

## 2.Communication

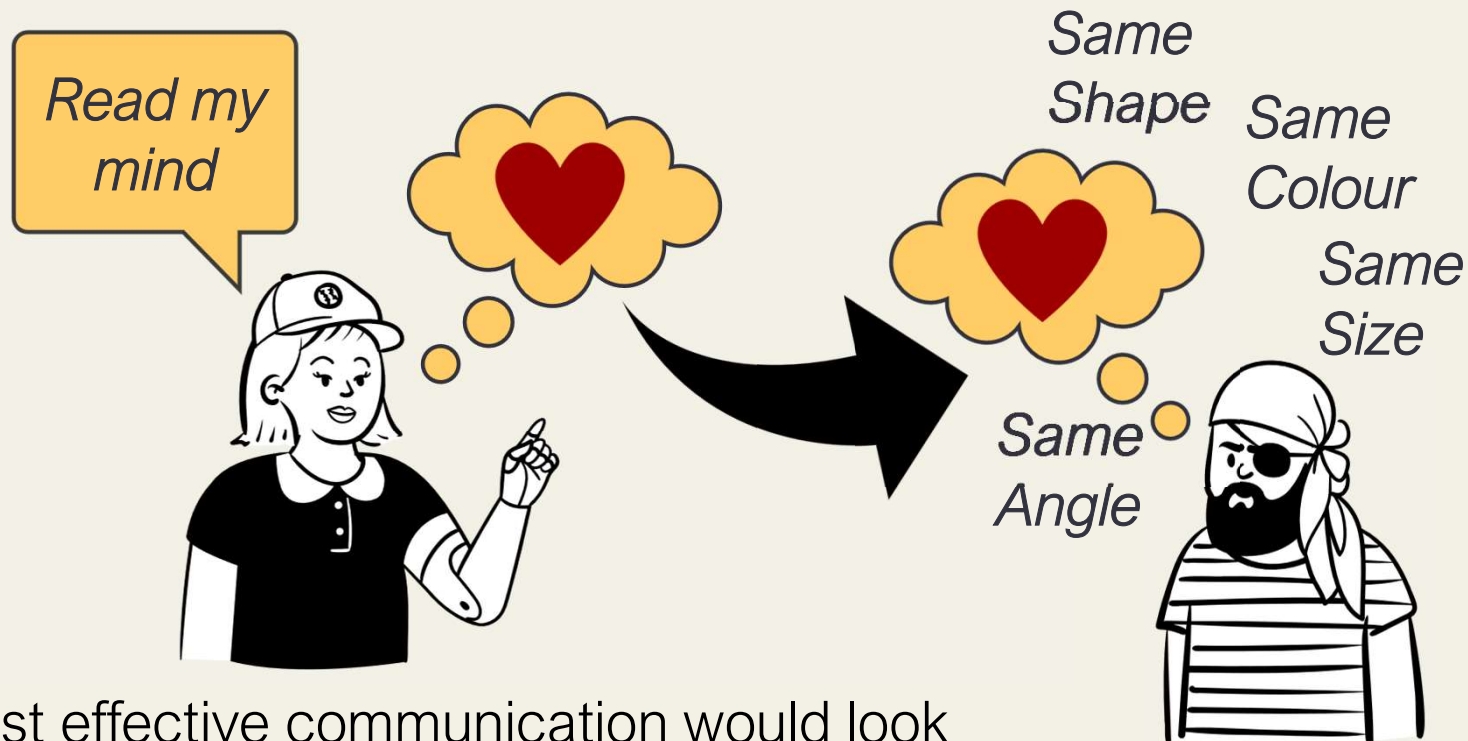
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ENGR 401 Professional Practice

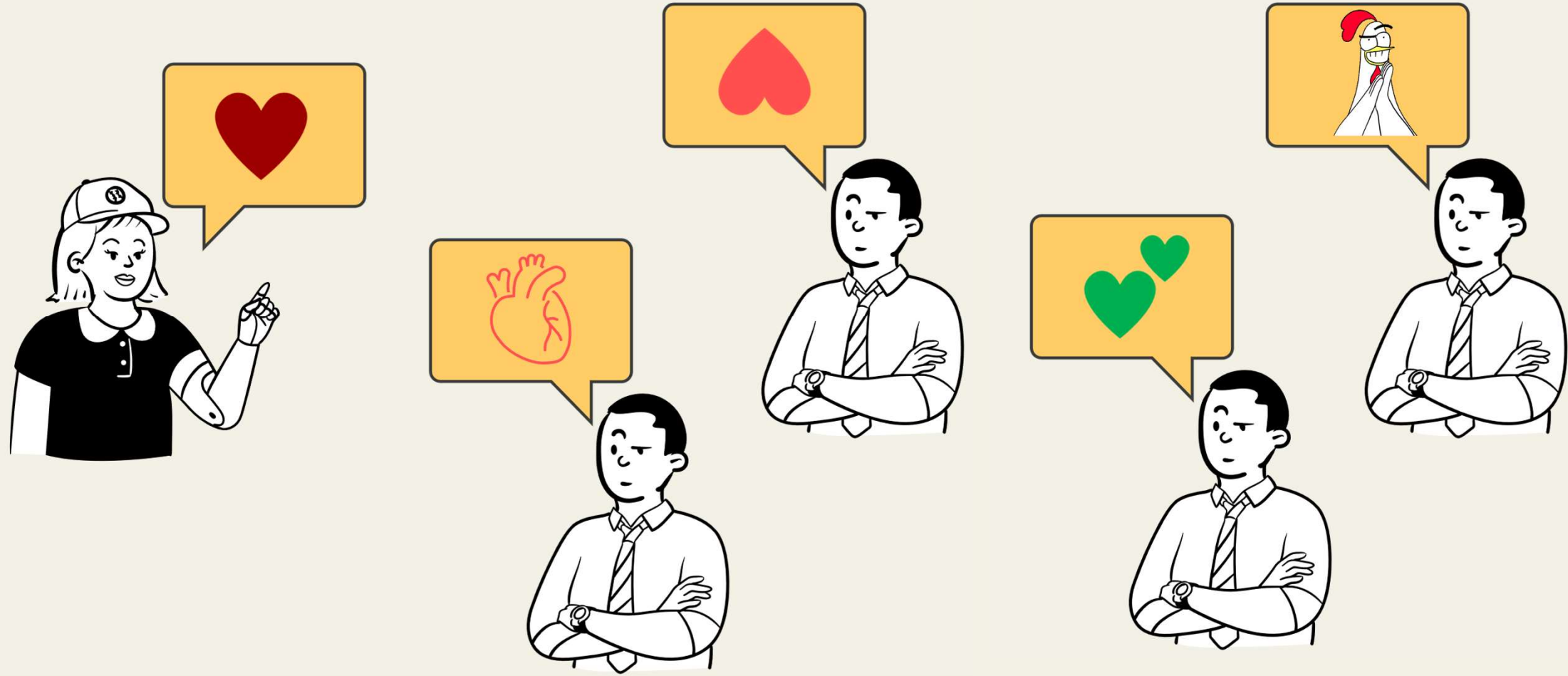
## The Essence of Effective Communication || The Nirvana

- *“The essence of effective communication is accuracy and brevity”*



- The most effective communication would look like mind reading

# The Essence of Effective Communication || The Reality



## The Essence of Effective Communication || Why We Need It

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- *“... of course, engineers must understand the technology economics of their projections, but these skills are worth very little unless they are paired with the ability to write and communicate.” – Smelser (2001)*
- Prime scaffolding to support almost all other “Professional Practices”
- Unless you are working entirely by yourself from concept to delivery to operation, you will need to communicate with other people
- Often highly technical and complex concepts
- Used to direct and be directed, co-ordinate, collaborate, and sell

# Overview

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- Communication styles & learning styles
  - *Auditory, visual, kinaesthetic*
  - *Active Listening*
  - *Bias in communication*
- Non-verbal communications
  - *Written & graphical presentation*
  - *Body language*
- Communication Disruptors – Thinking about video conferencing as an example

## Communications & Learning Styles || Auditory, Visual, Kinaesthetic

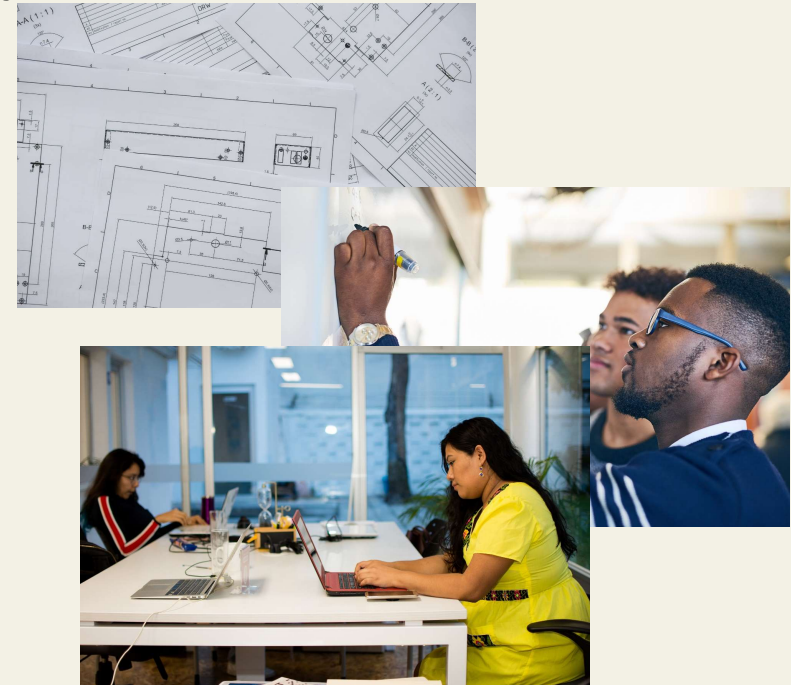
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- People learn in different ways – Think about which are you?
- Ideally communication needs to align with the learning style of audience
  - Auditory – “Learning by hearing”; Need to hear it, also associated with reading
  - Visual – “Learning by seeing”; See the actual thing, or pictures & diagrams
  - Kinaesthetic – “Learning by doing”; Need practical experience, hands on labs
- Often a person will be a mixture of styles, with one dominant.

# Communications & Learning Styles || Auditory, Visual, Kinaesthetic

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- If you have an audience of one, try to gauge their learning style and adapt your messaging
- If you have an audience of more than one person, you will have more than one dominant learning style to accommodate – How?
  - *Avoid documents that are walls of text or just diagrams*
  - *Include descriptions of worked example scenarios, or make time for practical work*
  - *Include pictures of the physical objects, or the screens of a programme*



## Communications & Learning Styles || Auditory, Visual, Kinaesthetic

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- Some useful general truisms
  - *A picture is normally worth a thousand words regardless of how you learn*
  - *Don't forget brevity – Simple picture over complex, short sentence over long, imperatives or key messages first and justifications after.*
- Watch for introducing your personal natural bias in communication you create, particularly when in a stressful situation
- Validate how well you have been understood by asking the audience to play the message back in their own words and style, or asking them questions on the message (if possible)



## Communications & Learning Styles || Active Listening

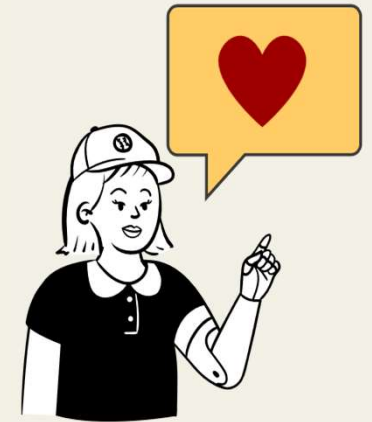
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- The other half of effective communication
- When others are communicating to you, are you;
  - *Thinking about what you are going to say next to disagree with them?*
  - *Thinking about what they are saying and what it means to you?*
- When most people have decided what they are going to say next, they have stopped listening to the person who is speaking to them.
- Active Listening also includes observing the body language and non-verbal cues being expressed

## Communications & Learning Styles || Active Listening

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- Step 1 - Comprehension
  - *Gaining a common understanding*
- Step 2 - Retaining
  - *Creating an accurate memory/record of what was communicated*
- Step 3 - Responding
  - *Effecting action or continuing the communication*



# Communications & Learning Styles || Active Listening

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- Step 1 - Comprehension
- Purpose
  - *Gaining a common understanding*
- Techniques
  - *Attentiveness to emphasis and word-choice*
  - *Attempting to summarise complex information internally*
  - *Your body language – Reflecting & “You were leaning into the problem/opportunity”*



# Communications & Learning Styles || Active Listening

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- Step 2 - Retaining
- Purpose
  - Creating an accurate memory/record of what was communicated
- Techniques
  - *Writing notes*
  - *Memorisation techniques (word association, etc)*
  - *Attempting to summarise complex information internally*



# Communications & Learning Styles || Active Listening

- Step 3 - Responding
- Purpose
  - Effecting action in response, or continuing the communication
- Techniques
  - *Paraphrase – Replay what you believe you heard*
  - *Clarify – Reinforce what you have understood by asking follow-on questions*
  - *Summarize – Offer a concise overview of what has been discussed and what the major points are, and include your opinion*



## Communications & Learning Styles || Bias In Communication

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- Conscious versus unconscious bias
- Leads to discrimination
  - *Excluding concepts, suggestions, ideas*
  - *Excluding people*
  - *Discouraging others to share their ideas*

# Communications & Learning Styles || Bias In Communication

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- Types of Bias
  - *Affinity Bias – We like people that like us*
  - *Confirmation Bias – We like things that confirm our prejudices*
  - *Attribution Bias – We create assumptions regarding behaviour versus objectiveness*
  - *Conformity Bias – We like to agree with the majority*
  - *Halo Effect – We judge based on surrounding factors*
  - *Contrast Effect – We judge against the previous case*

## Communications & Learning Styles || Bias In Communication

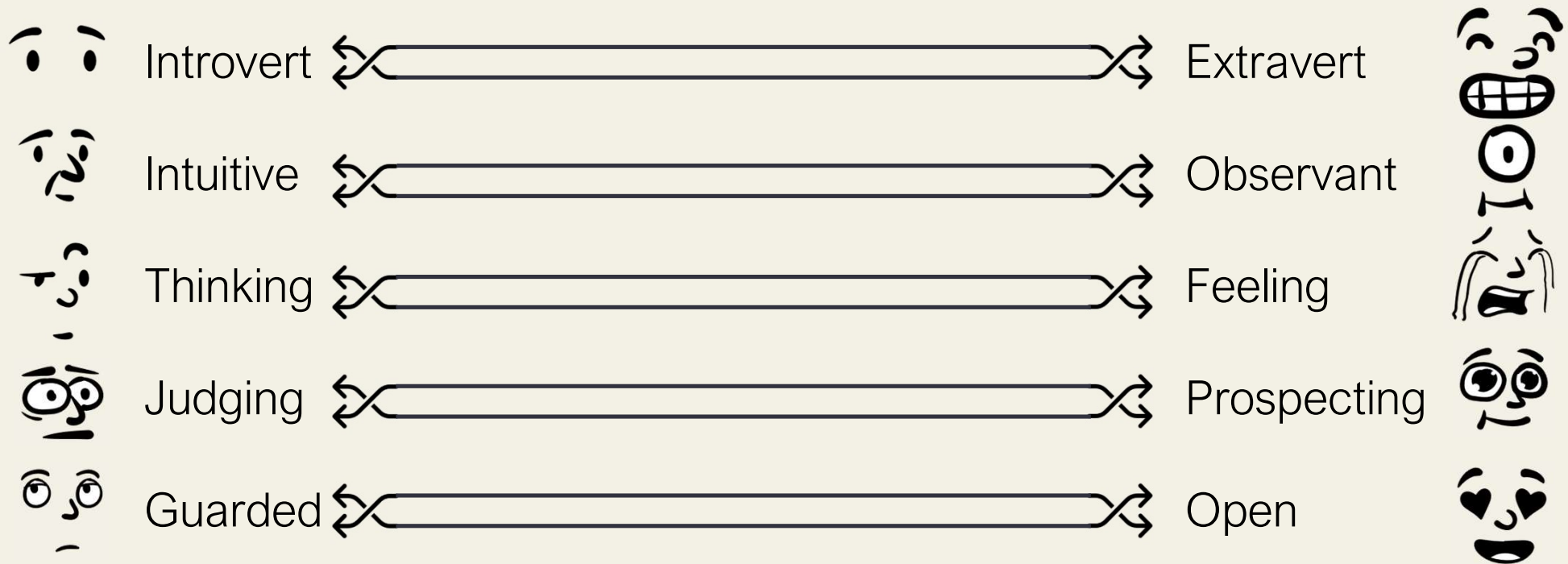
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- Understanding how bias may affect you ...
  - *...is the beginning of wisdom — Socrates*
  - *...is enlightenment — Lao Tzu*
  - *...allows you to step outside yourself and observe your own reactions - “Adam Smith” (actual name George J.W. Goodman)*
  - *...is extremely hard — Benjamin Franklin*
  - *...is considered quite an accomplishment — Frank Baum*
- Understanding your bias helps you understand that others are not like you



# Communications & Learning Styles || Bias In Communication

- Where do you feel you sit on each scale?



# Non-Verbal Communication || Written and Graphical Communication

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- Remember to think about people's learning styles
- Executive Summaries are important (similar to, but different job than journal abstracts)
  - *Volume of information and pace of decision-making in corp/govt means people often won't read more than the first few pages.*
- Does the written/graphical communication need to stand by itself?
  - *A written document will normally be stand-alone (its read offline versus being presented)*
  - *Slides purely for a presentation generally supplement the message, but are not the message alone*
  - *Some slide decks may be a replacement for a written document, or be presented but left with the audience to refer to later*

## Non-Verbal Communication || Body Language

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- Suitable clothing & appearance for the situation
  - *As you develop experience, organisations will tend to value more what you do versus how you look (please always wear a shirt during video-conferences though!)*
  - *First impressions really do matter, and when meeting someone new they will see you before they hear what you have to say*
  - *What is an acceptable “base-level” is always evolving (no more mandatory neck-ties – YAY!)*

# Non-Verbal Communication || Body Language

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- Physical Body Language
  - *Balanced level of eye-contact – People you are talking to or people you are listening to, but not “staring”*
  - *Be careful with physical contact, look before acting - Are people creating barriers between you and them via their body (folded arms, touching collar across their body, etc)*
  - *“Mirroring” then “Directing” to encourage more open engaging postures in other people*
  - *“Leaning in” to show engagement, “Leaning Back” while maintaining eye contact to create a more relaxed environment*
- Body Language in a video conferencing world
  - *How can you leverage body language cues and techniques over video-conference? What additional new challenges does it create compared to real life? What about if people have their cameras turned off?*

# Communication Disruptors || Thinking About Video Conferencing

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- So what does video-conferencing change as an example disruptor?
- Imagine presenting a room with your eyes blindfolded and tape over everyone's' mouths
  - *If everyone sits with their cameras off how can you read their body language?*
  - *If everyone has the microphone muted then how do you know if there are any questions?  
– “Joe, you’re on mute again”*
  - *People can and will type questions at your while presenting – how will you monitor that?*
  - *Will people on the call be able to hear questions in the room?*
  - *Will there be background noise and people moving around you distracting everyone?*