

# STEM FOR ALL!

## What We've Learned about Fostering STEM Engagement

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Character LAB



IAM Lab  
Identity and Academic Motivation Lab

### 01.

**STEM should be for all students.** However, not all students develop interests in STEM. Gender gaps in STEM interests show up around middle school, especially for fields like computer science and engineering.



### 02.

**Belonging is the key.** When girls feel like they don't belong in a STEM class, they are less interested in enrolling.



### 03.

**Classroom environments send a message.** The way that classrooms look and feel can help girls feel that they belong there.



### 04.

**Representation matters.** Get more girls into computer science classes by signing up with friends or with encouragement from guidance counselors. Gender balance makes a big difference in supporting belonging!



### 05.

**Stereotypes start early.** The belief that girls are less interested than boys in STEM fields can harm girls' motivation for STEM. Children believe these stereotypes as early as elementary school.



### 06.

**Teachers are role models.** Teachers can challenge gender stereotypes by sending messages and sharing stories about how much girls and women enjoy STEM.



### 07.

**Growth mindsets are needed.** Explain that mistakes are how we learn in STEM, not a sign you don't belong.



### 08.

**Nothing is set in stone.** Early experiences matter, but it's never too late. Teachers and schools can increase girls' interest and engagement in STEM.

