

Making Your Research Matter: Strategies for Outreach and Public Engagement

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www.uh.edu/education/iamlab

Let's start by sharing!

- Introductions: what is your current role?



Let's start by sharing!

- How do you share your research?
- What are you hoping to learn today?



Today's Plan

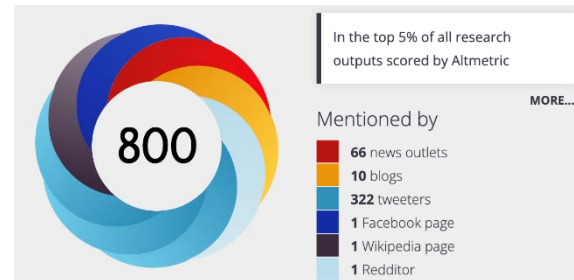
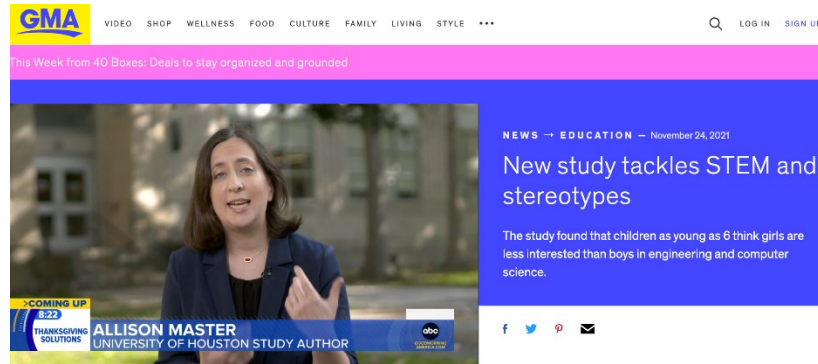
- My experience with outreach & dissemination
- Intro to science communication
- Career paths and science communication
- Equity-focused research design
- Strategies for communicating your science
- (Time permitting: Start working on a communication project)



My origin story



My outreach and dissemination



There Are Too Few Women in Computer Science and Engineering

It's not that they aren't interested; it's the culture of these fields and how they exclude women and girls

By Sapna Chervan, Allison Master, Andrew Meltzoff on July 27, 2022

Data Parties!



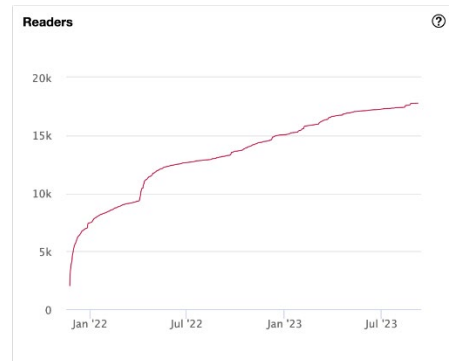
THE CONVERSATION

Academic rigor, journalistic flair

COVID-19 Arts + Culture Economy **Education** Environment + Energy Ethics + Religion Health Politics + S

Stereotypes about girls dissuade many from careers in computer science

Published: November 24, 2021 8:41am EST



STEM FOR ALL!

What We've Learned about Fostering STEM Engagement

Dr. Allison Master, University of Houston, @AllisonMaster, <https://jhi.edu/individual/cv/allison-master>

Character LAB **IAM Lab**

- 01. STEM should be for all students.** Research and data show that girls are less interested in STEM careers than boys. STEM careers are not just for boys. STEM careers are for everyone. We need to create a culture where everyone is encouraged to pursue STEM careers.
- 02. Research is the key.** Research is the key to understanding why girls are less interested in STEM careers. We need to create a culture where everyone is encouraged to pursue STEM careers.
- 03. Classroom environments and a message.** It is important that classrooms are inclusive and welcoming to all students. We need to create a culture where everyone is encouraged to pursue STEM careers.
- 04. Representation matters.** Representation matters. We need to create a culture where everyone is encouraged to pursue STEM careers.
- 05. Teachers are role models.** Teachers are role models. We need to create a culture where everyone is encouraged to pursue STEM careers.
- 06. Teachers are role models.** Teachers are role models. We need to create a culture where everyone is encouraged to pursue STEM careers.
- 07. Growth mindset is needed.** Growth mindset is needed. We need to create a culture where everyone is encouraged to pursue STEM careers.
- 08. Making it fun is key.** Making it fun is key. We need to create a culture where everyone is encouraged to pursue STEM careers.

This infographic was created for Character Lab's Evening of Science, Learning, and Community, November 2023. We thank the schools and students who have participated in our Character Lab studies!

CUTTING EDGE PEER-REVIEWED SCIENCE RESEARCH ADAPTED FOR STUDENTS AND THEIR TEACHERS

SCIENCE JOURNAL **KTD'S TEENS**

Translate this page

Select Language

Powered by Google Translate

How do gender stereotypes impact girls' interest in science?



WeTeach_CS

My outreach and dissemination

Lab website **news** articles:



Lab website **resources**:



<https://www.uh.edu/education/iamlab/resources/>

My postdoctoral training in dissemination

<https://modules.ilabs.uw.edu/outreach/>



**The Latest
Research**

At I-LABS, we explore



**Partnering with
the Community**

The Outreach and

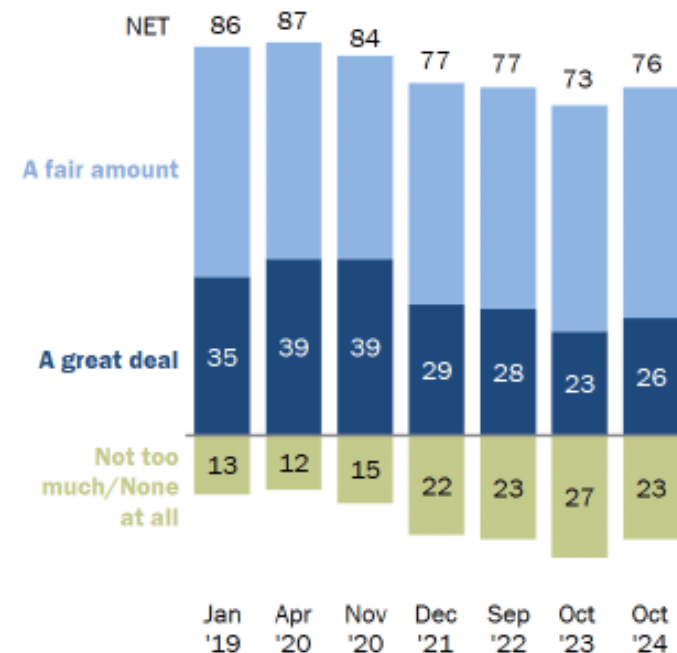


**Training &
Resource
Library**

Introduction to Science Communication

Confidence in scientists up slightly but remains lower than before pandemic

% of U.S. adults who have ___ of confidence in scientists to act in the best interests of the public

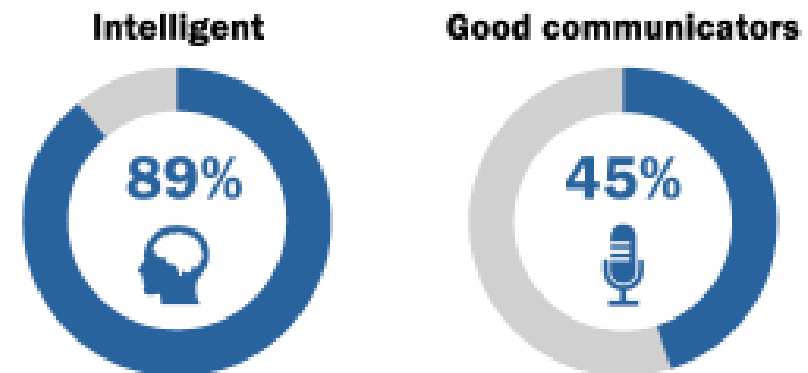


Note: Respondents who did not give an answer are not shown.
Source: Survey of U.S. adults conducted Oct. 21-27, 2024.
"Public Trust in Scientists and Views on Their Role in Policymaking"

PEW RESEARCH CENTER

Most Americans see research scientists as intelligent, while fewer say they're good communicators

% of U.S. adults who say each of the following statements describes most research scientists well



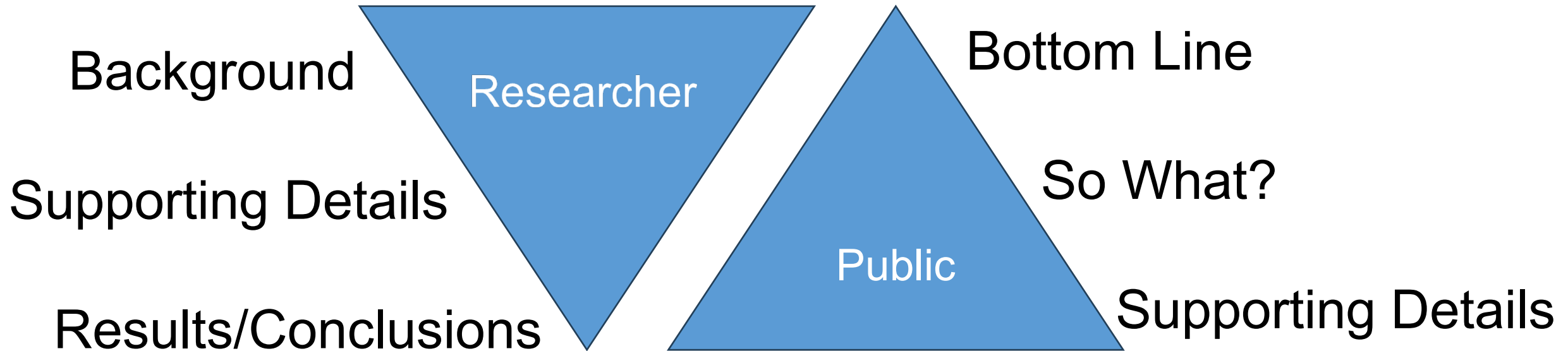
Note: Respondents who gave other responses or did not give an answer are not shown. Refer to the topline for full list of traits.

Source: Survey of U.S. adults conducted Oct. 21-27, 2024.

"Public Trust in Scientists and Views on Their Role in Policymaking"

PEW RESEARCH CENTER

Introduction to Science Communication



Introduction to Science Communication

- *Why Should They Care?* Start with the big picture before you get to your key points.
- *Three-Point Structure:* What are the three key points you want your audience to remember?

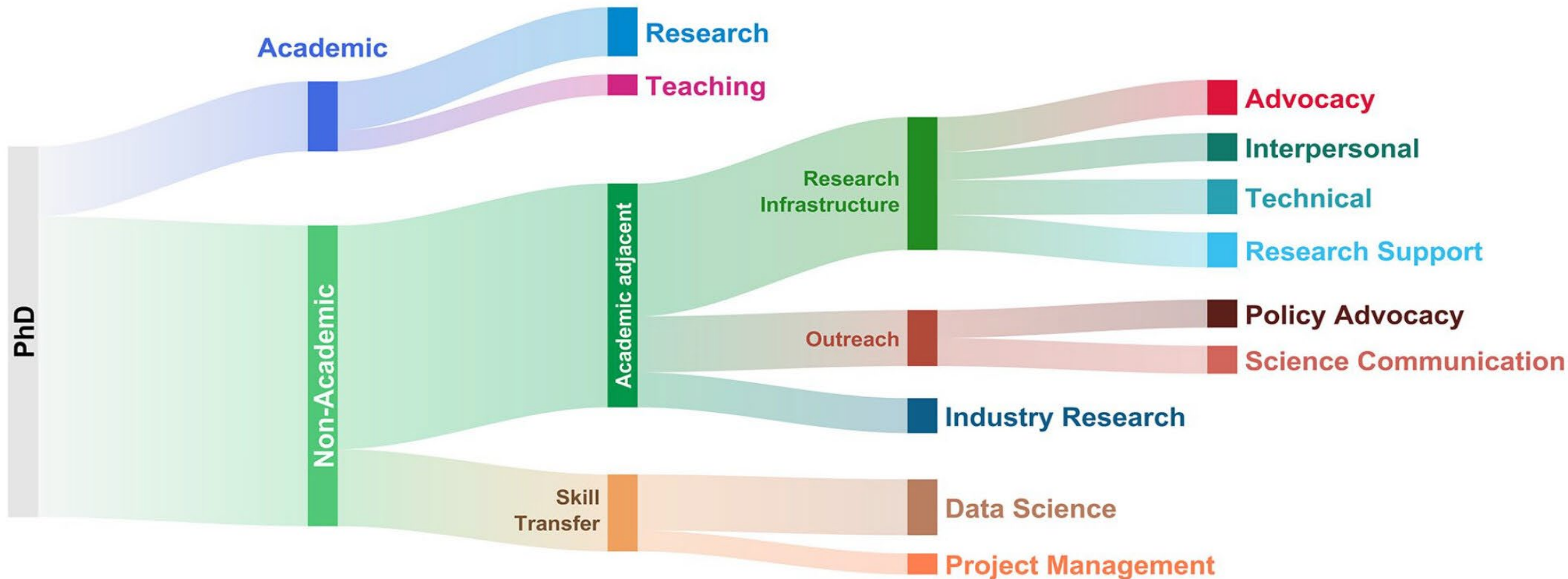
Introduction to Science Communication

- What is an idea you want to communicate to the public?
- In small groups, talk about what your big picture and three key points would be.



Career Paths and Why Communication Matters

What are your career goals? Where do you see yourself?
How would science communication be important in that pathway?

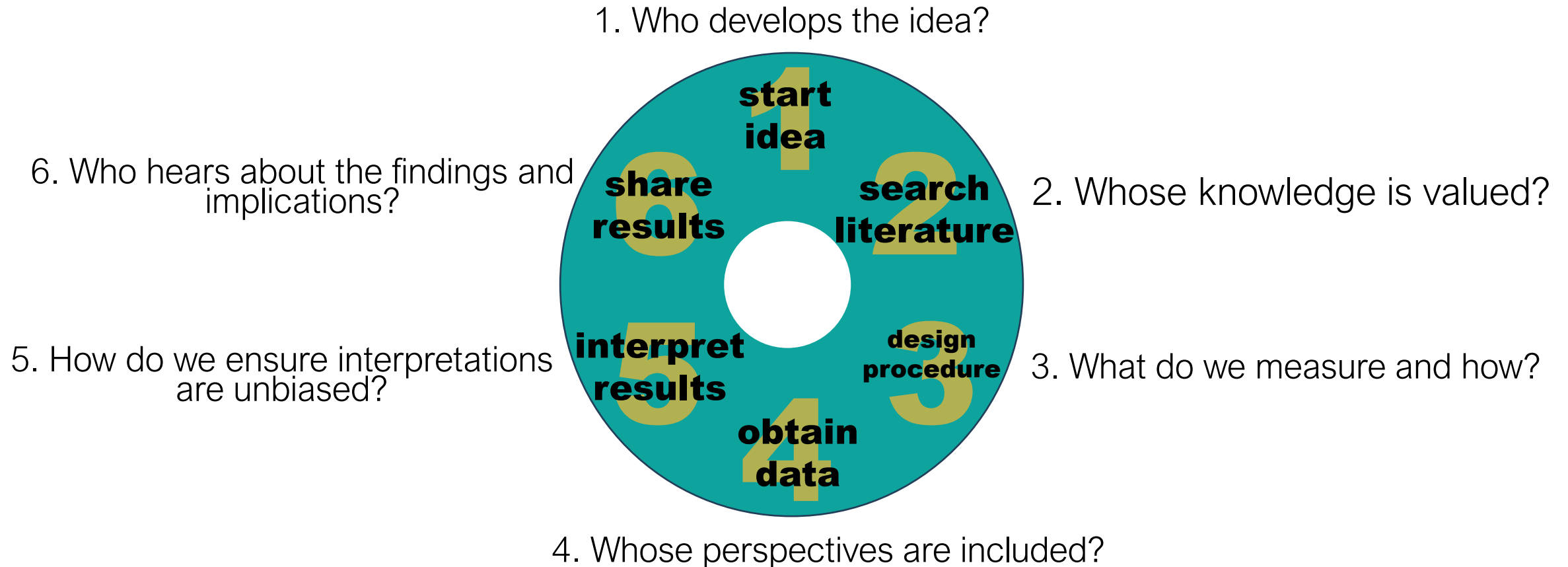


Equity-Focused Research Design

- What do you already do to support equity in your research?

Equity-Focused Research Design

RESEARCH CYCLE



Equity-Focused Research Design

- In small groups, talk about how you could improve equity in your research for at least one of these steps



Strategies for Communicating Your Science

In small groups, talk about:

- Who is your audience?
- What do they already know?
- What do you want them to know?



Strategies for Communicating Your Science

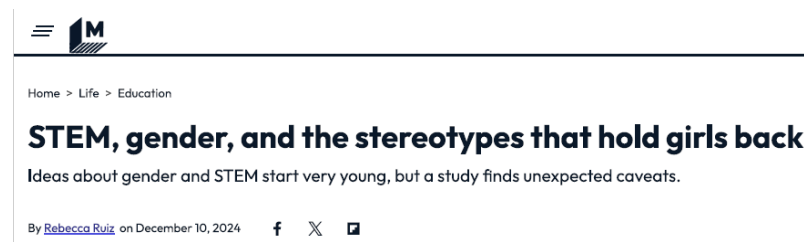
Your Audience:

- **General public:** news articles; lab website; video modules on websites; op-eds; Psychology Today; the Conversation; social media (use hashtags)
- **Teachers:** infographics; short videos; workshops at practitioner conferences (ISTE, CSTA, etc.); social media (using hashtags to tag teacher orgs); data parties
- **Parents:** infographics; parent workshops (e.g., The Parent Venture)
- **Kids:** Science Journal for Kids; Ask-a-Scientist; booths at festivals and science museums

Strategies for Communicating Your Science

Strategies for news articles:

- Connect with your media/press person at your university (they can help a LOT)
- Help them write a press release
- If a journalist reaches out, get back to them FAST
- Use simple, concrete language—how would you explain your research to your family?



EducationWeek®

CURRICULUM

Gender Stereotypes About Coding Ability Start as Young as 1st Grade, Study Finds



By Sarah Schwartz — May 10, 2017 ⌚ 4 min read

FORBES > LEADERSHIP > CAREERS

How Quickly Gender Stereotypes About Work Emerge

Adi Gaskell Former Contributor

U.S. News NEWS

Home / News / Health News / Many Kids, Teens Think Girls Don't Care About Computer Science

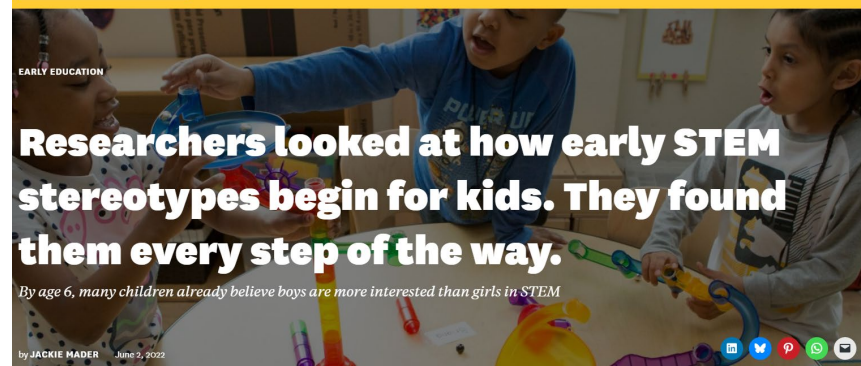
Many Kids, Teens Think Girls Don't Care About Computer Science

Nov. 29, 2021

THE HECHINGER REPORT

Covering Innovation & Inequality in Education

NEWSLETTERS ABOUT DONATE



Strategies for Communicating Your Science

Strategies for op-eds:

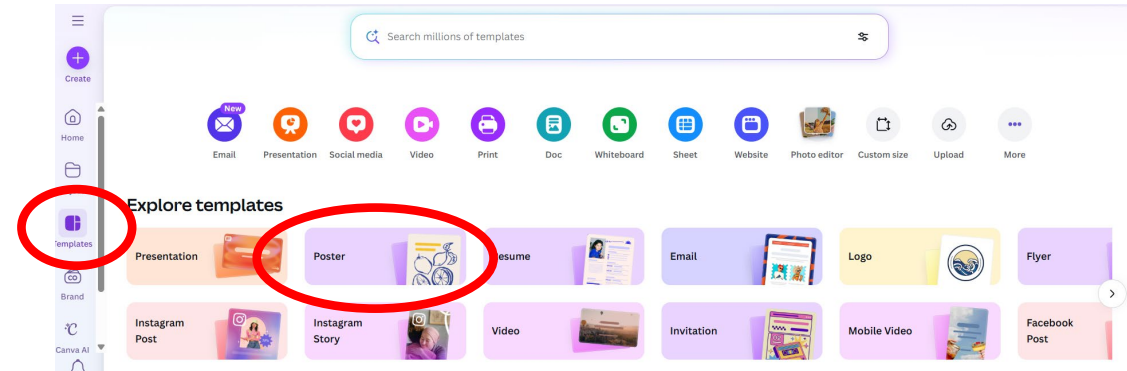
- Check out theopedproject.org for resources and tips
- If you have funding, get psychgeistmedia.org to give feedback on your pitch
- Be persistent and emphasize anything timely for news cycles

The **OpEd** *Project*



Let's Make Infographics!

- Go to canva.com
- Make sure you are on the “Home” screen
- Under “Templates,” select “Poster”
- Scroll until you find a template you like
- Spend 15 minutes putting in an outline of what you want to share



Thank you!

- Email: amaster@uh.edu