

Henry - Don't Forget to hit record!

A dark blue diagonal gradient bar that starts from the bottom left and extends towards the top right, covering the lower half of the image.

# Let's Talk: Communicating a problem



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Dr. Jason Simms

2024 Virtual Residency, June 26th

**CyberAmbassadors**  
Professional Skills for Interdisciplinary Work

# Acknowledgements

The **CyberAmbassadors** program was developed by Katy Luchini-Colbry and Dirk Colbry, evaluated by Julie Rojewski and Astri Briliyanti, and appreciates the efforts of our many **volunteer facilitators**. Program materials are protected under a CC BY-NC-SA 4.0 International License. This material is based upon work supported by the **National Science Foundation** under Grant No. 1730137. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

The CyberAmbassadors program was developed with contributions and feedback from many sources, including:

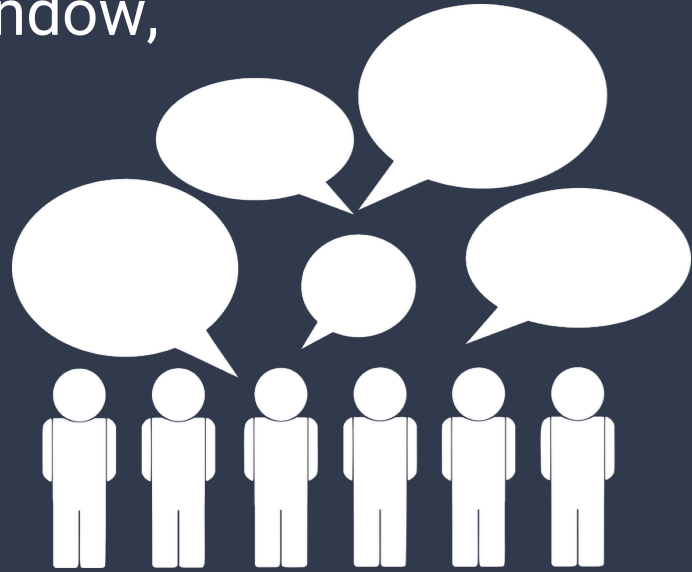
- **Teaming Up** includes substantial contributions from David Cribbs and Mark Luchini.
- **Speaking Up** is adapted and expanded from Effective Presentation Skills by Tau Beta Pi Engineering Futures.
- **Leading the Change** and **Leading with Principles** are informed by materials developed for the Entering Mentoring program and provided by cimerproject.org.

Additional sources are noted throughout the materials. Graphics and images are original creations, part of Google apps, or free for commercial use without attribution from pixabay.com. For more information, please contact colbryka@msu.edu.



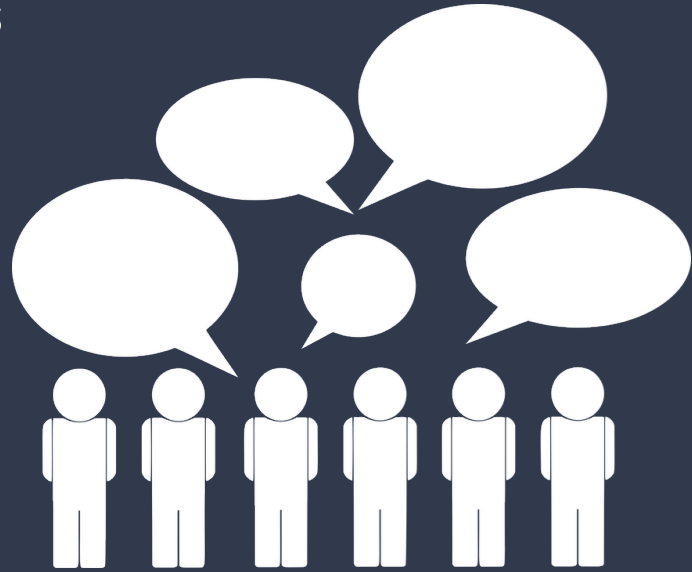
# Chatter

1. Type your response into the chat window,  
but **WAIT** to hit enter
2. Listen for the countdown  
(three, two, one, CHAT!)
3. Hit enter and watch the responses  
scroll through the chat window!



# Chatter

What interesting place will you visit this summer?



# Learning Goals

By the end of this session, participants will have the knowledge and skills to:

- Define effective problem solving and effective communication
- Identify the characteristics of three common types of problems
- Describe the impact of communication style and list factors that can influence individual styles
- Illustrate the use of expectations and observations to invite conversation and avoid arguments
- Reflect on the training and identify areas where they can apply what they've learned



# Agenda

- Defining Effective Problem Solving
- Types of Problems and Solutions
- Impact of Communication Style
- Communication Practice



# How do we define a Problem?



# Chatter

How do we define a Problem?



# prob·lem

/'præbləm/ 

*noun*

1. a matter or situation regarded as unwelcome or harmful and needing to be dealt with and overcome.

"they have financial problems"

*synonyms:* difficulty, issue, trouble, worry, complication, difficult situation, mess, muddle, mix-up;  
[More](#)

2. **PHYSICS • MATHEMATICS**

an inquiry starting from given conditions to investigate or demonstrate a fact, result, or law.

# How do we define a problem?

<https://www.skillsyouneed.com/ips/problem-solving>



**BARRIER**



# How do we define a solution?

<https://www.skillsyouneed.com/ips/problem-solving>



**BARRIER**

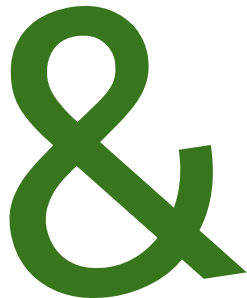


# How do we define an effective solution?

<https://hbr.org/2020/02/how-to-mend-a-work-relationship>

## Solve the Problem

- Remove barriers
- Find a solution
- Implement the plan



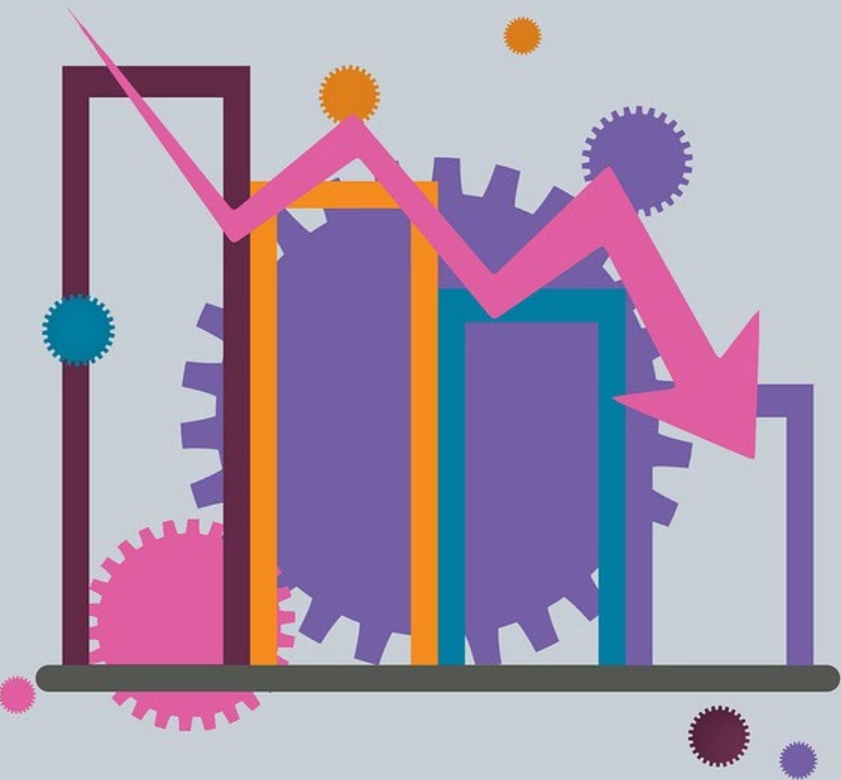
## Maintain the Relationship

- Build teamwork
- Strengthen connections
- Foundation for future success



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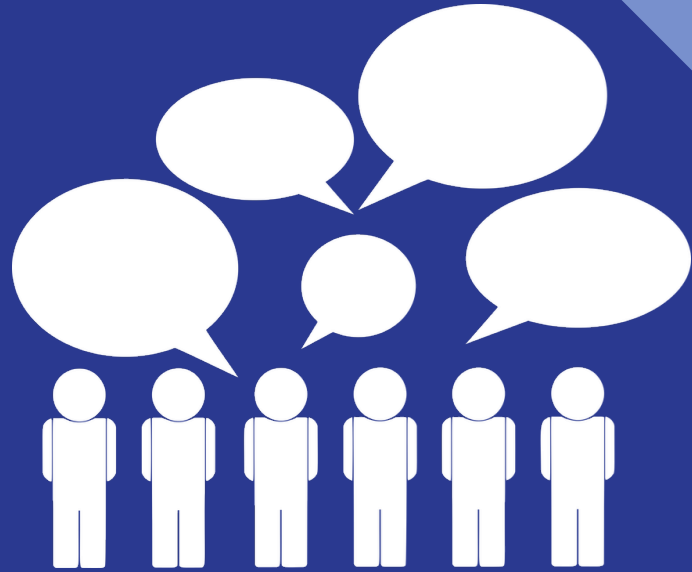


We Have  
a Problem

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# Chatter

What are some possible causes of our problem?





# Categories of problems

- Ability Problems
- Motivational Problems
- Interpersonal Problems



# Ability Problems

## “I can’t do this”

- Lack of resources
- Lack of knowledge
- Lack of skills
- Lack of experience



# Solving Ability Problems

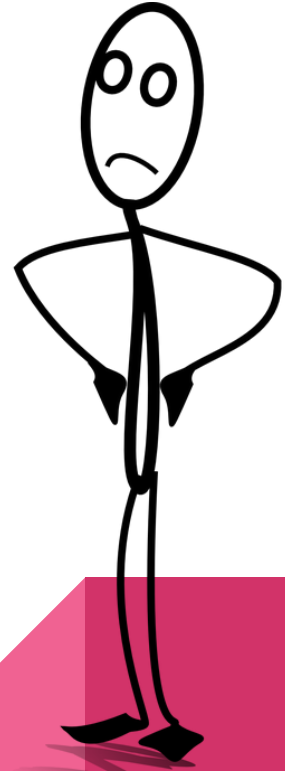
1. Ask questions: what is going on?
2. Listen carefully: is this really an ability problem?
3. Avoid assumptions: don't jump to conclusions or solutions until you understand
4. Work collaboratively to identify a solution: what needs to change?



# Motivational Problems

## “I don't want to do this”

- Inconvenient
- Undesirable
- Difficult
- Boring



# Solving Motivational Problems

## 1. Ask questions: what is going on?

- Listen carefully: is this really a motivational problem?
- Avoid assumptions: don't jump to conclusions or solutions until you understand

## 2. Motivate by communicating consequences

- Natural consequences: what is the impact on the task?
- Imposed consequences: what is the impact on the person?

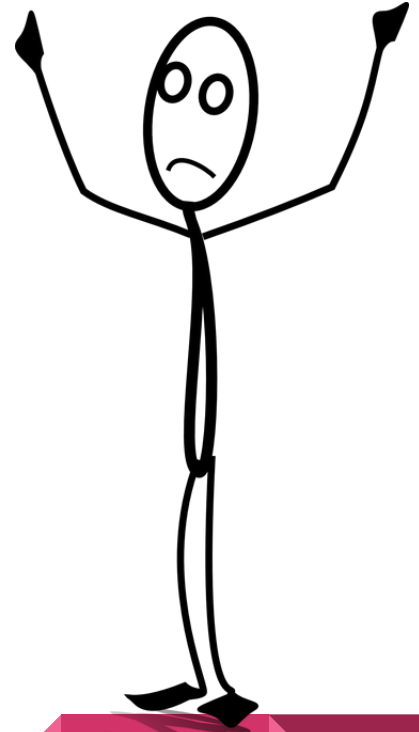
## 3. Follow up to ensure an effective solution (solve problem + maintain relationship)



# Interpersonal Problems

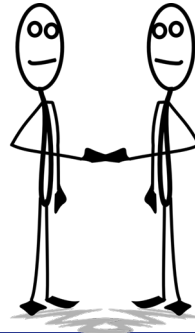
## “You can’t make me do this”

- Personality conflicts
- Negative experiences
- Lack of mutual respect
- Misunderstandings



# Solving Interpersonal Problems

1. Ask questions and listen carefully: what is going on?
  - Acknowledge emotion without judgement (“that seems really challenging”)
  - Avoid assumptions: don’t jump to conclusions or solutions until you understand
  - Consider both sides: where might you be wrong?
  - Pay attention to communication style differences, and adjust accordingly
2. Work collaboratively to repair the relationship first, then consider problem solving



# The Challenge of Strong Emotions

Patterson et al. (2012) *Crucial Conversations: Tools for Talking When Stakes are High*

## Strong feelings can get in the way of logical thinking

- Miscommunications and misunderstandings are common
- Facts can be lost or confused
- We want to win the argument, even if we are not on the “right” side

## Strong feelings can lead to a Fool’s Choice

- A false dilemma between two (bad) options -- “steal food or starve”
- In reality, there are alternative solutions
  - Visit a food bank, ask a friend or neighbor for assistance, ask a grocery store or restaurant for any food donations, pay it forward and help another when you can





# Addressing Strong Emotions

<https://sloanreview.mit.edu/article/the-smart-way-to-respond-to-negative-emotions-at-work/>

## Manage your own emotions

- Stay calm and model effective coping behaviors (pauses, deep breathing, etc.)

## Acknowledge emotion without judgement

- Ask neutral questions (“how are you doing?” “is everything OK?”)
- Listen carefully and try to understand what is going on

## Focus on the individual and their emotional needs

- Problem solving can happen later



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# So why is **effective problem solving** so hard?!

Solve  
the  
Problem

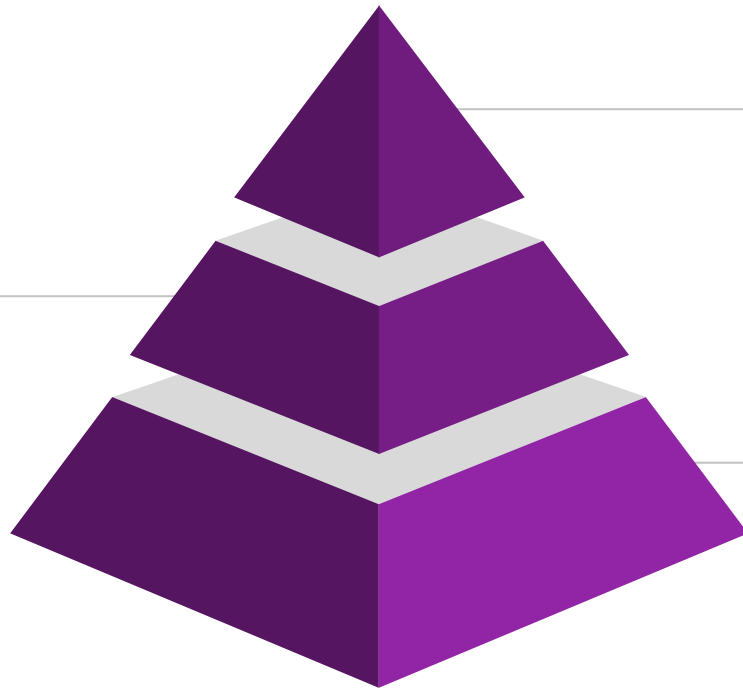


Maintain  
the  
Relationship

Relationships

Effective Communication

Trust, Respect, Effort



# Communication Style Matters

Deborah Tannen (2011) "That's Not what I Meant: How Conversational Styles Make or Break Relationships"

We form unconscious opinions about people based on their communication styles

- Accent
- Culture
- Pitch of voice
- Speed and pacing
- Pausing to allow others to speak

We tend to like people with communication styles **similar to our own**

“Many of our motives, so obvious to us,  
are never perceived by the people we talk to.  
Many instances of rudeness, stubbornness,  
inconsiderateness, or refusal to cooperate  
are really caused by differences in  
conversational style.”

~ Deborah Tannen

# Agenda

- Defining Effective Problem Solving
- Types of Problems and Solutions
- Problem Solving Practice
- Impact of Communication Style
- Communication Practice
- Wrap Up and Evaluations

# How to Start Conversations, Not Arguments

<https://www.linkedin.com/pulse/what-resonated-week-expectations-vs-observations-amy-blaschka>

Invite conversation by sharing expectations and observations

- **Expectations** are what we think, wish or assume to be the truth
- **Observations** are facts: what do we know, based on actual experience or data?

It's important to communicate expectations first and then observations

- When we feel defensive, we may not be listening carefully
- We are more likely to remember the last thing we heard

The goal is conversation, not argument

- It's easy to argue about expectations
- We're more inclined to have discussions about facts



# But What if you Still Disagree?

Patterson et al. (2012) Crucial Conversations: Tools for Talking When Stakes are High

Our expectations and opinions may be different, but we can still work together

- Communicating effectively about diverse ideas can lead to new solutions

Can you “agree to disagree”?

- Yes, if the idea is not central to the solution
- No, if the disagreement is about factual information or is critical to the success of the solution

When you disagree, remember your ABCs

- **Agree.** Start by finding the points where you agree.
- **Build.** Use these points of agreement as a foundation to build the relationship.
- **Compare.** Work together to examine the areas of disagreement and compare both perspectives. You may not always find solutions, but you will gain understanding and build relationships.





# Rehearsal Activity: Effective Communication

# Let's Practice: Email Communications

Use expectations and observations to communicate about problems

- Email offers the opportunity to draft, review and revise
- Don't fill in the "to" field until you're actually ready to send the final version!

Clearly state your expectations

- What did you expect to happen?

Clearly describe your observations

- What did you see / hear / read / experience?
- When did you observe this?
- Who was involved?

Avoid assumptions

- You may not understand the true source of the problem



# Email Example - IT Problems

Expectations

Observations

Natural Consequences

Follow Up

Dear Dr. Xio,

From now on please come to me with all questions and comments instead of the IT staff. I realize that there is a problem on the system that is impacting your work, but my staff is trying their best to fix the problem and your constant interruptions are distracting them and makes fixing the problem take longer.

- Rory

Dear Dr. Xio,

**The IT department has a ticketing system for our users to submit requests and let us know when there are problems.** I understand that you came into the office three times last week asking our staff to resolve a problem impacting your work.

I rely on the ticketing system to track problems and assign staff to address them. **Please make sure to submit a ticket when you have an IT concern; if you do not receive a response within 48 hours, feel free to email me directly.**

- Rory



# Email Example - Interruptions

**Expectations**

Observations

**Natural Consequences**

**Follow Up**

Dear Ali,

I am sick and tired of you interrupting me during meetings. My opinion is just as important as yours. Please stop.

- Kris

Dear Ali,

**The ground rules for our weekly meetings include making sure that everyone has a chance to contribute to the conversation.** I noticed that you interrupted me twice at the meeting this morning, which meant I wasn't able to fully explain my idea for the project.

**I'd like to present my idea at our next meeting; would you please include 10 minutes for me in the agenda?**

- Kris

# Email Example - Sandwiching

**Expectations**

Observations

**Natural Consequences**

**Follow Up**

Dear Alexis,

I really like the energy you are bringing to the team. However, I have noticed that you have stopped writing weekly reports. We really need them. You have also created a wonderful workspace. Keep up the good work.

- Sage

Dear Alexis,

**Each member of our team is expected to submit weekly progress reports.** I haven't received your updates for the last two weeks, **which means that I don't know the current status of your project.**

**Please schedule an appointment within the next three days so that we can talk about your progress.**

- Sage

# Email Example - Student Intern

Expectations

Observations

Natural Consequences

Follow Up

Dear Harley,

You are not spending enough time in the office and therefore not getting enough work done. I need you to either put in the time that is needed or you need to let me know so I can hire a different student to take your place.

Quinn

Dear Harley,

**As part of orientation, we explained that interns are expected to be in the office from 8am to 5pm, with a one hour lunch break.** I've noticed that you haven't been at your desk until after 9:30 this week, and that you were gone by 3pm on Tuesday and Wednesday. **Since you weren't at your desk, I wasn't able to talk to you about the draft report you submitted.**

**Please come to my office at 8am tomorrow so that we can talk about what's going on.**

Quinn



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- Wrap Up and Evaluations

# Learning Goals

By the end of this session, participants will have the knowledge and skills to:

- Define effective problem solving and effective communication
- Identify the characteristics of three common types of problems
- Practice different processes for diagnosing and solving problems
- Describe the impact of communication style and list factors that can influence individual styles
- Illustrate the use of expectations and observations to invite conversation and avoid arguments
- Reflect on the training and identify areas where they can apply what they've learned

