



# Representation in STEM Disciplines

Women, persons with disabilities, and Black, Indigenous, and People of Color (BIPOC) are underrepresented in STEM careers. I-LABS is advancing our understanding of how STEM-related stereotypes develop and what kinds of training and programs can broaden representation in STEM fields.

## At a Glance



### Infographic: STEM for All!

<https://bit.ly/34hJW5l>



### Handout: Math Stereotypes

<https://bit.ly/3aHnvcg>



### Handout: Early STEM Learning

<https://bit.ly/2FITBlh>

## Dig Deeper



### Featured Resource: Math Stereotypes

<https://bit.ly/34c98dH>



### Featured Resource: Early STEM Learning

<https://bit.ly/2EbKZcD>



### Video: Asking a Scientist about STEM Stereotypes

<https://bit.ly/3Ns6bu1>



### Video: Who Is a “Math Person”?

<https://vimeo.com/435910590>



### Video: Feeling Connected to Others Can Improve STEM Engagement

<https://vimeo.com/435910927>



### Video: Empowering Young Girls in STEM

<https://bit.ly/3gaOw84>

## Want to Learn More?

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

## Read Our Research

Stereotypes and bias can negatively impact STEM interest and academic outcomes for women and Black, Indigenous, and People of Color (BIPOC). Interventions that focus on social factors like mindsets, identities, and a sense of belonging can buffer the negative impacts of stereotypes, playing an important role in diversifying STEM fields.

*Master & Meltzoff, 2020, International Journal of Gender, Science, and Technology*  
<https://bit.ly/2YgbHHT>

As early as 1st grade, children develop the stereotype that boys are more interested in computer science and engineering than are girls. We examine the origins, development, and consequences of these stereotypes from 1st to 12th grade, and what can be done to help children and society overcome them.

*Master, Meltzoff, & Cheryan, 2021, Proc. National Acad. of Sci.*  
<https://bit.ly/3WjWim9>

Parental beliefs about “who does math” are linked to children’s beliefs about their own math abilities. Mothers who do not identify with math may inadvertently dissuade their daughters from seeing themselves as a “math person.” Fathers play an important role by encouraging and supporting math skills in their daughters.

*del Río, Strasser, Cvencek, Susperreguy & Meltzoff, 2019, Dev. Psychol.*  
<https://bit.ly/3aEcUxu>

Young girls report being less interested and comfortable with technology and programming than boys. This study uses a short training program that includes positive engagement with programming to reduce or eliminate this gender difference.

*Master, Cheryan, Moscatelli & Meltzoff, 2017, J. Exp. Child Psychol.*  
<https://bit.ly/31drCbM>

Preschool-aged children who feel like they belong to a social group associated with STEM do better and are more motivated in STEM activities. STEM can be a social endeavor!

*Master, Cheryan & Meltzoff, 2017, Dev. Psychol.*  
<https://bit.ly/3gdXhXS>

In the U.S., children internalize the view that “math is for boys” as early as the second grade. These math-gender stereotypes emerge even before any actual differences in math achievement.

*Cvencek, Meltzoff, & Greenwald, 2011, Child Dev.*  
<https://bit.ly/2YR3OJa>