Varied Communication Directions

- Producers
  - Consumers & Media
- Veterinarians
  - Vet students & Producers
- Government
  - Producers & Legislators
- Industry
  - Consumers & Retailers
Focus

- Communication is a tool, not a goal.
- What do you actually want to achieve by using that tool?
Focus

• Educate?
• Counter misinformation?
Focus

- Educate?
- Counter misinformation?
  - Weak – too vague
Focus

- Educate?
- Counter misinformation?
  - Weak – too vague
- Buy my product?
- Greater compliance on regulation?
- Give agriculture more respect?
Focus

- Focus down to a single and specific goal that you might hope to achieve through communication.
Focus

1. Awareness
2. Knowledge
3. Attitudes
4. Emotions
5. Behaviors

- Not necessarily in any order
1 Focus

- Also need to focus to a particular audience
- There is no real “general public”
- Instead, lots of little publics that respond differently
Focus

December 2018
n=1,114

Alarmed 29%
Concerned 30%
Cautious 17%
Disengaged 5%
Doubtful 9%
Dismissive 9%

Highest Belief in Global Warming
Most Concerned
Most Motivated

Lowest Belief in Global Warming
Least Concerned
Least Motivated
Focus

12% of the U.S. population

- Certain that global warming is happening, human-caused, and harmful
- Strongly support climate policies – most likely to engage in political activism
- But, often do not know what they or society can do.

Illustration by Michael Sloan
Focus

29% of the U.S. population

- Moderately certain that global warming is happening, human-caused, and harmful
- See the problem primarily as a distant threat, however – harmful mainly to other nations and future generations
- Support action on climate change, but unlikely to have engaged in political activism

Illustration by Michael Sloan
Focus

26% of the U.S. population

- "Fence-sitters" - Uncertain that global warming is happening and human-caused
- Global warming seems like a distant threat
- No strong opinions on what, if anything, should be done

Illustration by Michael Sloan
Focus

7% of the U.S. population

- Have given little or no thought to global warming
- Need basic information about climate change
- Tend to be the least educated and lowest-income among the six groups

Illustration by Michael Sloan
Focus

15% of the U.S. population

- Uncertain whether global warming is happening
- If it is happening, think it is likely not human-caused
- Tend to be politically conservative and hold traditional religious views

Illustration by Michael Sloan
Focus

11% of the U.S. population

- Believe that global warming is not occurring, or that if it is occurring is not human-caused
- Strongly oppose policies and action to reduce the threat
- May have contacted an elected representative to argue against action on global warming

Illustration by Michael Sloan

Iowa State University Greenlee School of Journalism and Communication
Focus

December 2018  

n=1,114

- **Alarmed** 29%
- **Concerned** 30%
- **Cautious** 17%
- **Disengaged** 5%
- **Doubtful** 9%
- **Dismissive** 9%

*Highest Belief in Global Warming*  
*Most Concerned*  
*Most Motivated*  

*Lowest Belief in Global Warming*  
*Least Concerned*  
*Least Motivated*  

IOWA STATE UNIVERSITY  
Greenlee School of Journalism and Communication
• What do you actually include in your message?
Content

• What do you actually include in your message?
• Many statements about focusing on the science
• Getting the facts right
2 Content

- Transmission Model of Communication
- Deficit Model of Science Communication
2 Content

- What do you actually include in your message?
  - Many statements about focusing on the science
  - Getting the facts right

- When is science the solution and when should you look elsewhere?
  - What is the elsewhere?
The diagram represents the Elaboration Likelihood Model, which illustrates the central route and peripheral route. The central route is marked with "Central Route," and the peripheral route is marked with "Peripheral Route."
Content

- Ability
• Ability
  • Problem of complexity
  • Avoid jargon
  • Provide metaphors
  • *Overuse of antibiotics is like a military boot camp, training germs to get stronger.*
  • Necessary for central processing, but not sufficient
• Ability
• Motivation
  • Focus on meeting an existing need rather than fulfilling your own
Content

- Ability
- Motivation
- Self-efficacy
  - Belief that I have the power to enact my motivation
  - Guide around barriers to action
2 Content

- Ability
- Motivation
- Self-efficacy
- Social norms
  - Other people expect you to know about this...
  - People you care about want you to do this...
• Ability
• Motivation
• Self-efficacy
• Social norms
• Identity
  • A good parent does this...
  • You care about your livestock...
Content

- Do you eat enough vegetables?
  - Ability
  - Motivation
  - Self-efficacy
  - Social norms
  - Identity
• Do you always need central route processing?
Format
3 Format

- **Expository**: Descriptive or explanatory
  - Reports, fact sheets, instructions, etc.

- **Argumentative**: Supporting a claim
  - Logical chains, advocacy messages, etc.

- **Narrative**: Placing content in a story format
  - Anecdotes, testimonials, personal conversation, etc.
3 Format

- Scientific expertise, complexity, unintuitive results are barriers.
- But the human experience surrounding agriculture can build connections.
- Stories connect us to each other.
• What is a story?
  • More than “telling our story”
3 Format

- What is a story?
  - More than “telling our story”
- A particular personal experience of a larger phenomenon.
- Flips the direction of generalization.
• Stories are the default mode of human thought

Stories are:

• Easier to comprehend
• Processed faster
• Recalled easier
• Carry greater weight for decision-making
3 Format

- Anecdotes / Exemplars
  - Make the abstract concrete
  - Allow audience to identify with character
  - Your topic is about something relevant to human experience - show it in action!
3 Format

- Does your topic have obvious anecdotes?
- Access to real stories or fictionalize?
- Most relevant character(s)?
- Show success or failure?
- Extreme or representative?
- Organize around a challenge or conflict.
3 Format

• How can you humanize the communication around your goal?
• Who would be your main character?
Values

- What do you think is good?
- What do you think is valuable?
Values

- What do you think is good?
- What do you think is valuable?
- These form the foundation of an underlying value system
- Values cannot be incorrect
4. **Values**

- Knowledge is uninterpretable until applied to an underlying value system.
- Science describes and explains the world but can never tell society what **should** be done.
- It is this application of knowledge in the service of values that drives attitudes, behaviors and acceptance of science.
Values

- Should raw milk be legalized?
- Science: Drinking raw milk significantly increases the risk of food-borne illness.
Values

- Should raw milk be legalized?
- Science: Drinking raw milk significantly increases the risk of food-borne illness.
- Value 1: Keeping people safe
Values

- Should raw milk be legalized?
- Science: Drinking raw milk significantly increases the risk of food-borne illness.
- Value 1: Keeping people safe
- Value 2: Freedom of choice
Values
Values

- Values are powerful but often remain unspoken and assumed.
- You can often uncover values by asking why a fact or argument is meaningful.
What values are driving controversy about AMR?
- Consider the arguments for or against AMR made by your audiences.
- What values are those arguments being used to support?
Values

- Recognize your attitudes and behaviors around AMR are built on values too!
4 Values

- Recognize your attitudes and behaviors around AMR are built on values too!
  - Protect public health
  - Care for my animals
  - Produce a quality product
4 Values

- Look at the specific goal you identified at the beginning of this presentation.
- How does it reveal the values you hold about AMR?
  - Ask why is it important to me?
Values

- Feed the world (care, benevolence)
- Support scientific progress (achievement, power, loyalty to science)
- Increase productivity (achievement, power)
- Protect (decrease) power of organizations (power, fairness, liberty, authority)
- Increase (decrease) power of US (power, fairness, care, security)
- Support tradition (loyalty, tradition, security)
- Support purity (sanctity, tradition)
- Protect health and safety (care, fairness, authority, benevolence)
- Protect environmental health (care, fairness, security, benevolence)
- Increase consumer choice (fairness, liberty, power)
Values

• Values are valuable communication strategies.

• Consider leading with your values or including them in your messages.

• Expressing values shared by your audience builds trust

• Success is shared across the relationship
Science Communication Strategies

1. Focus
   Identify a specific goal and audience

2. Content
   Think beyond sharing the science

3. Format
   Humanize your info through stories

4. Values
   Build trust through shared values

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Looking Forward

• We will continue to analyze your comments toward a report in the near future.
• Thank you for providing your honest experiences about your communication challenges.
Science Communication Strategies