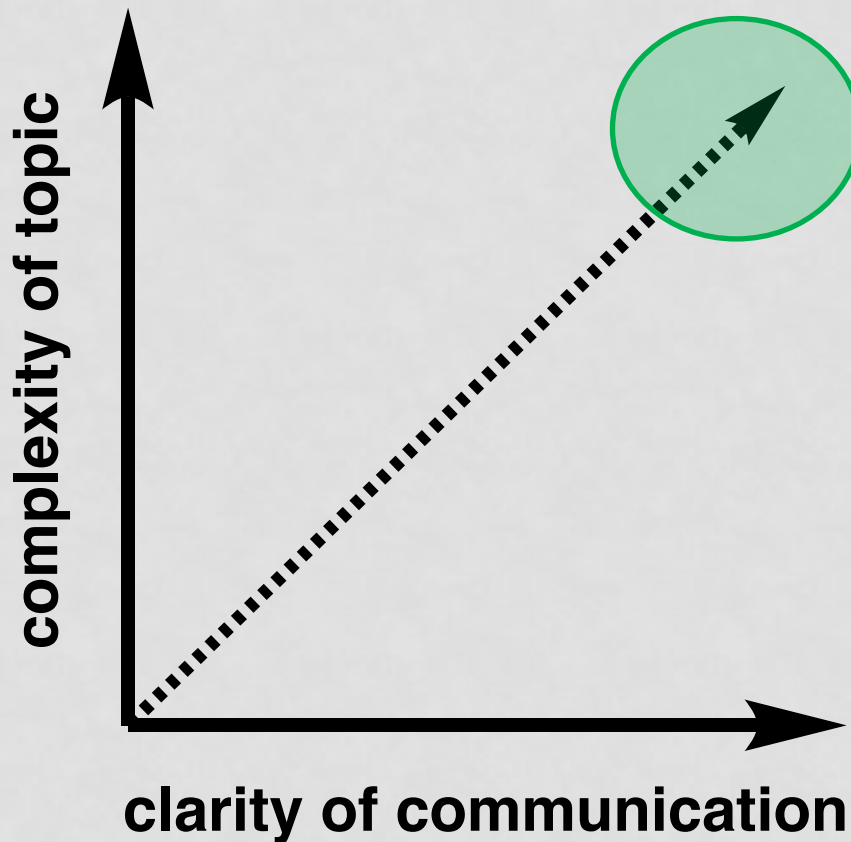
- The complexity of scientific concepts often makes effective communication difficult
- Unique challenge for graduate students; self-pressure to 'sound smart'

DISCUSSION: COMPLEXITY VS. CLARITY



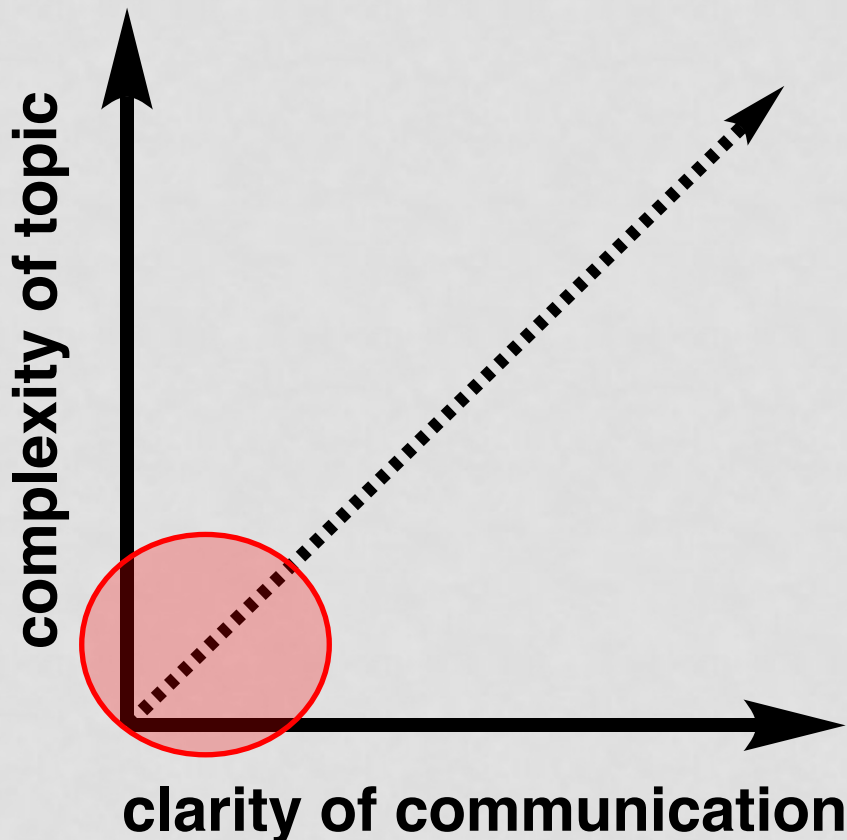
- The complexity of scientific concepts often makes effective communication difficult
- Unique challenge for graduate students; self-pressure to 'sound smart.' (puts you on the wrong side of the curve!)

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: SIMPLE 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!!!