THE GiST
Girls in STEM Toolkit

The Girls in STEM Toolkit Evaluation Report Summary

The purpose of the evaluation:

Evaluate the effectiveness of the GiST for teachers:

- Do teachers find the resources on the GiST useful in supporting them to improve girls' participation in STEM?

Evaluate the usefulness of the Career quiz for students:

- Does the quiz guide students to discover STEM careers and does it provide useful information?

Evaluate the usefulness of the GiST for families:

- Are the resources on the GiST useful for families to support / encourage their girls into STEM pursuits/pathways?

What we did:

The evaluation of the GiST was informed by multiple evaluation activities, including;

- Questionnaire for educators and families
- Two student focus groups
- Five teacher semi-structured interviews
- Google analytics data from website
- Review of discovery phase findings

DO WE ANSWER OUR EVALUATION QUESTIONS?

Overall, the evaluation activities indicated that overwhelmingly that users of the GiST find the site **useful**, **informative** and **inspiring**.

What we are working on

Participants in these evaluation activities has indicated some initial areas to begin work:

- Chunking information into sections and adding images and key quotes so that it is easier to scan information.
- Improving tagging and searching throughout the site
- Improving interactivity and clarifying learning pathways in the quiz
- Increasing the diversity of women in STEM in our profiles and Q&As
- Widening the awareness of the site and resources via promotional activities

QUESTIONNAIRE

Questionnaire participant breakdown

PARENTS OR CARERS	7
EDUCATORS	26
OTHER ROLES	4

Key findings from the questionnaire

- Participants (all groups) like the site and find the resources valuable
- Many participants mentioned awareness/promotion/marketing as an issue
- Parents/carers come with different goals and needs when compared with educators, for example parents highlighted the value of careers information

Word cloud from the questionnaire

These terms were gathered across all of the text responses from the questionnaire, highlighting some of the most-mentioned topics and themes.

Do visitors find the site useful?

Survey respondents overwhelmingly indicated that the site was useful:

STUDENT FOCUS GROUPS

Student focus group participants breakdown

It was important that these groups be diverse. Participants' representation included the following audiences:

Identify as Aboriginal or Torres Strait Islander	1
Identified as BIPOC	3
From regional/rural areas	5
Identify as having a disability	4
Identify as CALD	4
Identify as being part of the LGBTQI+ community	5

Strategies for success

- ☑ Ensure information is easy to read and well tagged to allow for subject searching (consider plain English and chunking of information on pages)
- ☑ Provide more diverse examples of women in STEM and make explicit their learning and career pathways
- ☑ Include more video content where possible so that girls can visualise the working life of women in STEM and project themselves into these roles
- ☑ Provide more support for STEM teachers to introduce STEM careers as part of their teaching programs

> *"I was interested in reading about the imposter syndrome and it surprised me about how many women feel insecure."*
>
> *– Year 10 student*

> *"Women of colour are already a minority, so in STEM careers they are even more of a minority. So it's fair enough that it might be hard to find people to tell their story. But I think it would be good if there were more people like me."*
>
> *– Year 11 student*

TEACHER INTERVIEWS

Participant breakdown

Participants, five teachers:

- Science teacher, urban secondary school in ACT
- Science teacher, regional secondary school in NSW
- Science teacher, urban secondary school in VIC
- Maker space specialist teacher, urban primary school NSW
- Visual arts and STEM teacher, urban secondary school in NSW

Strategies for success

- ☑ Explore creating some case studies around the Seven principles that model some simple ways teachers have implemented the principles in their schools and classrooms
- ☑ Provide resources to for teachers to integrate careers information into their STEM programs that support girls
- ☑ Provide some practical strategies for setting up STEM events or extra-curricular activities, either targeted at girls or with a gender-inclusive lens

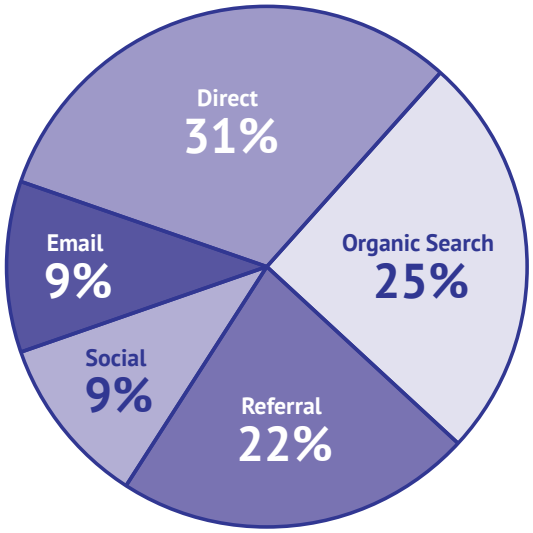
> *"It is powerful and it has the potential to, I don't think I'm overstating it, revolutionize what people do in their classroom and in school."*
>
> *– Teacher*

> *"And now our class numbers, as you've read, have gone from 8 in VCE to 19. You know that just astounded me that these changes that I had made specifically to engage girls actually ended up engaging another whole group of boys that we were disengaging, by the way that we were teaching science ... there was a whole gamut of young men and boys who because of the way we've traditionally taught science, believe that it's not for them."*
>
> *– Teacher*

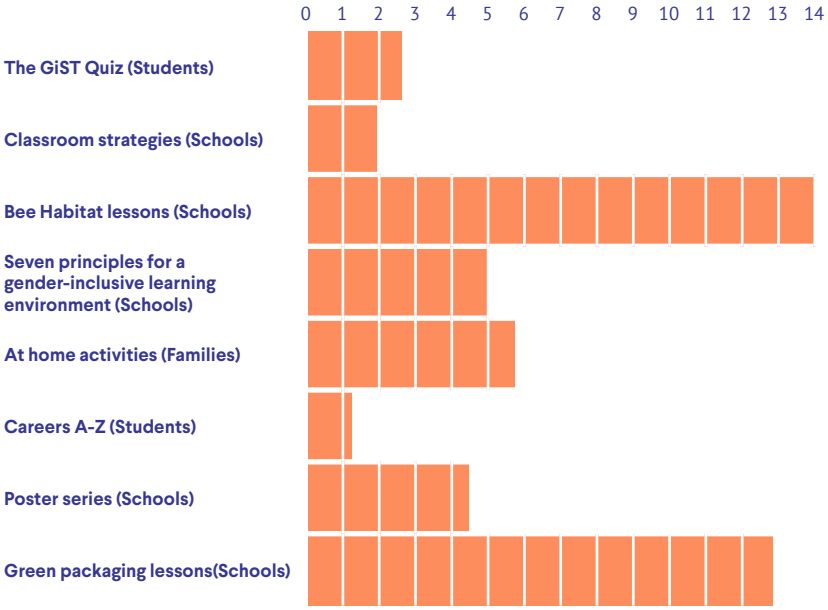
This project is funded by the Australian Government Department of Industry, Science, Energy and Resources

WEB SITE ANALYTICS

How did our visitors get to the site?



What are our most popular resources? And how long do people spend there? (minutes)



WORDS FROM OUR USERS

> *My daughter attends the online Engineers Australia High School program days, she has a team in tech girls competition this year and is researching gender bias with her team as the main community problem to solve.*
>
> *– Parent/carer*

> *I was looking for work experience and extra-curricular activities for my daughter.*
>
> *– Parent/carer*

> *I think it is a great website to use to encourage girls to be interested in STEM, my main frustration is male teachers are STEM teacher and there are not enough female STEM teachers. Encouraging more females to teach these roles, or for school leadership to understand the importance of employing female STEM teacher would be great.*
>
> *– Parent/carer*

> *It would be great if you had a career in mind, like an animal biologist, and you could just type in the word 'animal' and you would get lots of information.*
>
> *– Year 9 student*

> *It showed me there are many things you could do, and you can do anything you want if you put your mind to it.*
>
> *– Year 7 student*

This project is funded by the Australian Government Department of Industry, Science, Energy and Resources