



Girls in STEM at home

What is STEM?

STEM stands for science, technology, engineering and mathematics.

Benefits of studying STEM

- A STEM degree can be a starting point for virtually any career.
- Over 80% of science, technologies and maths graduates gain full-time employment, and over 88% of engineering graduates gain full-time employment, compared with the national average of 72.9% for all graduates.¹
- STEM is the key to solving important world issues such as curing diseases, saving the environment and building critical infrastructure.

A recent survey of Australian employers found that more than 82 per cent valued STEM qualifications in the workplace.²

Engaging girls in STEM

An Australian Government report has found that fewer girls undertake Year 12 STEM subjects than boys.³ So how can we support girls to engage with STEM at school, and to consider STEM careers?

It all starts at home

Families have a big influence on girls' school subject and career choices. You can help by building your girls' confidence and interest in STEM at home.

Inspire a love of STEM

Inspire a love of STEM by discussing STEM topics and enjoying STEM entertainment as a family. Try to connect STEM with your child's interests and passions.

- Do the Career Quiz on The GiST website together to connect your child's interests and passions with STEM careers.
- Watch movies together that positively portray women engineers, scientists or mathematicians.
- Borrow science fiction or non-fiction science books from the library.
- Talk about how STEM is a part of everyday life – from our phones, to the satellites that connect us to the internet, to the infrastructure on our streets.
- Discuss how STEM can be used to solve important world problems and social issues.

Build confidence

Girls sometimes feel less confident than boys when it comes to STEM subjects at school. But you can help.

- When the family talks about people in STEM, try to notice and counter gender stereotypes and biases.
- Encourage girls to have a 'growth mindset'. A growth mindset is about believing that success is due to effort and persistence, rather than natural ability.
- Encourage girls to get hands-on with STEM. The 'At home activities' page on The GiST website suggests activities that you can do together at home – including making a cloud in a bottle, making paper airplanes, constructing towers with raw pasta, and more.

References

1. *2018 Graduate Outcomes Survey – Longitudinal (GOS-L)*. (2018). Quality Indicators for Teaching and Learning.
2. *Australia's STEM workforce: A Survey of Employers*. (2014). Deloitte Access Economics.
3. *Advancing Women in STEM*. (2019). Commonwealth of Australia.

For more ideas, go to:

thegist.edu.au