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**Athena
SWAN**

Science in Australia Gender Equity (SAGE)

Pathway to Diversity in STEM Review:

Submission to the consultation on the Draft Recommendations

8 September 2023

Overview

We thank the Review panel for their work and for taking on board much of our [feedback](#) to the initial consultation.

By stressing the need for a coordinated, strategic approach to equity, diversity and inclusion (EDI) in STEM, the Review's Draft Recommendations report builds on the success of the 2019 [Women in STEM Decadal Plan](#) produced by the Australian Academy of Science and the Australian Academy of Technology and Engineering. It also recognises that the sector has moved into a new phase of action on improving diversity and inclusion.

We are very supportive of all the draft recommendations, and are particularly pleased to see the following themes, which reflect the strengths of the SAGE framework, featuring strongly throughout:

- intersectionality and the consideration of diversity other than gender
- a coordinated strategy to ensure that barriers at every stage of the STEM lifecycle are addressed, and that initiatives do not duplicate each other
- ensuring initiatives are evidence-based and subject to rigorous monitoring and evaluation
- the long-term sustainability of change initiatives.

We emphasise the importance of continued investment in research to establish best practices and evaluate programs. The STEM sector needs better information to ensure that our programs meet the needs of the labour market and produce the best outcomes for people working in STEM. This Review offers an opportunity to coordinate meaningful, sector-wide metrics to measure progress. For example, we could be tracking graduates to better understand how individuals and cohorts progress in the workforce, and where the barriers to their participation lie.

Our submission offers further suggestions, insights and questions for consideration to help refine the Review's draft recommendations.

Summary of feedback

Feedback on specific recommendations

- ✓ **A central government office for diversity in STEM initiatives:** We seek further clarity on the responsibilities, oversight and role of the office.
- ✓ **A sector-wide EDI strategy:** We would welcome a strategic focus on actions and outputs while setting measurable targets.
- ✓ **Long-term funding:** The timeframes required to engage in systemic change frameworks lead us to support the proposed 10-year minimum funding period.
- ✓ **Linking grant funding to EDI:** We applaud the recommendation to and suggest possible criteria for assessment.
- ✓ **Bullying, harassment and discrimination:** SAGE applauds the proposal to establish this as a form of scientific and academic misconduct.
- ✓ **Requiring organisations to show evidence of EDI performance:** We welcome the proposal requiring organisations to demonstrate embedded EDI when seeking grants and other funding.
- ✓ **Compensation for employees doing EDI work:** We suggest that organisations also minimise the burden on 'diverse' staff by ensuring that there are dedicated, qualified staff to lead EDI work.
- ✓ **Assessment of researchers' performance:** We support developing more equitable ways of conducting this assessment.

Feedback on recommendations regarding SAGE

- ✓ **SAGE looks forward to responding to the needs of the Australian STEM sector,** diversifying our services and deepening our advisory role as the experts on improving EDI in STEM.

Feedback on draft recommendations

Recommendations relating to leadership and governance

Recommendation 1a

The Australian Government should set up an ongoing central office and independent council to maintain accountability, oversight and momentum of diversity in STEM initiatives.

We welcome further clarity on the responsibilities, oversight and role of the Government's central office for diversity in STEM initiatives.

The coordination of diversity in STEM initiatives will ensure greater accountability for progress. We would appreciate the Panel further exploring the responsibilities and oversight of the office and providing clarity in their final recommendations.

Further consideration could be given to:

- how the office might work with other government organisations and departments working in gender equity, diversity and inclusion, such as the Office for Women
- how the office will work with organisations that are funded by the Australian Government
- how the office will work with programs that are not (or have never been) funded by the Australian Government; including any reporting requirements imposed on them (i.e., the extent of the office's oversight)
- the type of advice and guidance that the office will provide to STEM programs; for example:
 - providing subject-matter expertise, such as tailored one-on-one advice on specific EDI issues (for example, Indigenous cultural competency)
 - developing and providing toolkits and good practice guidance (for example, an evaluation toolkit)
- how the office will work with EDI programs that do not specifically target STEM organisations or disciplines but have been used in a STEM context, such as the Career Revive program or the Australian Workplace Equality Index.

Recommendation 2a

Building on recommendations of this review, the Australian Government should create a national strategic approach to diversity in STEM initiatives.

We would support a sector-wide strategy that focuses on actions and outputs, and sets measurable EDI targets.

A new strategic plan is exciting and signals a new phase in promoting diversity and inclusion. We would welcome a strategy that focuses on actions, cooperation and outputs, building on experience gained from current initiatives and programs, and avoiding duplication among initiatives.

In addition, we would welcome a strategy that:

- sets specific EDI targets for the sector
- includes measurements of success
- requires regular, public reporting on progress against its targets.

Recommendation 2b

Government funding bodies and STEM-employing organisations should commit to the long-term success of diversity in STEM programs and initiatives.

The timeframes required to engage in systemic change frameworks lead us to support the proposed minimum 10-year period for funding.

SAGE welcomes the commitment to long-term funding. We recognise that systemic change takes time and requires sustained investment, and that outcomes and impact can take a long time to emerge. With the assurance of funding continuity, recipients can direct their full energies to implementing, evaluating and refining their programs.

Our experience implementing the SAGE framework has shown that programs requiring whole-of-organisation engagement in systemic change takes several years.

Organisations working with the SAGE framework often need 1 to 2 years to identify inequities and design an action plan to address them. Implementing that action plan can be expected to take another 3 to 4 years. A thorough evaluation, with reporting, may take a further 1 or 2 years, because showing sufficient outcomes and impact after implementation does take time. The first participants joined the SAGE pilot in 2015, but we only started receiving evidence of outcomes and impact through the Cygnet Awards 7 years later (noting that the COVID-19 pandemic caused unexpected delays).

This experience leads us to support the proposed minimum 10-year period for funding.

Recommendation 3a

Government grant funding, investment and procurement for STEM-related programs should align with best practice guidelines for inclusion and diversity.

We applaud the recommendation to link grant funding to an EDI commitment and suggest possible criteria for assessment.

We are pleased that this recommendation reflects our own recommendation¹ to link funding to EDI policies, practices and outcomes, and applaud the Panel's decision to propose it.

¹ SAGE (2023) [Submission to the Pathway to Diversity in STEM Review dialogue starter](#).

Recent approaches developed in Australia and internationally may inform the development of this policy, including approaches taken in the European Union², Ireland³, and domestically at the Snow Medical Research Foundation⁴ and the National Health and Medical Research Council (NHMRC)⁵.

The Panel might recommend that the criteria for an EDI commitment could be evidenced by:

- the institution's EDI strategy and performance
- the demographic diversity of the research team
- demonstrating an EDI lens on project design, implementation and/or expected project benefits.

Further, projects that can demonstrate the inclusion of, and value to, underrepresented and marginalised groups could be ranked more highly for competitive funding.

The approach to linked funding could also mature over time. While initial funding could be linked to EDI *commitments*, as the diversity of the sector improves changes could be made to link funding to EDI outcomes.

We also encourage the Panel to make the following additions to their recommendation:

- Grant applicants could be required to specify, in their original proposal, details of the EDI outcomes and impacts they plan to measure, how and over what period. These could then be considered as part of the assessment process, rather than a condition that must be met *after* receiving the grant.
- Funding/investment bodies could specify the forms of diversity (demographic, skills, lived and professional experience, and so on) that would be taken into consideration, and provide guidance on which should be prioritised under what circumstances.

² Horizon Europe is the EU's 2021–2027 framework programme for research and innovation. To be eligible for Horizon Europe funding, applicants must show that their institution has a Gender Equality Plan that is publicly available, adequately resourced, evidence-based and supported by capacity building; and they have integrated a gender dimension in their research proposal, for example by examining any sex or gender differences in the outcomes of a drug trial.

³ Science Foundation Ireland (n.d.) [Irish funding bodies to require Athena SWAN gender equality accreditation for higher education institutions to be eligible for research funding](#), SFI website, accessed 31 March 2023.

⁴ Hare J (6 March 2023) ['No gender equality? Then no money from this major philanthropist'](#), *Australian Financial Review*, accessed 31 March 2023.

⁵ National Health and Medical Research Council (12 October 2022) [Working towards gender equity in Investigator Grants](#), NHMRC website, accessed 11 April 2023.

Recommendations relating to workplaces

Recommendation 9a

STEM-employing organisations and governments should apply policies like anti bullying and harassment, flexible work and pay transparency to create safe and inclusive environments. They should invest in programs to accelerate progress for underrepresented groups, like career development, fellowships, job customisation or mentoring.

SAGE applauds the proposal to treat bullying, harassment and discrimination as a form of scientific and academic misconduct.

As employers are the key determinant of staff retention and progression, organisations are key change agents. Research shows that, flexible work, generous parental leave and unbiased promotion processes can be effective tools in retaining diverse staff. However, these tools are only effective if the organisational culture provides the safety for all employees to utilise them.

Attraction and retention of diversity in STEM relies on the safe workplaces, where everyone can thrive. SAGE applauds the proposal to treat bullying, harassment and discrimination as a form of scientific and academic misconduct, and for these to be grounds for denying or withdrawing funding.

Recommendation 9b

STEM-employing organisations and governments should adopt or strengthen accountability mechanisms for middle and senior leaders to effectively implement policies and programs that accelerate change and inclusion.

We welcome the proposal requiring organisations to demonstrate embedded EDI when seeking grants and other funding.

Requiring organisations to show evidence of EDI performance when seeking contracts or funding will not only promote transparency and accountability in this area, but also normalise EDI as a basic requirement of doing business.

As organisations vary greatly in size and EDI maturity, it is pragmatic to provide flexibility in options for demonstrating good EDI practice, noting there should be some expectation for organisations to show continuous improvement. We agree that actions like mandatory training and evaluation, quotas or targets, and performance agreements are good examples of evidence that could be provided.

To prevent this from becoming a box-ticking exercise, organisations should also describe how they train and incentivise staff (particularly middle managers)⁶ to implement these

⁶ Williamson S, Colley L, Foley M and Cooper R (2018) [The role of middle managers in progressing gender equity in the public sector](#), Public Service Research Group (UNSW).

actions correctly. For example, organisations should set key performance indicators (KPIs) for managers' involvement in EDI initiatives, and reward those who meet these KPIs.⁷

To help organisations drive change and make it easy (from an administrative perspective) for them to provide evidence of good EDI practice, we would be delighted to work with industry and the Australian Government to enable non-academic or non-research organisations to participate in the SAGE accreditation program. We suggest ways to do so in our feedback on Recommendations relating to SAGE.

Recommendation 10a

All STEM-employing organisations should develop a recruitment and promotion system for STEM positions that attracts, retains and promotes employees from underrepresented, including intersectional, cohorts.

Organisations should compensate the employees doing EDI work, and also minimise the burden on 'diverse' staff by ensuring that there are dedicated, qualified staff to lead EDI work.

We commend the Review for drawing attention to the often invisible labour of EDI work, and for calling for reward and recognition systems to fairly compensate the employees (often from marginalised backgrounds themselves) who do this work.

Research shows that staff from marginalised backgrounds are disproportionately relied upon to provide pastoral care for equity students (and often invest more emotional energy⁸ in providing this care), educate their colleagues on EDI issues, and to contribute to the organisation's EDI agenda.⁹ Diversifying the staff cohort is one way to ensure that there are more staff available to do this work, relieving the 'identity tax' on existing 'diverse' staff.

All employees should be given the opportunity to contribute to EDI initiatives in their organisation, and we acknowledge the tremendous value of grassroots/volunteer initiatives in the workplace. However, leading EDI initiatives is a big responsibility and requires specialised skills in change management, cultural competence and subject matter expertise in EDI, to name a few. Instead of relying solely on employees to drive initiatives in addition to the requirements of their official role (even if the additional work is appropriately recognised), organisations should ensure that there are dedicated, qualified staff to lead this work.

⁷ Creary SJ, Rothbard N and Scruggs J (2021) [Improving workplace culture through evidence-based diversity, equity and inclusion practices](#), Wharton School of the University of Pennsylvania.

⁸ Macqueen S, Southgate E and Scevak J (2023) [Supporting students from equity groups: experiences of staff and considerations for institutions](#), *Studies in Higher Education*, 48:356–367.

⁹ Crimmins G, Casey S and Tsouroufli M (2022) [Intersectional barriers to women's advancement in higher education institutions rewarded for their gender equity plans](#), *Gender and Education*.

Mahoney MR, Wilson E, Odom KL, Flowers L and Adler SR (2008) [Minority faculty voices on diversity in academic medicine: perspectives from one school](#), *Academic Medicine*, 83(8):781–786.

Recommendation 11a

Australia should follow the lead of other countries, such as the Netherlands and the UK, to change the recognition, reward and research systems we use to assess the performance of STEM researchers.

We support developing more equitable ways of assessing researchers' performance.

We specifically support the consideration of addressing career interruptions, non-traditional career paths and more. It provides a more contextualised picture of what a person has achieved, given the opportunities they had.

We are also very supportive of the suggestions for research funding bodies and research organisations to improve job security and career progression and mobility.

Recommendations relating to SAGE

SAGE has shown success in making the academic and research sector accountable for cultural changes that support women to stay and progress in their careers.

SAGE should work with the academic sector, industry and the Australian Government to build on this success. It should consider a self-sustaining, sector-led model to further embed accountability to drive cultural change, and support retention and progression for other underrepresented cohorts.

SAGE looks forward to responding to the needs of the Australian STEM sector, diversifying our services and deepening our advisory role as the experts on improving EDI in STEM.

We are excited to continue to work with the education sector and further build on our success together with higher education, industry and the Australian Government.

We are looking forward working with representatives from the Australian Government and STEM organisations to create a pathway to inclusive workplaces that is tailored to the industry context, while retaining the systemic, evidence-based approach that sets SAGE apart from other EDI accreditation schemes.

About Science in Australia Gender Equity (SAGE)

Who we are

Sage is a not-for-profit organisation founded by the Australian Academy of Science and the Australian Academy of Technology and Engineering.

Our purpose is to promote and advocate for gender diversity and equity in Australian higher education and research, thereby fostering excellence, building trust in the sector, and strengthening its future.

What we do

We support our subscribers to create healthy and productive workplaces.

We provide evidence-driven strategies, capacity building, professional development and collaborative practitioner networks that foster sustainable and embedded change, while providing a pathway to accreditation through the internationally recognised Athena Swan Charter.

“SAGE is the only transformative gender equity program of its kind in Australia designed to achieve sustained cultural change via a national accreditation framework. Measures to enable SAGE to be adopted by all higher education and research institutions across Australia would bring unparalleled impact.”

— Women in STEM Decadal Plan

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