



An Australian Government Initiative

Women in STEM
Ambassador

ANNUAL REVIEW 2022



UNSW
SYDNEY

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IMPACT AT A GLANCE 2022



Direct Engagement

The Ambassador communicated with **131,085** unique participants:

- Policymakers
- Industry representatives
- Students, teachers and educators
- STEM research organisations and funding bodies
- Families and the community



2022 STEM Equity Monitor

Women in STEM-qualified occupations increased by **34%**

(2018 to 2021)

Women enrolled in **university** STEM courses increased by **12%**

(2018 to 2020)

Women enrolling in **vocational** STEM education increased by **1%**

(2018 to 2021)



5 years after graduation
1 in 10 STEM-qualified women
and **1 in 5** STEM-qualified men
work in a STEM industry

The STEM Equity Evaluation Portal

The Portal was launched in November and has had:

6,687 visits

60 user profiles created

2 external evaluations published

(at 30 December, 2022)

Media activity

The Ambassador:

- Had **496** media appearances or mentions
- Reached a potential audience of **16.3 million**
- Was featured in *ABC News*, *ABC Radio*, *The Age* and *The Conversation* and *Women's Agenda*



Future You

The website re-launched in September promoted by a media campaign that secured **222** pieces of nation-wide coverage

Research Projects

Work continued on our two research projects:

- the anonymous review study and
- the analysis of awarded Australian grants by gender

EXECUTIVE SUMMARY

Professor Lisa Harvey-Smith, the Australian Government Women in STEM Ambassador, continues to work towards a more inclusive, dynamic and sustainable STEM sector in Australia. The Women in STEM Ambassador and her team conduct research, create resources, run programs and strategically engage with stakeholders including government, industry leaders, and research funding bodies. The work of the Ambassador supports and informs the STEM sector to make coordinated, research-backed efforts to improve equity.

Efforts to increase women's participation in STEM are making a difference. Data from the **2022 STEM Equity Monitor** reveal that from 2018 to 2021, the number of women in STEM-qualified occupations increased by 34%. In comparison, the number of men in STEM-qualified occupations increased by about 6% during this time. More women are also choosing to study STEM at university. Between 2018 and 2020, the number of women enrolled in university STEM courses increased from 77,673 to 87,371. This was a 12% increase, compared to a 5% increase for men.

Although there has been a marked increase in the number of women enrolling in university STEM courses, few women are going into vocational STEM education. The number of women enrolling in vocational STEM education

has increased 8% from 2018 to 2020. However while women made up 37% of university STEM enrolments in 2020, they only made up 16% of vocational STEM enrolments. Efforts to retain women in STEM occupations need attention. A five-year study of STEM graduates from the year 2011 found that by 2016, only 1 in 10 STEM-qualified women worked in a STEM industry, compared with more than 1 in 5 STEM-qualified men. The data reveal there is significant work to be done in these areas.

The Women in STEM Ambassador and her team engage with the community through outreach, advisory and advocacy work. Target audiences include the public, the STEM sector, the education sector, Government and policymakers, workplace leaders and others in a position to make impactful changes to achieve STEM equity. The Ambassador and her team promote and share evidence-based tools and advice, increase awareness of, and advocate for the need for diversity in STEM. Since her appointment, the Ambassador has communicated with 131,085 unique participants including:

- students
- teachers and educators
- policymakers
- STEM research organisations
- industry representatives

As part of her advisory and advocacy work in 2022, the Ambassador has worked with a broad range of government agencies, education and industry leaders on measures that lead to greater participation by women in STEM.

From January to December 2022, Professor Harvey-Smith invested 158 hours engaging with:

- **stakeholders across government departments and agencies**
- **peak bodies**
- **advocacy groups**
- **industry and workplace leaders**
- **educators and policy makers**

The Ambassador provided input to numerous roundtables, discussion papers, and reports, including, but not limited to:

- Engineers Australia Women in Engineering Report, published in June
- the Science and Commercialisation Roundtable in September
- the National Health and Medical Research Council's equity review of the Investigator Grants Scheme

Work continues on our two major research projects: (1) a study of the impacts of anonymous peer review on the outcomes of applications for time on public research infrastructure in Australia and (2) a longitudinal analysis of awarded Australian research grants by gender. Data collection for both studies has been completed. The preliminary results of the research grants by gender study were shared with the research councils involved and a manuscript was submitted to an academic journal at the end of 2022.

In November 2022 we launched **The STEM Equity Evaluation Portal** - our online evaluation tool and repository for STEM equity programs. Guest speakers at the launch event included:

- the Honourable Ed Husic MP, Minister for Industry, Science and Resources
- Anna-Maria Arabia, CEO of the Australian Academy of Science
- Dr Wafa El-Adhami, CEO of the Science in Australia Gender Equality (SAGE)

Since its launch the Portal has received 6,687 visits, 60 user profiles have been created and two external evaluations have been published (at 30 December, 2022).

Following the success of the national awareness-raising initiative Future You pilot in 2020, we launched our new **Future You** website in September 2022. After conducting extensive evaluation and in consultation with leaders in primary school education, the program was redesigned to provide practical resources and advice to students, families, and educators about careers in STEM. The program uses imaginative storytelling and engaging resources, lesson plans, and activities to encourage students aged 8 – 12 years to explore STEM careers. The new website has received positive feedback from teachers, families, and government stakeholders. Notable congratulations were received from the Executive Director of the Victorian Department of Education and Training, Western Australia's Minister for Women, and the Assistant Director General from the Queensland Department of Education. Since launching, there have been 12,912 unique users to the new site, and 16,058 sessions.

The Ambassador delivered 49 hours of public outreach at events, to a total audience of 8,239 in 2022. Significant events included keynote presentations at:

- the Women in Data Science worldwide conference on International Women's Day
- the Locate 22 Space & Spatial Industry Conference
- the Women in Public Service Leadership Conference
- the Australian Conference in Science and Mathematics Education

International keynotes and panels included the inaugural Ladies Who Tech Convention in Chengdu, China. This was coordinated through the Department of Foreign Affairs and Trade (DFAT) and the Australian Consul-General in Chengdu, Adelle Neary. The Ambassador was

invited to showcase Australia's work on gender equity as part of the **World Majlis** program at the global EXPO2020 held in Dubai. She also presented an on-demand webinar for the United Women Singapore STEM Festival. The Office of the Women in STEM Ambassador delivered two public online evaluation webinars to promote the STEM Equity Evaluation Portal as a priority tool that will remove barriers to full participation in STEM. These were attended by 350 people. When committing to public engagement activities, the Office selects events that meet our strategic aims leading to improved equity in STEM.

From January to December 2022, our media activity totalled 496 media appearances or mentions reaching a potential 16.3 million people and consistent 79% favourability. Favourable media includes news items that reflect favourably on the organisation, its employees or the activities it engage in. The remaining 21% of coverage had a neutral media sentiment. Large-scale media coverage of the Women in STEM Ambassador and engagement with key audiences and stakeholders indicates that we are active in the community and strongly communicating key STEM gender equity messages. The Ambassador featured prominently on radio, online and TV, with mainstream media (national and regional) as the leading source of coverage, including ABC News, ABC Radio, The Age and The Conversation, SBS and Women's Agenda.



OVERVIEW

This annual review provides a summary of the activities and achievements of the Office of the Women in STEM Ambassador in the 2022 calendar year.

ABOUT

The Women in STEM Ambassador is an Australian Government initiative to address gender inequity in science, technology, engineering, and mathematics (STEM).

In October 2018, the Australian Government announced Professor Lisa Harvey-Smith as the inaugural Australian Government Women in STEM Ambassador, a position outlined in the 2018-19 Budget to encourage more women into STEM education and careers. The Ambassador and her Office received \$4.845 million from 2018-19 to 2021-22 to improve equity in STEM, to lead the national awareness raising initiative Future You, and to develop the STEM Equity Evaluation Portal.

In November 2022, the Hon. Ed Husic MP, Minister for Industry and Science, announced the reappointment of Professor Harvey-Smith to the role for another 12-month term. In his announcement, Minister Husic recognised the substantial contributions Professor Harvey-Smith has made in her role as Australia's inaugural Women in STEM Ambassador, which have resulted in the Ambassador building a strong profile in the STEM sector and broader community. The Australian Government is providing up to \$1.8 million over 2022-23 for the Women in STEM Ambassador initiative. As part of a package to improve STEM equity in Australia, the Ambassador will continue her work on the national digital awareness raising initiative, Future You, as well as the STEM Equity Evaluation Portal which delivers on a key recommendation from the Women in STEM Decadal Plan, and provide research to support the Australian Government's [Pathway to Diversity in STEM Review](#).

The Women in STEM Ambassador initiative is hosted at the University of New South Wales (UNSW).

VISION

A more inclusive, dynamic, and sustainable STEM sector in Australia.

MISSION

To mobilise Australians to remove barriers to full participation in STEM.

PURPOSE

To cultivate the conditions in which all Australians can pursue successful and rewarding careers in STEM.

GOALS

To provide knowledge, resources, and tools to enable systemic change and remove barriers to participation in STEM education and workplace settings.

To embed a consideration of intersectional barriers into everything we do.



2022 YEAR IN REVIEW

ACTIVITIES, OUTCOMES AND IMPACTS

The Women in STEM Ambassador's activities drive cultural and systemic change to address barriers to equity in STEM and are aligned with the Australian Government's Advancing Women in STEM Strategy and the Women in STEM Decadal Plan 2019. We achieve this by engaging across the sector to influence the decision-making of leaders and policy makers to support equity in STEM.

Our collective efforts are making a difference. Data from the **2022 STEM Equity Monitor** reveal that from 2018 to 2021, the number of women in STEM-qualified occupations in Australia increased by 34%. More women are also choosing to study STEM at university. Between 2018 and 2020, the number of women enrolled in university STEM courses increased from 77,673 to 87,371. This was a 12% increase, compared to a 5% increase for men.

Despite this increase in the number of women enrolling in university STEM courses, very few women are going into vocational STEM education. The number of women enrolling in vocational STEM education has increased 8%

from 2018 to 2020. However while women made up 37% of university STEM enrolments in 2020, they only made up 16% of vocational STEM enrolments. Efforts to retain women in STEM occupations need attention. A five-year study of STEM graduates from the year 2011 found that by 2016, only 1 in 10 STEM-qualified women worked in a STEM industry, compared with more than 1 in 5 STEM-qualified men. The data reveal there is significant work to be done in these areas.

As a result, our efforts during this grant period have focused on systemic issues, particularly in workplaces, that prevent full and equitable participation. Our activities are detailed in full in the following sections:

- Advice to government and the STEM sector
- Research projects
- The STEM Equity Evaluation Portal
- Future You
- Public engagement
- Other resources

WORKPLAN 2022 OUTCOMES

No.	Activity	Outcomes	KPI no.	KPIs	Progress toward target	Evidence of outcomes/impacts
1	Implement the 'Future You' initiative to promote STEM career pathways, reduce stereotypes and gender bias and increase the visibility of girls and women in STEM.	Target audiences are aware of the diverse and exciting career possibilities in STEM, and of the economic benefits of STEM careers for individuals and for the nation The visibility of diverse women in STEM is increased Gendered perceptions of career and discipline choice are challenged	1.1	Expand on successful elements of the pilot Future You campaign and transition to an on-going program with a continuous communications plan.	On track	See section: Future You for details
			1.2	Partner with high-profile STEM organisations to create authentic content and expand the initiative's reach.		
			1.3	Develop and implement a communications plan that supports Future You activities (e.g. launch activities) to promote the initiative and grow audiences		
			1.4	Partner with industry and other leaders in areas of national significance, such as manufacturing, low emissions technology and resources to develop content that profiles and promotes areas of national skills need.		
			1.5	Develop a sustainability strategy for Future You and secure funding partners.		
			1.6	Deliver ongoing evidence-based awareness raising digital content.		
			1.7	Ongoing evaluation of impact including recommendations for the development and delivery of an initiative with sustained outcomes.		
2	Support implementation of Boosting the Next Generation of Women in STEM program	A fit for purpose program design that increases representation of women in the STEM workforce, and helps develop deeper and new connections and collaborations between researchers, industry and students, on industry-relevant problems.	2.1	Participate in the co-design of the program (including connecting the delivery partner with relevant stakeholders)	Achieved	See section: Advisory work for details
			2.2	Participate in governing body (TBC)		
			2.3	Promote uptake through networks and media		
3	Develop and launch an Evaluation Portal to support Women in STEM program managers to conduct evaluations, share data and attract funding for proven projects. Draft a project outline and plan appropriate ways to target/incentivise participation from a range of sectors and organisations. Include a program logic.	Women in STEM programs are effectively evaluated and learnings are shared across the sector. The Evaluation Guide and Portal are widely adopted across the sector.	3.1	Engage an appropriate vendor to create the Evaluation Portal	On track	See section: Evaluation for details
			3.2	Test and launch the Evaluation Portal		
			3.3	Deliver communications activities to support the launch and use of the Evaluation Portal		
			3.4	The portal is widely adopted by the sector to evaluate programs		
4	Advise leaders and policy makers on issues affecting women and girls in STEM and evidence-based interventions and policies to support women in STEM.	Leaders and policy makers are informed and able to make policy decisions designed to address systemic issues affecting the participation of girls and women in STEM.	4.1	Advise government departments and Ministers and inform policy outcomes relating to women and girls in STEM.	Achieved	See sections: Advisory work and Strategic engagements and partnerships for details
			4.2	Support the Department of Industry, Science, Energy and Resources in the development and ongoing implementation of gender equity in STEM initiatives.		
			4.3	Involvement in advisory groups with leaders from key organisations and government agencies including the Defence STEM Council.		
			4.4	Engage with international stakeholders to share Australia's unique policy and institutional responses on gender equity in STEM.		
5	Provide input to consultations on future STEM workforce needs and STEM education for government departments/STEM organisations as requested.	Government departments and STEM organisations receive specific feedback with a view to implement measures to remove barriers to girls' and women's participation in STEM.	5.1	Consult on policy and strategies relevant to women in the STEM workforce.	Achieved	See section: Advisory work
			5.2	Provide feedback on discussion papers, guidelines and other documents as required.		

No.	Activity	Outcomes	KPI no.	KPIs	Progress toward target	Evidence of outcomes/impacts
6	Mobilise stakeholders across education, industry, research, and government to identify opportunity areas to drive change, support existing gender equity activities, and coordinate and collaborate on initiatives.	Key stakeholders are mobilised to remove barriers to girls' and women's participation in STEM. Organisations are supported to address inequities that prevent retention and progression of women in STEM fields	6.1	Engage new STEM stakeholders (for example from the climate change/low emissions technology space) in gender equity initiatives to develop relationships, make the case for change, and influence the implementation of evidence-based interventions and policies to support women in STEM.	On track	See sections: Advisory work and Strategic engagements and partnerships
			6.2	Promote high quality existing initiatives and resources to stakeholders through talks, media channels and meetings, including programs designed to assist in re-engaging girls and women in STEM following the impact of the COVID-19 pandemic		
			6.3	Identify and engage stakeholders and other leaders, particularly in areas of national significance such as manufacturing, low emissions technology and resources, who are not currently focused on systemic change for gender equity. Reach out to the Clean Energy Council to begin consultation in this space. Develop relationships, make the case for change and influence the implementation of evidence-based interventions and policies to support Women in STEM.		
			6.4	Continue to broaden the network of the Women in STEM Ambassador to coordinate efforts and amplify existing initiatives.		
7	Inform awards committees and public campaigns on how to encourage diversity of recipients and selection committees.	Increase in the number of women who apply or are nominated for, and who win, awards.	7.1	Develop and deliver a plan to promote PMI's prizes, Eureka Prizes and other different prizes/award throughout the year.	On track	See section: social media
			7.2	Develop and deliver a plan to engage and advise prize organisers on strategies to make selection processes more equitable.		
8	Support and leverage the networks of existing sector organisations such as SAGE, Chief Executive Women (CEW) and Champions of Change Coalition (CCC) to remove barriers to women's participation in STEM. Share latest research and outcomes with the STEM community to encourage uptake of positive measures.	Corporate and industry leaders are mobilised to remove barriers to the participation of girls' and women in STEM. Resources are shared and widely used across the sector.	8.1	Support and share the activities and research outputs of relevant organisations.	Achieved	See section: Strategic engagements and partnerships for details
			8.2	Meet regularly with leaders of the organisations to discuss opportunities and provide advice when requested.		
9	Promote and share recommendations from the Women in STEM Decadal Plan and support its implementation. Promote existing women in STEM initiatives including the Women in STEM and Entrepreneurship (WISE) grants; STEM Equity Monitor, STEM Women website, the Girls in STEM Toolkit, Boosting the Next Generation of Women in STEM and STA's Superstars of STEM.	Progress is made toward implementing the recommendations in the Decadal plan. Existing initiatives and resources are shared and utilised across the sector. The STEM Equity Monitor is used as an evidence base for decision-making	9.1	Promote the Decadal Plan widely through speeches, media, and other activities.	Achieved	See section: Public engagement, Advisory work, and Strategic engagement and partnerships for details
			9.2	Encourage stakeholders to implement relevant Decadal Plan recommendations. Provide advice to Decadal Plan Champions if requested.		
			9.3	Promote the STEM Women database and Girls in STEM Toolkit as appropriate through keynote speeches and other communication channels e.g. social media.		
			9.4	Provide support to the Superstars of STEM as a mentor and notify the Superstars of media opportunities as appropriate.		
			9.5	Promote the STEM Equity Monitor as the go-to data source for statistics on girls and women's representation in STEM, influencers' perceptions of girls' and boys' abilities, and student subject choices		
			9.6	Collaborate to ensure the Office of the Women in STEM Ambassador's work aligns with existing initiatives.		
			9.7	Promote and help shape the Boosting the Next Generation of Women in STEM program to encourage uptake.		

No.	Activity	Outcomes	KPI no.	KPIs	Progress toward target	Evidence of outcomes/impacts
10	Deliver communications activities to support and maintain the Ambassador's position as a recognised leader and expert on women in STEM.	The Australian public are aware of the Women in STEM Ambassador, and the media recognise that the Ambassador is a leader and expert on women in STEM.	10.1	Publish Annual Review 2021 and disseminate to key stakeholders.	Achieved	See section: Public engagement for details
			10.2	Submit 2022 Annual Work Plan in February based on Minister for Science and Technology Statement of Expectations.		
			10.3	Regular communications across social channels and the WISA website to communicate the work of the Office and key gender equity messages.		
			10.4	Proactively seek opportunities to share Australia's unique policy and institutional responses on gender equity in STEM with partners in international fora.		
			10.5	Develop a media strategy to secure regular media coverage on the role of the Women in STEM Ambassador, including at least 5 television appearances, 1 major feature in a mainstream media outlet (e.g. Australian Women's Weekly feature 2021), and develop relationships to enable regular media appearances e.g. as a 'go to' person for comment.		
			10.6	Write and release the Women in STEM Impact Report		
11	Deliver communications activities to promote diversity in STEM careers and key messages around gender equity in STEM, engaging a broad range of traditional and new media.	The Australian public understand that STEM is for everyone. Target audiences are aware of the diverse and exciting career possibilities in STEM, and of the economic benefits of STEM careers for individuals and for the nation The visibility of diverse women in STEM is increased Gendered perceptions of career and discipline choice are challenged	11.1	Develop a communications plan that promotes and communicates the outreach and engagement activities of the Women in STEM Ambassador and the work of the Office to the Australian public	Achieved	See section: Public engagement for details
			11.2	Implement and monitor the communications plan across online, social media, print, radio and television media, and undertake monthly reviews and assessment of messaging, engagement levels and resonance with the target audience.		
			11.3	Lead communications efforts through media series which will engage and reach audiences aligned with WISA's strategic priorities (e.g. parents and carers and regional communities)		
			11.4	Leverage dates of significance (e.g. International Day of Women and Girls in Science, International Women's Day, NAIDOC Week, National Science Week) to promote the Office's projects and other gender equity in STEM initiatives.		
			11.5	Support existing Australian Government Women in STEM initiatives by embedding them across WISA communications, where relevant, as well as amplifying announcements on social media platforms and co-creating content when requested (e.g. video content).		
			11.6	Secure regular media coverage featuring the Ambassador and the Office's key messages through a broad range of traditional and new media.		
12	Embed a consideration of intersectional barriers into the advisory and communications activities of the Office	The visibility of diverse women in STEM is amplified and reflected in the work of the Office Organisations consider the intersectional barriers affecting underrepresented groups when addressing gender equity.	12.1	Collaborate with relevant organisations on activities and associated media campaigns around key dates/events.	On track	See sections: Future You and Advisory work for details
			12.2	Promote diversity of speakers at conferences and events.		
			12.3	Consult with relevant expert stakeholders in the development and delivery of content produced by the Office		
			12.4	Profile the increased barriers to participation and underrepresentation of diverse groups in STEM and evidence-based interventions to address these challenges. These groups include Aboriginal and Torres Strait Islander women, those living with disability, residing in regional or remote locations, and those from culturally and linguistically diverse backgrounds.		
			12.5	Support the sector to address inequities and issues related to intersectionality which prevent organisations from retaining women with intersecting identities in STEM fields.		

No.	Activity	Outcomes	KPI no.	KPIs	Progress toward target	Evidence of outcomes/impacts
13	Communicate the case for gender equity and the Women in STEM strategy across the sector - via conference keynotes, panels, speeches and articles.	Educators address and correct gender bias and stereotypes in their classrooms. STEM subjects are chosen equally by students of all genders.	13.1	At least 45 conference talks, panels, media appearances and articles per year that make the case for gender equity in STEM.	Achieved	See section: Public engagement for details
			13.2	Promote the implementation of key government-funded activities as evidence-based interventions for the sector.		
14	Communicate with educators, education providers and students about gender equity in STEM education and to promote best practice to reduce gender bias and stereotypes. Advise the Department of Education, Skills and Employment on evidence-based measures to upskill STEM educators and improve girls' uptake of STEM subjects	Educators address and correct gender bias and stereotypes in their classrooms. STEM subjects are chosen equally by students of all genders.	14.1	Deliver at least 5 keynote and panel presentations at conferences and events for educators, education providers, and students.	Achieved	See sections: Future You, Public engagement and Strategic engagements and partnerships for details
			14.2	Engage virtually with at least 30 schools, colleges, universities, VET providers and cultural institutions across Australia, through the Future You campaign, educational resources available via DART Learning, and selected virtual talks or events.		
			14.3	Provide ongoing advice to the Department of Education, Skills and Employment regarding building the STEM pipeline through the education system.		
15	Participate in academic research collaborations that study the gender factors within STEM education and engagement.	The Office contributes to the evidence base on Women in STEM	15.1	Pursue research publications from the activities of the Office where appropriate.	On track	See section: Research projects for details
			15.2	Secure and commence a research collaboration agreement with WGEA to study gender factors within Australian STEM and non-STEM workplaces		
			15.3	Analyse 7-years of WGEA data and collaborate with WGEA to write and submit findings to be published in reports and academic journals		
16	Work with national research funding councils to identify opportunities to improve gender equity and diversity in STEM.	Funding councils act on opportunities to improve gender equity and diversity in STEM.	16.1	Support research funding organisations to identify areas for improvement and encourage implementation of evidence-based changes to address these areas.	On track	See section: Research projects for details
			16.2	Provide advice and feedback where requested on consultation documents, reports, etc.		
			16.3	Meet with ARC, NHMRC and AusIndustry to keep up to date with activities and identify where our Office can offer support.		
17	Implement anonymised review in research resource allocation application/selection processes and investigate the outcomes for gender equity.	<ul style="list-style-type: none"> Implementation of anonymised review for an application process in research/STEM organisations. Ongoing data collection adding to the evidence for this measure as a method to reduce bias in an Australian context. 	17.1	Collect and analyse data, write and submit research paper to be published.	On track	See section: Research projects for details
			17.2	Deliver communications activities to promote the findings and publication of the research		
18	Host and maintain the Expert FindHer Resource directory	Provide increased visibility of and access to information and support for female entrepreneurs through transferring, hosting and maintaining Expert FindHer resources directory content from https://staging.expertfindher.global/ initiatives to the Ambassador's existing website.	18.1	Transfer directory content from https://staging.expertfindher.global/ initiatives to the Ambassador's existing website.	Achieved	See section: The Australian Resource Directory for Women Entrepreneurs
			18.2	Maintain directory content on the Ambassador's existing website.		



ADVICE TO GOVERNMENT AND THE STEM SECTOR

The Ambassador is a trusted advisor on the systemic changes required to address gender inequity in STEM. In 2022 she provided advice to government, industry representatives, peak bodies, and research organisations that focussed on four areas:

- meeting the future needs of Australia's STEM-skilled workforce
- structural workplace changes required to address intersecting barriers to participation
- highlighting proper evaluation as essential to ensure equity initiatives are rigorous and well-resourced to reduce barriers to workforce participation
- advising funding bodies on equitable funding processes

The Ambassador advocated for investment in evidence-based solutions to address systemic issues affecting people who face discrimination in the workforce. Professor Harvey-Smith dedicated 158 hours of meetings and presentations as part of her advocacy and advisory work over the course of the year, as well as providing feedback on discussion papers, reports and consultations including:

- the Engineering for Australia Taskforce report [Increasing women's participation in engineering education: actions for change](#)
- the Chief Executive Women whitepaper: [Why don't women get the cool jobs? What to do differently so talented women advance to leadership in STEM sectors, according to women who are leading the way](#)
- the Pathway to Diversity in STEM Review [Terms of Reference](#)
- the [Elevate Advisory Group](#) Terms of Reference, Implementation Plan, and application guidelines
- consultation to the [National Health and Medical Research Council](#) on proposed changes to the Investigator Grant scheme
- consultation to the [Snow Medical Research Foundation](#) on awarding grant funding following a keynote presentation delivered by the Ambassador at the Snow Medical Gender Equity Forum

FUTURE WORKFORCE NEEDS

The Ambassador provided policy advice and updates to, former minister Price in early 2022. In August Professor Harvey-Smith met with Minister Husic and was invited to present at two government Roundtables: the Science and Commercialisation Ministerial Roundtable and the Large Australian and Multinational Technology Companies Policy Roundtable. The Ambassador provided formal submissions containing ten policy recommendations to Minister Husic and Minister for Women Senator the Hon. Katy Gallagher.

Professor Harvey-Smith continued to work closely with the Office of the Chief Scientist, Dr Cathy Foley, throughout 2022 to discuss options for future Government investments for women in STEM. The Ambassador also met with the Department of Industry, Science and Resources' Technology and National Security Division to provide advice on gender equity in our quantum technologies workforce.

MEETING WITH CHIEF SCIENTIST AUGUST 2022



STRUCTURAL WORKPLACE CHANGES TO ADDRESS INTERSECTING BARRIERS

The Ambassador continued to serve as a member of the Questacon Advisory Group and the Australian Space Agency Advisory Board, bringing to the table issues relevant to the creation of a vibrant and equitable STEM workforce and of inspiring the next generation of STEM talent. Professor Harvey-Smith attended the National Forum on Space Workforce, and met with the head of the Space Agency, Enrico Palermo, to provide advice on gender equity in workforce growth planning.

The Ambassador provided expert advice to Australian Government programs supporting women in STEM. She was an active member of the ATSE Elevate Advisory Group, advising on the detailed design of the Elevate – Boosting Women in STEM program. She contributed to the ATSE Roundtable on Digital Skills the outcome of which was a submission to the Commonwealth Government on the Australian STEM workforce. Dr Kingsley delivered a workshop on evaluation at the Science in Australia Gender Equity (SAGE) Diversity Interventions conference. SAGE CEO, Dr Wafa El-Adhami, engaged in discussions with the Ambassador regarding sector-wide adoption of the Evaluation Portal, and potential for its use amongst SAGE member organisations to improve equity programs that are delivered in their workplaces.

The Ambassador remained an active member of the Engineering for Australia Taskforce, working with a consortium made up of Engineers Australia, Cicada Innovations, the Australian Academy of Technology and Engineering and universities to identify opportunities to ‘put the E back in STEM’. The taskforce produces research reports that recommend actions to remove barriers to young people studying engineering. Professor Harvey-Smith has been a member of the Engineering for Australia Taskforce since its inception in 2019. In March the Taskforce released a [report](#) mapping the actions that schools, industry and government can take to improve the uptake of engineering studies and retain skilled employees — and Professor Harvey-Smith spoke to [The Canberra Times](#), [Climate Control News](#), and [The Sector](#) about the report.

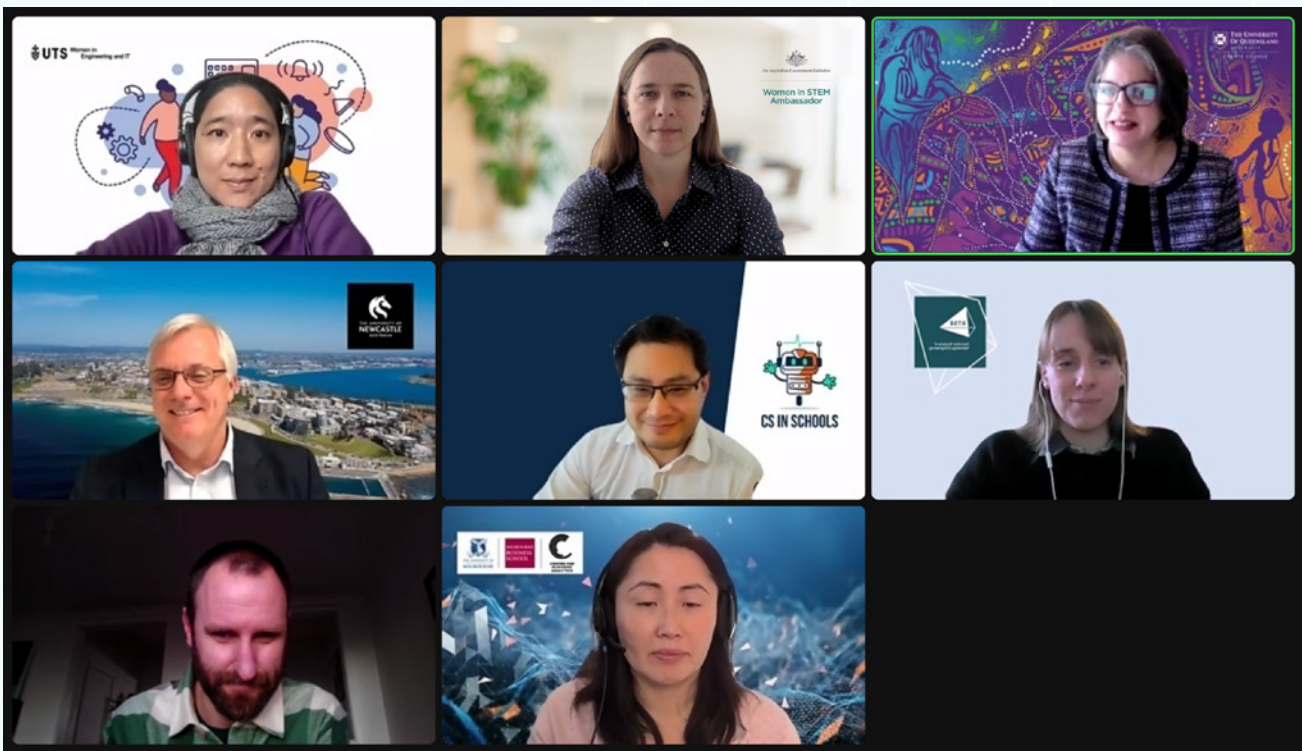
Professor Harvey-Smith met regularly with gender equity leaders in Australia including the Australian Ambassador for Gender Equality, the e-Safety Commissioner, the Australian Sex Discrimination Commissioner, and leaders from the Office for Women, ANROWS, and Our Watch. These meetings facilitated information sharing and communication across government agencies and civil society organisations and coordination of gender equity work and policy recommendations for cultural and social change measures to improve women’s safety and economic security.

Professor Harvey-Smith took part in an all-day forum (attended by the Federal Attorney-General) to learn more about the Respect@Work council and listened to presentations on intersectional barriers to accessing help with workplace sexual harassment. In a separate event, the Ambassador gave a presentation about her work to the Australian Human Rights Commission's Sex Discrimination team to uncover further opportunities for collaboration.

In 2022 the Ambassador's Office engaged closely with the Champions of Change Coalition (CCC), whose members cover every major sector of the economy and include representatives from business, government, community, academic, and not-for-profit organisations. Formally engaging leaders, especially those with the power to drive change, is critical to address the systemic and societal issues relating to gender equality. Dr Kingsley provided members of the CCC STEM Group with a preview of the STEM Equity Evaluation Portal at their quarterly meeting in September 2022. Members will be encouraged throughout 2023 to use the Portal to evaluate their equity programs.

Chief Executive Women (CEW) is a membership organisation for women leaders of Australia's largest private and public organisations, of which the Ambassador is a member. In late 2021 Professor Harvey-Smith joined G20 EMPOWER representative Christine McLoughlin in a series of Roundtables with CEW members focused on advancing women in private sector STEM leadership, learning what works (and what challenges remain) in Australian STEM organisations, with a call to action for these leaders to influence change in their own spheres of influence. Following these discussions, CEW published a [whitepaper](#) in early 2022 that shares the lived experiences of senior women leaders in STEM and outlines actions organisations can take to advance women's leadership the sector. Professor Harvey-Smith also spoke at the CEW Breakthrough Summit in September on skills and future jobs that will take women to new heights.

ATSE DIGITAL SKILLS ROUNDTABLE AUGUST 2022



“The Women in STEM Ambassador assisted greatly the APEC-Australia Women in Research Fellowship judging process by offering unique expert views on current trends and issues facing women STEM researchers in the Asia Pacific region. This Department of Foreign Affairs and Trade funded program benefitted greatly from her involvement.”

Briony Wood-Ingram

Program Director

The Australian APEC Study Centre
RMIT University

ADVICE TO FUNDING BODIES

The Ambassador and Dr Kingsley met frequently with the ARC and the NHMRC in 2022, to share preliminary findings from the Analysis of Awarded Australian Grants by Gender study and to advise on equity issues that relate to the administration of grant funding. We provided input to the NHMRC Investigator Grant scheme consultation, advocating for a trial of equitable research funding allocation. Professor Harvey-Smith gave a presentation at a Gender Equity Forum organised by Snow Medical, after which we provided further advice on Snow Medical’s proposed approach to minimum gender equity requirements for organisations applying to them for grant funding. We gave several pieces of feedback, which were incorporated into the discussion document. The Ambassador and Dr. Kingsley also met the Queensland Chief Scientist’s team who were interested to learn about the Office’s research into awarding grant funding.

International information exchange

International engagement and collaboration continued in 2022. Professor Harvey-Smith served on the judging panel for The Australia - APEC Women in Research Fellowship. Twenty five-year fellowships were given to women researchers from APEC economies to undertake research programs that will benefit their home countries and Australia, and tackle important challenges from climate, ecosystems, disease prevention to plastic pollution and food security. Dr Kingsley worked with APEC on the US-led project for a Women in STEM metrics framework for APEC economies. She provided recommendations of suitable gender indicators for the metrics framework. The recommended indicators are based on gender disaggregated data collected and reported in Australia by organisations such as the Australian Bureau of Statistics and Workplace Gender Equality Agency (e.g., gender composition of the workforce, higher education enrolment and completion rates).

Following our involvement in a Women in STEM Webinar hosted by the Australian Embassy in South Korea in 2021, the Ambassador and her team met with our Republic of Korea counterpart organisation, the Centre for Women in Science, Engineering and Technology (WiSET) in July 2022. We learned about WiSET’s funding model, legal framework, and programs, and were able to share Australia’s commitments to gender equity in STEM. WiSET shared further information on their programs following the meeting and are keen to pursue further collaboration in future.

RESEARCH PROJECTS

ANALYSIS OF AWARDED AUSTRALIAN GRANTS BY GENDER

Dr Isabelle Kingsley, Research Associate, is leading a **study** examining trends over time in twenty years (2000-2020) of Australian government grants awarded by the Australian Research Council (ARC) and the National Health and Medical Research Council (NHMRC) according to awardee gender. The analysis also accounts for other factors such as academic level, field of research, scheme, funding amount, and Group of Eight status of the administering organisation.

Throughout the project, we worked closely with the ARC and the NHMRC to discuss how the outcomes of our research may guide future actions by the ARC, NHMRC and other funders.

The study was submitted to an academic journal at the end of 2022. We will disseminate the findings in a public report containing recommendations for relevant key actors, including higher education and research institutions, research funders and government, in 2023.

THE ANONYMOUS REVIEW TRIAL AND STUDY

We are leading a **national Australian trial** to study the effects of anonymising grant applications for in-demand scientific equipment with Australian research organisations. The results will provide a strong evidence base to inform government and the STEM sector on where and when anonymisation might be a suitable process.

Four Australian research and funding organisations are taking part in the trial: the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia's Nuclear Science and Technology Organisation (ANSTO), the National Computational Infrastructure (NCI), and Astronomy Australia Limited (AAL).

Since March 2020, we have worked closely with these organisations to make significant structural changes to their time allocation schemes. They made changes to their procedures, systems, and application portals to integrate and implement anonymous review practices.

The project is ongoing. Data were collected throughout 2022 and our research team will conduct their analysis in 2023.

STEM EQUITY EVALUATION PORTAL

To support effective equity program evaluation, we have developed a suite of free resources for people running STEM-related equity programs. In 2020, we published the **National Evaluation Guide** for STEM equity programs, which has been accessed 4,958 times (to 31 December, 2022) and used to evaluate STEM equity programs including the Australian Academy of Science's STEM Women Database and Education Services Australia's Girls in STEM Toolkit.

In July 2021, we received funding from the Commonwealth Department of Industry, Science, Energy and Resources to create a digital extension of the Evaluation Guide and produce an online evaluation tool and national repository for STEM equity programs.

The **STEM Equity Evaluation Portal** was launched on 9 November 2022, with more than 350 people attending the online event. Special guest speakers included the Hon. Ed Husic MP, Minister for Industry and Science, CEO of the Academy of Science, Anna-Maria Arabia and CEO of Science in Australia Gender Equity, Dr Wafa El-Adhami.

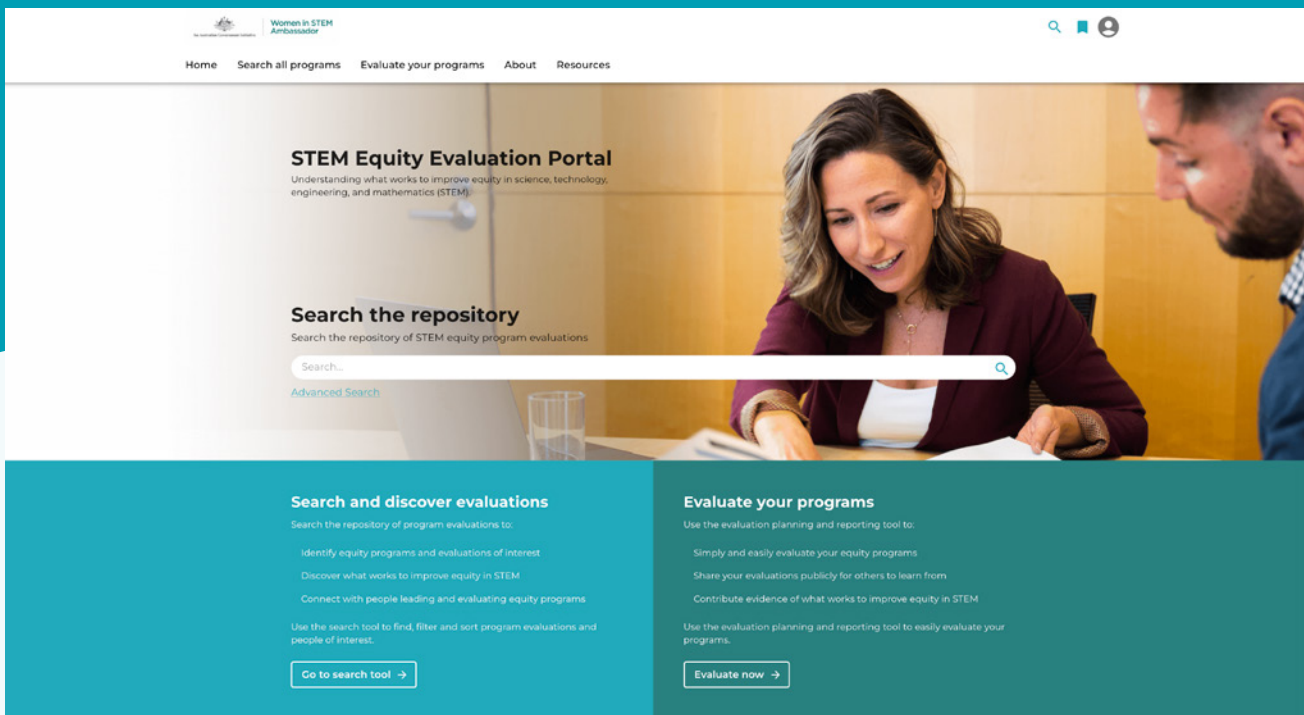
Created by Dr Isabelle Kingsley, the Portal and Guide are complementary, user-friendly resources that offer practical advice to help STEM equity program leaders evaluate their programs. The Portal contains standardised and interdependent elements that users can 'click & select' to build an evaluation plan and report on findings. It also includes a bank of recommended tools (surveys, tests, and other instruments) users can choose from for their evaluations. The Portal is also a searchable repository to discover program evaluations and learn what works and doesn't work to improve equity.



With this work, we are leading the delivery of all three strategic recommendations from the Women in STEM Decadal Plan, *Evaluation: understanding what works*.

1. By 2022, establish a consistent national evaluation framework that guides evaluation efforts across all existing and future gender equity
2. Organisations who fund STEM gender equity initiatives support evaluation and evidence-based approaches by requiring evaluation as a condition of funding
3. Improve awareness of existing programs and their efficacy

The evaluation resources were also an integral part of the Australian Government's Advancing Women in STEM 2020 Action Plan.



EVALUATION PORTAL HOMEPAGE

The Evaluation Portal and the associated Evaluation Guide are designed to:

- Enable project-level evaluation and demonstrate what works to attract, retain, and progress girls and women in STEM
- Support a culture of evidence-based practice by enabling activities to be improved based on evaluation data
- Create consistency and comparability of evaluation data
- Publish and collate evaluation data in a national repository to (1) improve awareness of existing programs and their efficacy, (2) identify and/or address any gaps, and (3) inform decision making about what works and what should be scaled up and/or funded across sectors
- Support and incentivise collaboration between providers of programs within and across sectors to create stronger cohesion and consolidate efforts and resources

Highlighting the need for robust evaluation of STEM equity programs is a priority of the Office, and the development of this suite of tools and resources will continue in 2023 with the publication of an implementation guide to workplace change. In addition to the Ambassador’s advisory work regarding promoting proper evaluation, we will also deliver a coordinated awareness campaign to encourage industry leaders to use our evaluation tools and publish their findings on the Portal.

FUTURE YOU

In September 2022, the reimagined Future You program was launched across Australia.

Future You aims to change perceptions about STEM careers to build a more diverse, skilled workforce, ready to tackle the technological, environmental, and economic challenges Australia faces. The program provides educators, families and children with exciting and engaging resources, activities and lesson plans that encourage students aged 8 to 12 to

explore STEM careers. Following on from the successful pilot campaign in 2020, the focus of Future You shifted towards delivering a more holistic program that captures the hearts and imaginations of children across Australia, inspiring them with visions of themselves working with STEM skills in the future.

The new program launched with a series called Pathfinders, which showcases short films featuring extraordinary people working with STEM skills.



THE HIGHFLYER - RENEE WOOTTON

FUTURE YOU BOOTH



Pathfinders

Season One tells the career stories of four incredible women working in aerospace, conservation, machine maintenance and augmented reality storytelling:

- **The Fixer** - Louse Azzopardi is a heavy vehicle mechanic who started an apprenticeship at 15 and never looked back. Growing up on a farm inspired Louise's passion for mechanical engineering and she now mentors and teaches other tradeswomen
- **The Highflyer** - Renee Wootton is an aerospace engineer who discovered a passion for aviation when she joined the Air Force Cadets in her mid-teens. A proud Tharawal woman, Renee now works as the First Nations Engagement Manager for Qantas, and has her sights set on space
- **The Storyteller** - Mikaela Jade is the Founder and CEO of Canberra-based digital consultancy, Indigital. Mikaela uses augmented reality to tell the traditional stories of the Cabrogal people, and recently addressed the 2022 World Economic Forum in Davos about Indigenous storytelling
- **The Protector** - Dr Phoebe Meagher, wildlife conservation officer at Taronga Zoo. Trips to the outback with her grandmother sparked Phoebe's passion for wildlife, and she now uses forensic science to save animals. Her work has been featured on the cover of Australian Geographic and she is a leading authority on Australia's shark life

Each of the Pathfinder films, by filmmaker Hugh Clark, is accompanied by a stunning portrait poster by graphic artist Claudia Chineyere Akole, with additional design elements by Cassandre Collins. The posters are available to download from the [Future You](#) website, together with [teaching resources](#), activities and career advice packs to help educators and families to engage with children in discussion and exploration of STEM and possible career pathways.

MEET THE PATHFINDERS LOUISE, RENEE, MIKAELA AND PHOEBE





IMAGINING THE FUTURE WRITERS: MELISSA, ALISON, REBECCA, LILI AND GARY

Imagining the Future

Imagining the Future is a STEM fiction program that encourages children to explore the exciting world of future STEM careers through short stories written by some of Australia's most acclaimed authors.

The first series launched in October 2022 with the heart-stopping thriller **Far Out!**, by leading Australian writer, Lili Wilkinson. Series one is set in the future and explores humanity's first deep space outpost on Callisto, a moon of Jupiter. Alongside Lili's story, new writing by Alison Evans, Rebecca Lim, Gary Lonesborough and Melissa Keil to be released in 2023 will take children on an interstellar journey of the imagination.

Each story features young protagonists who use STEM thinking, coupled with ingenuity, inventiveness, and courage, to solve problems related to life off-world. The stories are available to download in written form, or as dramatised podcasts featuring exciting young Australian actors, rich sound design, and a captivating soundtrack. The first story, **Far Out!**, read by Brenna Harding from Channel 10's *Puberty Blues*

features sound design by Weronika Rażna, and a commissioned soundtrack by Freya Berkhout which features pop song **Galaxy Vibes (Far Out!)**, also performed by Freya.

Free, curriculum-aligned teaching resources for educators and families, and activities for children, accompany each story to enrich student comprehension and engagement with the stories and encourage greater interest in pursuing careers in STEM.

In October a targeted online advertising campaign for Future You began. This campaign received 1.8 million impressions from October to December 2022 from children aged 8 to 12 years, educators, and families. Future You has also received media coverage across Australia, including regional areas such as Alice Springs (NT), Gunnedah (NSW), Toowoomba (QLD), Murray Bridge (SA), Gippsland (VIC), and national coverage from the Saturday Telegraph, Women's Agenda, NITV Radio, and Engineers Australia.

Since the launch of the new website in September 2022, Future You has received a total of 23,199 page views and 2,169 video views.

PUBLIC ENGAGEMENT

OUTREACH

The Ambassador and her team continued to engage with the community throughout 2022 by providing actionable, evidence-based advice for Australians to act on equity measures. She communicated these messages through 49 hours of outreach and public events across Australia, engaging with 8,239 people including students, teachers and educators, policymakers, STEM research organisations and industry representatives. The Ambassador's public engagements included 62 conference talks, panels, webinars, online events, and school visits that made the case for equity in STEM.

Public and schools engagement

To mark the International Day of Girls and Women in Science (IDGWS), the Ambassador spoke at the **Superstars of STEM Evaluation Report** launch alongside former minister Price, and also wrote the foreword to the report. On International Women's Day, Professor Harvey-Smith joined a virtual panel discussion as part of the Stanford University Women in Data Science conference, hosted by the Commonwealth Department of Education including to raise awareness of Future You. In May, the Ambassador delivered a keynote presentation on the future of Space and Spatial industries and the importance of building a diverse STEM workforce at the Locate 22 Conference, and added her expertise to a panel event in September for the Women in Public Service Leadership Conference.

Professor Harvey-Smith continued to visit schools throughout 2022, with schools able to book an online visit, download her **astrophysics on-demand webinars** from the DART Learning online platform, or via **STEM Storytime**. In March Professor Harvey-Smith gave a presentation on space to an audience of young people for The Royal Society's Young People's Book Prize Award Ceremony, a virtual event based in the U.K. The Ambassador delivered keynote presentations at the Australian Conference in Science and Mathematics Education where she highlighted the importance gender equity in STEM to teachers and closed out the school year with a presentation to the Australian National University's school-wide seminar at the Women in Physics Gala.

Professor Harvey-Smith, Associate Professor Williams, and Dr Kingsley met and exchanged information with Equity, Diversity and Inclusion (EDI) researchers from universities including Deakin University and UNSW. Dr Kingsley presented at a National University Collaboration workshop on evaluating gender equity programs. The Office met with researchers working on RMIT's Gender Equality Evidence Hub to discuss potential collaboration opportunities related to the Evaluation Portal. We also met with the team from Swinburne University of Technology, Deakin University, and the University of Melbourne who are developing the **STEM Hub** funded by the Invergowrie Foundation, to discuss synergies between their project and Future You.

We built on strong relationships forged with others working in educational outreach including Questacon, the CSIRO and the Australian Space Agency. Conversations regarding opportunities to promote and inform Future You and its development took place throughout 2022 and we plan to collaborate with these organisations further in 2023 to promote uptake of Future You resources. Professor Harvey-Smith also engaged significantly with schools through the Future You program, which is detailed in the next section: Future You outreach and engagement.



SCHOOL VISIT SELFIE

WEMBLEY PRIMARY SCHOOL VISIT



FUTURE YOU OUTREACH AND ENGAGEMENT

On the International Day of Women and Girls in Science, Future You Producer Dan Prichard partnered with the National Youth Science Forum (NYSF) to host a webinar panel discussion between Professor Harvey-Smith, NYSF CEO Dr Melanie Bagg, and NYSF Alumni to discuss careers in STEM. This webinar event also launched a pitch-fest competition, where students were challenged to pitch a new Future You program idea.

“Dr Phoebe’s story is right on point for us. I also REALLY appreciate the storytelling and VET components. You’ve created some great stuff here - thank you so much.”

Erin Johnson

NSW DET STEM specialist teacher



THE PROTECTOR - DR PHOEBE MEAGHER

We worked closely with the NSW Department of Education STEM team this year, meeting with Dr Scott Sleaf to organise our participation in the STEM2022 Conference. The Ambassador gave the conference opening address to 600 STEM teachers, supported by a Future You exhibition where Dan Prichard and Jaqui Pyke discussed the program with teachers and distributed posters of Pathfinder STEM role models for use in classrooms. These engagements with teachers also helped us to gather feedback prior to the Pathfinders launch, and encouraged sign-up to our Future You mailing list, which will drive engagement with teachers to ensure uptake of Future You in schools.

In September, the Ambassador delivered a keynote for the Victorian Department of Education Primary Maths and Science Specialists program, which demonstrated how engaging with maths and science in primary schools might inspire a passion for science and being a scientist. The Ambassador delivered a similar presentation with Digital Engagement Officer Becky Laurence in November to Queensland STEM teachers via their STEM One Channel –this was an opportunity to engage directly with Queensland primary school teachers and demonstrate how Future You can be used in classrooms.

International events

On the International Day of Women and Girls in Science in February, Professor Harvey-Smith gained global exposure for Australia’s women in STEM activities at the **World Expo 2020: Dubai’s World Majlis ChangemakeHER** event. In August, the Ambassador spoke about the work of the Office in a Keynote presentation at the inaugural **Ladies Who Tech Convention** in Chengdu, China. She also inspired Singaporean students through an on-demand webinar that outlines the Ambassador’s work and career as a woman working in STEM for the **United Women Singapore STEM Fest** event.



STEM 2022 TEACHERS CONFERENCE

Evaluation webinars and workshops

Following the launch of the Evaluation Guide and the Evaluation Portal, the Ambassador encouraged stakeholders to engage in meaningful evaluation of STEM equity programs at every opportunity throughout the year. Dr Kingsley delivered webinars and workshops on evaluation to several organisations in 2022 to provide practical support to program owners across Australia to evaluate their programs and promote evaluation as a priority action that will remove barriers to girls' and women's inclusion in STEM. In April at the SAGE Diversity Interventions conference Dr Kingsley delivered a workshop entitled: What works? Evaluating your equity program to 95 attendees.

In the lead up to the launch of the STEM Equity Evaluation Portal, Dr Kingsley provided a webinar to the Australian Resources and Energy Employer Association (managers and professionals in the resources and energy sectors), many of whom provide role models for AREEA's Bright Future STEM program for 9 -12-year-old children. Attendees were encouraged to use the portal to evaluate their programs.

Mentoring and career advice

The Ambassador continued to support the Superstars of STEM program and served as a mentor, providing practical advice and support to participants as she has each year since the program's inception. Professor Harvey-Smith also accommodated individual requests for mentoring and career advice where possible, including an interview for an Extraordinary Australians school project, and providing advice to early and mid-career women working in STEM.

MEDIA

Media coverage of the Women in STEM Ambassador featured on radio, in print, online and on TV, with mainstream media as the leading source of coverage, including ABC, The Age and Women's Agenda. In 2022 media activity totalled 496 appearances or mentions reaching a collective 16.9 million people and 79% favourability, with the remaining media sentiment reported as neutral.

Key coverage in 2022 about women's participation rates in STEM included interviews with the Ambassador in [The Age](#), an article in [The Conversation](#), and an article in [Cosmos Magazine](#). Professor Harvey-Smith outlined the persistent barriers to full participation in STEM and focused on the importance of evaluating current initiatives to find out what's working, promoting the STEM Equity Evaluation Portal as a valuable tool for helping drive equity in STEM.

In June 2022, Engineers Australia released the Women in Engineering Report. Professor Harvey-Smith featured in various national media outlets communicating the need for greater focus on engineering in early education. Create Digital quotes the Ambassador as saying: "Engineering is very practical. It's very creative. It's very hands-on, that is taught as a package, which is relevant to young people's interests, then I think we can get to a place where girls can really see themselves in engineering."

The Ambassador continues to be regular guest on ABC News (radio and television), informing audiences about a range of issues confronting girls and women in STEM while also highlighting positive initiatives. In August, the Ambassador was a guest on [The Drum](#) to speak about the significance of NASA's Artemis Project, and what this meant for historically underrepresented groups in STEM.

The launch of the reimagined Future You website in September 2022 was covered by the media through various formats. The Saturday Daily Telegraph featured an article about Dr Phoebe Meagher, one of the Future You Pathfinders, which was available in print and online. Additional media coverage also included Gympie Today, 5RM and radio news recordings were broadcast by 213 radio stations across the country.

Mikaela Jade, one of the Future You Pathfinders, and the Ambassador were interviewed by SBS NITV Radio, and these interviews were broadcast across Australia. Messaging highlighted the importance of supporting underrepresented groups, such as Aboriginal and Torres Strait Islander women and girls, in accessing STEM, as well as the importance of representation.



THE STORYTELLER - MIKAELA JADE

SOCIAL MEDIA

In 2022, the Women in STEM Ambassador social media channels had a combined following of 13,935. There was a 21.7% increase in social media followers from the previous year, indicating continued interest in the Ambassador’s work. Our social channels are an important avenue to communicate our work to our stakeholders in the STEM sector. Our content is informed by five pillars:

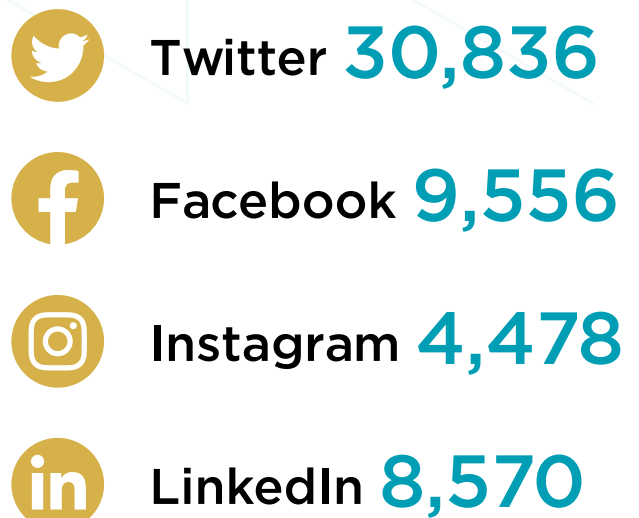
Pillar	Type of content
Educate	Infographics, research findings, notable statistics, resources
Amplify	External content that aligns with our values and mission
Spotlight	Achievements, advocacy, case studies, Analysis of Awarded Australian Grants by Gender, Anonymised Review Study
Engage	Events, quotes, surveys
Support	Entrepreneurs Resource Directory, the STEM Careers Hub, Future You, The Evaluation Portal, The Evaluation Guide

The significance of the Australian Government’s Women in STEM Ambassador initiative in supporting women in STEM was recognised by the Hon. Ed Husic MP, Minister for Industry and Science, when he announced the reappointment of Professor Harvey-Smith in November 2022.

“Professor Harvey-Smith has been an excellent leader within the STEM sector and will continue to provide expert advice and advocate the case for change. In doing so, she will continue to be a visible role model to encourage girls and women to enter STEM education and careers.”



Combined followers



(Future You does not have a Linked In page)

Caption: Professor Harvey-Smith, The Office of Women in STEM Ambassador and Future You channels combined

OTHER RESOURCES

THE AUSTRALIAN RESOURCE DIRECTORY FOR WOMEN ENTREPRENEURS

In early 2022, we added the **Australian Resource Directory for Women Entrepreneurs** to our website. The directory contains a collection of relevant programs, funding sources, networks, mentors, and tools to support women entrepreneurs. It complements the **Boosting Female Founders Initiative** which aims to support women entrepreneurs to grow their start-up businesses.

THE STEM CAREERS HUB

We partnered with Grad Australia to launch a **STEM Careers Hub** in September 2022. The Hub provides STEM graduates with information about employment opportunities, from internships to summer programs, work placements to graduate jobs in STEM. It provides graduates with access to employer reviews written by recent graduates, and first-hand accounts from STEM graduates of what they do day-to-day in their roles.

OUR PEOPLE

The team includes:



**Australian Government
Women in STEM Ambassador**
Professor
Lisa Harvey-Smith



Chief Investigator
Associate Professor
Lisa A. Williams



Future You Producer
Dan Prichard



Research Associate
Doctor
Isabelle Kingsley



**Digital Content and
Engagement Officer**
Becky Laurence



Senior Administrative Officer
Jaqui Pyke

Contracted Research Assistants

Contracted creatives

Filmmakers, authors/writers, actors, musicians, composers, graphic artists, web developers and web designers

These roles equip our Office with a diversity of expertise to enhance our capability to conduct gender equity research, communicate our messages to a broad audience and allow us to expand our impact.

WHO WE WORK WITH

We work with stakeholders across government, industry, research, and education to:

- Advocate for the removal of systemic barriers to drive change
- Identify, support, and encourage evaluation of existing gender equity activities
- Collaborate to boost the reach and impact of STEM equity initiatives

Government	AusIndustry, DISR, DFAT, The Australian Department of Education, QLD Department of Education, NSW Department of Education, VIC Department of Education, WA Department of Education, TAS Department of Education, SA Department of Education, Australian Space Agency, the Office for Women, Australia's Chief Scientist, QLD Chief Scientist, Department of the Prime Minister and Cabinet, ANSTO, CSIRO, Questacon, Workplace Gender Equality Agency (WGEA), Science in Australia Gender Equity (SAGE), Australian Research Council, National Health and Medical Research Council
Peak Body/ Advocacy	Australian Human Rights Commission, ANROWS, Chief Executive Women, Our Watch, STEM Sisters, Science and Technology Australia, Engineers Australia, Women in Leadership Australia, Women in Aviation Australia, Tradeswomen Australia, Australian Academy of Science, Australian Academy of Technological Sciences and Engineering
Industry	Google (YouTube), Prosple, ASG, CommBank, Laing O'Rourke, Education Services Australia, Refraction Media, Jala, Alphabet Design, Champions of Change Coalition - STEM organisations, BioMelbourne Network, STEM Returners, Naval Shipbuilding College
Education	UNSW, RMIT, Deakin University, Monash University, ANU, Macquarie University, Australian Science Teachers Association, Science Educators' Association of the Australian Capital Territory, National Youth Science Forum, Australian Primary Principals Association, Centre for Social Impact, CoRE Learning Foundation, Story Factory, Australian Science Innovations, Tech Girls Movement
International	APEC, Australian embassies in Japan and South Korea, United Women Singapore, Ladies Who Tech China, WiSET, EXPO2020 Dubai
Media	ABC TV, ABC News Breakfast, ABC Radio, NITV, SBS, The Australian, Australian Financial Review, The Conversation, Women's Agenda, Nature, Broad Agenda 50/50, Cosmos News, Mirage News, The Age, Food and Drink Business, The Guardian, Campus Morning Mail, Sydney Morning Herald, Create Digital, Climate Change News, Innovation Aus, News.com.au.
Other	Indigital, Stronger Smarter Institute, Access2Arts, The Wheeler Foundation, Taronga Zoo, Career Trackers, Dream Big Australia, The Graeme Wood Foundation, parents, carers, teachers, students, STEM professionals.

KEY STAKEHOLDERS WE COLLABORATED AND COMMUNICATED WITH IN 2022

GRANT BUDGET

The Women in STEM Ambassador initiative is funded through a Commonwealth Grant Agreement, which provides \$3.145 million in funding over three years.

The cost breakdown of the budget and expenditure for the three-year grant is shown below:

	Total Project Budget (\$)	Total Expenditure (\$)
Contract Expenditure	620,520	431,994
Delivery of Work Program	322,988	121,970
Independent Audit	10,000	0
Labour	2,181,177	1,130,974
Staff Training	2,000	0
Travel	8,315	2,393
Total Project Costs	3,145,000	1,687,333

2023 OUTLOOK

VISION

A more inclusive, dynamic, and sustainable STEM sector in Australia.

MISSION

To mobilise Australians to remove barriers to equity in STEM.

PURPOSE

To cultivate the conditions in which everyone in Australia can pursue successful and rewarding careers in STEM.

GOALS

To mobilise employers, educators, and carers to remove barriers to full participation in STEM.

To embed a consideration of intersectional barriers into everything we do.



2023 WORKPLAN

In 2023, the Women in STEM Ambassador team will work to realise our goals by delivering the following workplan:

Workplace Equity

Activities	KPIs/outputs
<ul style="list-style-type: none"> Develop and publish an implementation guide to workplace equity Work closely with industry, including SMEs, and the broader STEM sector to promote and facilitate workplace change initiatives Develop and deliver a plan to promote uptake of the Evaluation Portal and the implementation guide 	<p>WE1 Publication of an implementation guide to workplace equity on our website</p> <p>WE2 Minimum of 300 downloads of the implementation guide</p> <p>WE3 Meetings and events to promote the uptake of equity initiatives</p> <p>WE4 Minimum of 300 registered portal users</p> <p>WE5 Minimum of 50 evaluations published on the portal</p> <p>WE6 A set of evidence-based tools to support transformative action for equity in workplaces</p> <p>WE7 A repository of publicly available data to improve STEM equity initiatives across Australia</p>
<p>Impact</p> <ul style="list-style-type: none"> A STEM sector that is empowered to implement positive workplace change 	

Diversity in STEM Review Research

Activities	KPIs/outputs
<ul style="list-style-type: none"> Provide input and advice to the independent Pathway to Diversity in STEM (DiSTEM) review Lead research to support the DiSTEM review, on areas determined through collaboration with the review panel 	<p>DR1 Regular touchpoints to respond to requests for, and provide advice to, the review panel</p> <p>DR2 Delivery of appropriate reports and documents to the review panel</p> <p>DR3 Collated evidence-based advice on diversifying Australia's STEM education, careers, and industries</p>
<p>Impact</p> <ul style="list-style-type: none"> Government and STEM sector initiatives are evidence-based 	

Research Projects

Activities

- Complete the Anonymous Review study and disseminate findings
- Complete communication activities on the results of the Analysis of Awarded Australian Grants by Gender project
- Undertake analyses and research on systemic barriers to women's participation in the Australian STEM workforce

Impact

- Advanced Government and STEM sector understanding of systemic barriers to representation in STEM and how to remove them

KPIs/outputs

RP1 Anonymous Review study: one academic paper and one public report

RP2 Analysis of Awarded Australian Grants by Gender:

- One (new) academic paper – submission to an academic journal by 30 Nov 2023
- Two public reports

RP3 Research on systemic barriers for women in the STEM workforce: one public report

RP4 Recommendations for sector stakeholders to implement action to promote equity and diversity in STEM



Public Engagement

Activities

- Deliver communications activities that promote awareness of - and engagement with - the work of the Women in STEM Ambassador (including the Evaluation Portal and implementation guide to workplace equity)
- Build and strengthen relationships with stakeholders to increase the uptake of STEM equity tools
- Write and promote articles that inform the public on equity matters in STEM
- Secure media coverage to communicate the work of the Office
- Connect with target audiences through presentations, panels and other events that communicate our key messages
- Continue to broaden the network of the Women in STEM Ambassador to coordinate efforts and amplify existing initiatives
- Collaborate with and amplify activities that work to increase equity in STEM, including relevant government-funded programs

Impact

- Australians are aware of the barriers to participation in STEM and how to remove them
- Information is shared across networks to connect audiences with resources and information to improve equity in STEM

KPIs/outputs

- PE1** Minimum of 24 articles shared across a wide variety of media
- PE2** Minimum of 24 media interviews given, including on television, radio, podcasts
- PE3** Minimum of 20 keynote presentations, panel discussions and webinar/workshop presentations delivered
- PE4** Consistent communication with audience including through the publication of quarterly newsletters and the Annual Review
- PE5** Encompass views which are reflective of broad engagement with Australia's diverse communities

Advocacy and Advisory

Activities

- Advise leaders and policy makers on equity issues in STEM and evidence-based interventions and policies to advance inclusion in the sector
- Support research funding organisations to identify areas for improvement and encourage implementation of evidence-based changes to address these
- Collaborate with existing sector organisations to discuss opportunities and provide advice when requested
- Work with the STEM sector to understand key challenges and promote mechanisms to support pathways to STEM education, careers, and leadership positions
- Work together with leaders in industry, advocating for the systemic changes required to advance equity in STEM
- Engage with international stakeholders in information exchange, and share Australia's practical approaches to improving STEM inclusion

Impact

- Government, industry leaders, and research funding bodies make coordinated efforts to improve equity in STEM based on best practice

KPIs/outputs

AA1 Involvement in advisory groups with leaders from key organisations and government agencies

AA2 Feedback provided on discussion papers, guidelines and other documents as required

AA3 Minimum of 5 engagements with relevant international organisations

AA4 Contribute to workplace equity KPIs

AA5 Knowledge exchange with counterpart organisations

Future You

Activities

- Continue to build the national awareness-raising initiative, Future You
- Develop and deliver appropriate supporting documentation including a project plan, communication plan, and sustainability proposal
- Ensure resources are reflective of Australia's diverse communities
- Develop and deliver targeted promotion activities to build a strong digital and media presence with the target audience
- Develop relevant partnerships where possible to support the campaign
- Engage with educators, education providers, and students to promote gender equity in education and Future You
- Evaluate the effectiveness of the program

Impact

- Improved awareness of STEM careers amongst children, teachers and carers

KPIs/outputs

FY1 Minimum of 30 resources available on the Future You Website

FY2 Minimum of 3000 of resource downloads

FY3 Resources include perspectives of First Nations peoples, those living with disability, those living in regional or remote locations, those with varying socio-economic circumstances, those who identify as LGBTQIA+ and those from cultural, linguistic and neurodiverse backgrounds

FY4 Minimum of 100 of schools engaged with program

FY5 Minimum 10 of conference and professional learning engagements



An Australian Government Initiative

Women in STEM Ambassador



UNSW
SYDNEY