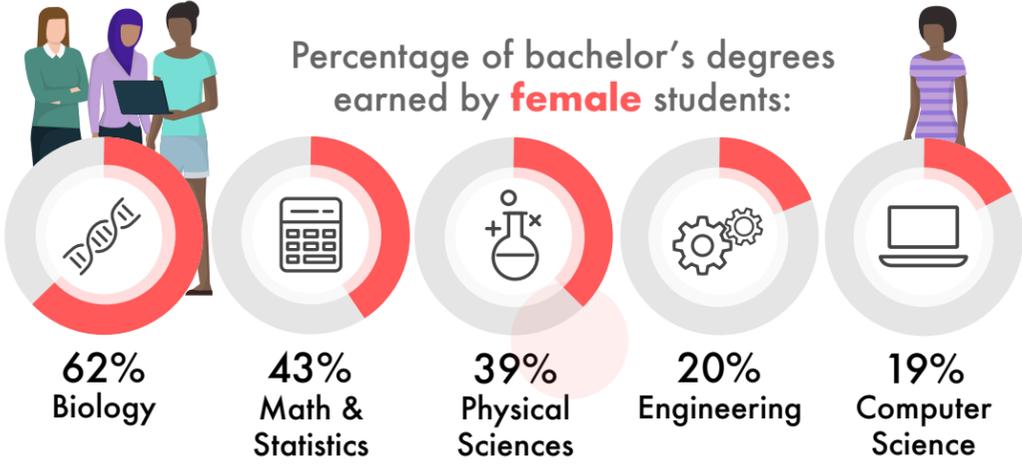


IS STEM ONLY FOR 'SOME'?

Compared to other fields, there are fewer women and people of color in most science, technology, engineering, and math (STEM) fields.

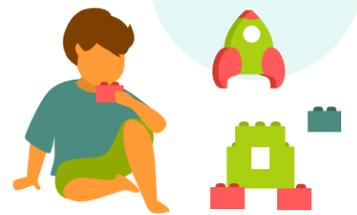
Percentage of bachelor's degrees earned by **female** students:



Why?

Access

From a young age, boys have more access to STEM toys and activities. (Jacobs et al., 2005)



Visuals

Stereotypic images of who "should" do science are everywhere. (Cheryan, Master, & Meltzoff, 2015)



Messages

Words can signal who does STEM: "Girls are just as good as boys" implies girls are not really as good. (Chestnut & Markman, 2018)



Girls are just as smart as boys.

Attitudes

Teachers' attitudes predict students' later success and choices. (Beilock et al., 2010)

I'm not a math person!



Explanations

Parents give boys more explanations about STEM subjects. (Crowley et al., 2001)



Marketing

STEM toys and experiences are heavily marketed to boys. (Sweet, 2014)



What can we do?

Environment

The people and things around us signal who belongs, and who doesn't.



Set up classrooms to feel welcoming to all students. (Master, Cheryan, & Meltzoff, 2016)

Provide STEM toys for everyone to play with. (Levine et al., 2012)



Representation matters. Introduce children to diverse role models in STEM they can identify with. (Cheryan, Drury, & Vichayapai, 2013)



Activities

Use experiences to broaden ideas about who does STEM.



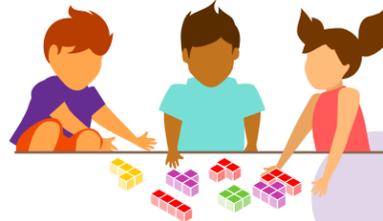
Give all children positive STEM experiences, beginning in preschool. (Master, Cheryan, Moscatelli, & Meltzoff, 2017)



Support children's interests, but also encourage them to explore new things. (Renninger, Nieswandt, & Hidi, 2015)

Relationships

Make it social! Relationships support STEM learning.



Feeling connected to others motivates children in STEM. (Master, Cheryan, & Meltzoff, 2017)



Seeing how STEM can be used to connect and help people makes young women more interested. (Diekman et al., 2011)

Language

Pay attention to how you use language around STEM topics.

Use inclusive language, like "kids" or "students" instead of "boys and girls." (Hilliard & Liben, 2010)

Kids, it's time to do math together!



It's all part of the process.



Encourage children to see mistakes as part of a learning process. (Dweck & Master, 2009)

Have high expectations of all children in STEM subjects. (Yeager et al., 2014)

I believe you can do it!



STEM FOR ALL!

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