

Research Professionals Network Fall 2020 Workshop Series

Improving Scientific Communication using Cultural Competence: Lessons from the TED stage

PRESENTED BY: JUSTINE NICHOLAS, MS

SEPTEMBER 23, 2020 | 3PM - 4:15PM



Scientific Communication using Cultural Competence

When we communicate more effectively, research thrives. Science has increasingly become more interdisciplinary and the ability to communicate more effectively across disciplines fosters collaboration and innovation. Being able to communicate the relevance and impact of your ideas, novel discoveries, and current projects can enhance our institution’s ability to meet the aims of a research project or secure funding.

Scientific communication encourages researchers to find simple, more succinct ways to get the essentials of their message across. Often times we have to get to the root of the following to make it more effective:

- Why is it important?
- Why should it matter to your community/audience?
- Is there a way to make it simpler and accessible to your community/audience?

Effective Communication involves getting your message across, ensuring your audience understands the idea you are trying to convey, and encouraging your audience to do something with that information: *remember it, apply it, or provide feedback*. Effective communication is 20% what you know and 80% how you feel about what you know-it’s a performance at heart. Confidence goes a long way because it’s a performance!

Group discussion:

What qualities do you consider in someone who’s an effective communicator?

Research Diversity in Healthcare

A recent report indicates that minorities represent almost 30% of those enrolled in clinical trials sponsored by the National Institutes of Health (NIH) and that African Americans now make up approximately 15% of those minority participants. One report estimated Hispanic representation in NIH studies at 7.6% of all research participants, and a report on industry-sponsored studies found that only 3% of those participants were Hispanic.

Research Diversity in Healthcare is instrumental for the research workforce to advance discovery, eliminate health disparities, improve minority health and achieve effective patient-centered outcomes in the quest for better health. One of the sustainable ways to achieve diversity in the workforce is through training, education and career development of all interested individuals including minority, underserved, underrepresented and populations with special needs.

Diversity in Research Case Study: Who gets studied and who’s doing the studying?

Illyasha Peete spent the first years of her son’s life listening to his whistling breaths on the pillow next to her.

“I was always afraid that he was going to stop breathing at night, so for two years, he slept in the same bed as me,” she said.

As a single mother of an asthmatic son in Memphis, Tennessee, Peete worked hard to provide her child with the medical care he needed. Her son took medications, received allergy shots, and used a nebulizer, a machine that pumps vaporized medicine into the lungs. Eventually, Peete gave up her real estate agency business to work as a grocery store manager, just for better health insurance. Despite her efforts, her son may have received treatments tailored to someone else. As with many diseases, the bulk of research on respiratory ailments in the U.S. has focused on white European-Americans, and Peete and her son are black. In May, a study in Immunogenetics out of the University of California, San Francisco, reported that only 5 percent of the genetic traits linked to asthma in European Americans applied to African Americans. Epidemiologist Esteban Burchard, who coauthored the paper, says other studies have also shown that different ethnicities have distinct genetic mutations that increase their risk for particular diseases and affect how they respond to medicine. Neglected by research, African American children have died from asthma at 10 times the rate of non-Hispanic white children. To explain the lack of diversity in health studies and clinical trials, researchers sometimes blame recruiting difficulties. People of color—especially African Americans, harbor suspicion toward medical research and are less inclined to participate in it. Scientific papers, popular media, and advice for clinicians all have cited minority suspicion as a significant obstacle to recruitment. But several researchers who have conducted clinical trials with diverse participant pools say some studies just aren’t making enough of an effort to be inclusive.

Breakout Group discussion:

- Before you dive in, what are 3 principles that you standby and incorporate in your research work ethic?
- After reading through the case, what barriers to research can you identify here?
- Discuss general barriers you face in increasing diversity in research.
- Should research institutions consider enrollment by race mandatory? (i.e. x% of minority subjects enrolled)

Cultural Competence:

Another way to research diversity is through cultural competence. Cultural competence refers to an ability to interact effectively with people of different cultures. Cultural competence comprises four components: (a) Awareness of one's own cultural worldview, (b) Attitude towards cultural differences, (c) Knowledge of different cultural practices and worldviews, and (d) cross-cultural skills. Developing cultural competence results in an ability to understand, communicate with, and effectively interact with people across cultures.



Chamberlain (2005), culture represents “the values, norms, and traditions that affect how individuals of a particular group perceive, think, interact, behave, and make judgments about their world”. This means examining our biases and prejudices, developing cross-cultural skills, and seeking workplace leaders who share a passion for cultural competence. The term multicultural competence surfaced in a mental health publication by psychologist Paul Pedersen at least a decade before the term cultural competence became popular. It involves our ability to understand, communicate with, and effectively interact with people across cultures.

At the heart of this process is audience curation. Audience curation is the TED process of simply knowing your community you're seeking to impact. In research, this term is synonymous to community engagement. Knowing who you are trying to reach, as it affects everything else you do. Are you trying to reach peers in your field or are you communicating across fields? Are you talking to a potential funder or to a local reporter? Regardless of your message or your goal, you always need to know your audience. When communication is adapted using cultural competence both at the individual and community level, it facilitates improved research outcomes at a systems level. It's an inside out job.

While there is no checklist to tick off to identify culturally competent workplace leaders, we can start to build a picture of the attitudes, skills and knowledge required. For example, research leaders who respect diversity and are culturally competent:

- have an understanding of and honor, the histories, cultures, languages, and traditions
- value individual's different capacities and abilities
- recognize that diversity contributes to the richness of our society and provides a valid evidence base about ways of knowing
- demonstrate an ongoing commitment to developing their own cultural competence in a two-way process with families and communities

The TED Approach to Cultural Competence

- We make diversity part of our rules of engagement
- We understand we won't always get it right
- We spend time with the community
- We do a QA on what the recent science says
- We host year-round trainings to improve how we engage and diversify
- We read the temperature of the room
- We practice, practice, practice!

Ways to Practice, Practice, Practice:

So much of communication is in performance! Below are tips on how to improve your performance engagement.

Starting Strong

The beginning of your contribution is crucial. You need to grip your audience's attention and hold it.

1. **Stories:** Stories are always memorable. We crave stories because we all have them. Proposing this shared experience with your audience allows them to identify with you on a personal level. Now that you've established a connection with your listeners and viewers, you can merge your message with their thoughts while keeping them engaged and entertained. Just remember to keep the story relevant to the requested topic/event you were asked to speak about in order to maximize effectiveness.
2. **Questions:** A question is an excellent tool for jump-starting audience engagement. A simple "How's everyone doing?" opens a forum of sorts for the audience, empowering them and making them more receptive to your message. A question also makes the audience think for themselves about a topic that you control. This is a great way to set and reinforce the agenda of your choice while giving the audience a sense of power.
3. **Quotes:** Referencing the words and thoughts of an expert in relation to your message is useful for establishing an overarching theme or general idea about the topic. You are imparting wisdom on your audience while creating a segway into your own topic. Since you have primed the audience with a nugget of value, your information now appears to be equally as valuable. Just make sure you follow up the quote with an explanation of how it empowers your topic and how it is relevant.
4. **Statistics:** Normally, numbers or any type of data can seem boring in a presentation. However, when used correctly, statistics can be very effective in illuminating your topic. The key is to use very clear, accurate and relevant information in order to truly engage your audience. A solid statistic places your incoming message in a concrete, irrefutable and trusted frame of reference. Data not only provides your presentation with a trusted source, but also lends credibility to everything you say thereafter.
5. **Jokes:** Humor is extremely powerful and is often used effectively. A good joke can loosen up your audience and make them more receptive to you as a person as well as to your message. Be warned, though, that humor is highly volatile. A bad joke can be worse than no

joke at all. Make sure you have a scope for your target audience before you dive into a dud of a joke.

Using your Voice:

Most of us are communicating these days with masks on our face. The way we leverage our voice has become that more powerful. The following three core elements of vocal production are often used to improve how to get your message across.

Volume (to be heard): This is not a question of treating the voice like the volume control on the TV remote. Some people have naturally soft voices and physically cannot bellow. Additionally, if the voice is raised too much, tonal quality is lost. Instead of raising the voice it should be 'projected out'. Support the voice with lots of breath - the further you want to project the voice out, the more breath you need.

When talking to a group or meeting, it is important to never aim your talk to the front row or just to the people nearest you, but to consciously project what you have to say to those furthest away. By developing a strong voice, as opposed to a loud voice, you will be seen as someone positive.

Clarity (to be understood): Some people tend to speak through clenched teeth and with little movement of their lips. It is this inability to open mouths and failure to make speech sounds with precision that is the root cause of inaudibility. The sound is locked into the mouth and not let out. To have good articulation it is important to unclench the jaw, open the mouth and give full benefit to each sound you make, paying particular attention to the ends of words. This will also help your audience as a certain amount of lip-reading will be possible.

Variety (to add interest): To make speech effective and interesting, certain techniques can be applied. However, it is important not to sound false or as if you are giving a performance. Whilst words convey meaning, how they are said reflects feelings and emotions. Vocal variety can be achieved by variations in:

- **Pace:** This is the speed at which you talk. If speech is too fast then the listeners will not have time to assimilate what is being said. Nevertheless, it is a good idea to vary the pace - quickening up at times and then slowing down - this will help to maintain interest.
- **Volume:** By raising or lowering volume occasionally, you can create emphasis. If you drop your voice to almost a whisper (as long as it is projected) for a sentence or two, it will make your audience suddenly alert, be careful not to overuse this technique.
- **Pitch - Inflection - Emphasis:** When speaking in public, try to convey the information with as much vocal energy and enthusiasm as possible. This does not mean your voice has to swoop and dive all over the place in an uncontrolled manner. Try to make the talk interesting and remember that when you are nervous or even excited, vocal chords tense and shorten causing the voice to get higher. Emphasize certain words and phrases within the talk to convey their importance and help to add variety.

- **Pause:** Pauses are powerful. They can be used for effect to highlight the preceding statement or to gain attention before an important message. Pauses mean silence for a few seconds. Listeners interpret meaning during pauses so have the courage to stay silent for up to five seconds - dramatic pauses like this convey authority and confidence.

Breakout Group discussion: Who's your audience?

In this 15-minute exercise, break into Zoom groups, choose a research topic and come up with a 2-minute TED talk. Each group will be assigned a different audience. Your presentation should include a dynamic intro, 2-3 things we should know and care about, and a strong conclusion. Don't overthink it and have some fun!

Audience:

- Group A: 5-year olds
- Group B: Black family with a chronically ill child
- Group C: Local media in a primarily Spanish speaking community
- Group D: NIH grant review committee
- Group E: Researchers not in your field
- Group F: Graduate minority students
- Group G: High school students

Additional Notes:

Your attendance at this workshop is so greatly appreciated! If you have any feedback, questions, or are looking for additional resources, please feel free to contact me at: nicholasj@ufl.edu