



SAGE
SCIENCE IN AUSTRALIA
GENDER EQUITY

CATALYSING
GENDER EQUITY 2020
BE PART OF THE SOLUTION

20–21 FEBRUARY
ADELAIDE CONVENTION CENTRE

APPENDIX
**WORKSHOP
SUMMARIES**

Exploring Departmental awards for SAGE

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Alison Johns – Advance HE

Dr Margaret Hartley – Advisor

Dr Adi Paterson – ANSTO

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Objective

To inform the design of the SAGE Athena SWAN awards pathway to meet Australian sector needs

Summary

An overview of the UK Athena SWAN Charter awards pathway showed that the approach continues to evolve from its original, 2005, form. Early stages of the UK awards were at Institutional level only; Departmental awards (flexibly encompassing units which sit below the Institutional level) were introduced in 2010.

While Institutional awards were found to be useful in highlighting high level areas for change, the UK introduction of Departmental awards responded to a need to explore Departmental cultures and disciplinary differences; address specific or localised issues; and to embed change locally. However, the burden of work involved in applying for a Departmental award can be challenging, and indeed this is a key concern for both the Australian and UK sectors. The Athena SWAN framework is currently being reviewed in the UK, with the aim of *reducing burden, retaining rigor*.

Key themes/ideas which emerged through the workshop discussions were:

- Institutions should have the autonomy to decide how best to achieve their equity, diversity and inclusion goals and progress from Bronze to Silver award levels. Suggestions were made that:
 - Action is needed at the local level as well as at an Institutional level.
 - Departmental awards do not need to be mandatory.
 - Institutional Silver award applications could include requirements for Department level data analysis and action.
- Any Departmental strategy must be sustainable, aligned with, and connected to the Institution's overall strategy and approach.
 - Institutional leadership needs to provide governance and accountability.
 - Data gathering and reporting functions should be centralised.
 - The Department's leadership and management needs to be engaged beyond implementing Institutional actions to allow the full learnings from a Department to be integrated into Institutional strategy, as appropriate.

- Certification, rather than accreditation, could help reduce burden for Departments. For example, a Case Study format could be used to highlight change and impact. 'Flagship themes' (such as tackling pay equity) could be nominated for Institutional level focus, with strategic actions embedded at Department level to address these themes.
- A clear picture is needed of what Institutional Silver looks like, and what 'unit' or 'Department' means in practice.
- Institutions should use metrics to identify their 'weakest areas' and to prioritise change in these (rather than putting forward the 'best departments' to achieve awards). This would help drive sector-wide improvements.
- Data are important to help identify problems and target actions. Benchmarking data are needed to identify common areas for action across the sector, and to understand where (and how) progress and impact are being made.

Key outcomes

The key themes emerging from the workshop are now informing the design of the SAGE Athena SWAN awards pathway to meet Australian sector needs. The design will aim to:

- 'reduce burden, retain rigor'
- enable Institutions the required flexibility and autonomy in decision-making whilst supporting their journey to effect progress and impact, and therefore to achieve a Silver award
- facilitate a focus on the Institution's key strategic priorities
- facilitate alignment in approaches to addressing gender equity, diversity, and inclusion, and to evidencing impact of initiatives, at Institutional and sub-unit level.

Next steps

- The feedback from workshop participants, outcomes of the UK review, and consultation with Advance HE, will inform the design of the SAGE Athena SWAN awards pathway. The proposed design will be presented to stakeholders at Head of Institution level for final agreement.
- The design of the SAGE Athena SWAN awards pathway will be published by end of Quarter 2 2020.
- Work in support of developing the SAGE Data Framework will be progressed concurrent with the awards pathway work.

Achieving diversity in STEM focused media

Four case studies showcasing positive examples of progress and change in working towards gender equity in STEM focused media.

STEM women in the media: Facts, figures and futures

Dr Merryn McKinnon – Senior Lecturer, ANU
[ACCESS SLIDES](#)

In 2018 Dr Merryn McKinnon analysed Australian mainstream and science news media to understand its diversity, finding only 20% of articles exclusively quoted women. In response she has developed a simple five-step process, START, aimed at anyone in STEM wishing to increase the diversity in their public representation: Support. Train. Advocate. Reinforce. Track. [Learn more here.](#)

Bring her into focus

Antra Kalnins – Communications Specialist, Macquarie University
[ACCESS SLIDES](#)

In 2017, after identifying that only 32% of its external media articles featured female academics, Macquarie University's marketing team developed a gender strategy to achieve a minimum 40% male/female representation in the stories told on the university's channels. Through quarterly reporting, actively seeking stories about women, providing media training and other changes, Macquarie has managed to regularly meet its target. Regular surveys of staff also found that 68% of researchers who appeared in the media said their appearance led to a new professional opportunity.

ABC 50:50

Claire McKay – Adelaide News Editor, ABC
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In 2018, UTS measured the diversity of ABC News content, identifying a 64% male skew and 95% Anglo-Celtic identifying presenters. This led to the 50:50 goal for talent by the end of 2020. The approach to reaching this goal is multi-faceted (see slide 4) but includes news team collecting daily data to inform their editorial conversations and intent to build this into KPIs, Talent Diversity training for the News, Analysis and Investigation team and 50:50 Champions to contribute brainstorming new approaches. ABC News also has an internal database of expert women that they are constantly growing.

Countering bias in media representation of science

Associate Professor Darren Saunders – Principal investigator, UNSW Sydney
[ACCESS SLIDES](#)

Darren Saunders gave a presentation on his experiences as a prominent scientist in the media. He highlighted how he has begun collecting diversity details on who he interviews for his own radio segment, inspired by [I Spent Two Years Trying to Fix the Gender Imbalance in My Stories](#), encouraging others to do the same. He also identified gender bias in how [cancer research stories are told](#).

Next steps

Continue to monitor the media and related networks to identify positive examples of progress.

Inclusive and respectful workplaces: attracting and retaining our STEM workforce

Three case studies showcasing positive examples of progress and change in creating inclusive and respectful workplaces across the STEM sector.

Inclusive and respectful workplaces: attracting and retaining our STEM Workforce

Sarah Howards and Kylie Emery – Australian Research Council
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The Australian Research Council presented an overview of the Gender and the Research Workforce report, providing data on the stark differences in gender proportion across two-digit fields of research and across employment levels. Key findings included the loss of women at level C and above in most STEM disciplines, and women departing level A and B levels at twice the rate of men. See data for your discipline [here](#). The ARC highlighted its current actions to support women in research, including the introduction of Research Opportunity and Performance Evidence (ROPE) to grant applications.

Diversity in Australian Science

Professor Lisa Kewley – Director, ASTRO 3D

Professor Lisa Kewley has transferred her knowledge of data modelling in astrophysics to gender equity in higher education data. Using publicly available higher education research data, Professor Kewley created a model that predicts the gender split across employment levels, identifying that a 2-3% implicit bias is required to reproduce 2017 data. These models have predictive power for testing new initiatives and estimating the time it will take to produce change.

Gender Equity at CSIRO—Pathways to Impact

Kerry Elliott – Executive Manager, Diversity and Inclusion, CSIRO
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Through extensive data analysis, CSIRO identified that between 2013 and 2016 senior hires were heavily skewed towards males. Through its SAGE Action Plan, it identified 90 actions which are grouped by impact. Tracking of action is available for all staff via the SAGE Action Tracker which gives real-time snapshots of progress.

Next steps

Continue to monitor and share successful examples of creating inclusive workplaces across the STEM sector.

Implementing actions: the role of equity practitioners and project officers

Presented by members of the Innovative Research Universities (IRU) network:

Kristin Perry – James Cook University

Associate Professor Theresa Petray – James Cook University

Dr Tasha Weir – La Trobe University

Kelly Parsons – Murdoch University

Professor Tracy Taylor – Murdoch University

Dr Kiernyn McKay – Western Sydney University

Lisa O'Neill – Flinders University

Ashley Vidulich – Griffith University

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Objective

The IRU Network found that through collaboration the journey of implementing action plans can be more effective, less daunting with a greater chance of success. We see there is real value in sharing strategies and learning from each other as front-line practitioners and project staff.

The session objective was to allow participants to share and learn from others to support their journeys of change towards gender equity.

Workshop summary

Research findings overview

The IRU commenced the workshop with the presentation of research findings delivered by Dr Tasha Weir. Dr Weir studied the role of project officers who are undertaking the Athena SWAN work within higher education institutions.

Key findings shared were:

- there is confusion over what the role involves (responsibilities), the skills required, governance and scope including self-assessment to monitor SAGE
- the number of hours required for the Bronze accreditation and the impact it had on their regular workload, followed by a perceived lack of recognition was an issue
- despite backlash received most project officers enjoyed the process of working towards SAGE accreditation
- to be successful, project officers need to find allies, find and network with people who can catalyse change and ensure the projects are adequately resourced.

Panel discussions

The panel discussion was facilitated by Dr Kiernyn McKay. The IRU practitioners on the panel were from each of the three cohorts. They reflected on their day-to-day roles—their experiences, challenges and suggestions.

Key experiences shared included:

- one factor key to success in role: having a full-time position dedicated to gender equity and ability to form relationships with colleagues in that capacity

- one challenge in achieving success in role: change and restructuring of the university—feeling like you are starting from scratch to keep rebuilding new relationships with key leaders
- one factor key to success in role: having actions embedded into KPIs and operational plans as well as having broad support across the university
- interconnectedness is clearly key within each organisation as means of overcoming challenges to achieve success.

Interactive participant workshopping

The final section of the workshop included participants breaking into groups to discuss five key themes; how they have experienced these issues or themes within their organisations; and what strategies they have employed to overcome or address these issues. The summary of these discussions is included in [Table 1 on page 5](#).

Key outcomes

Shared knowledge and experiences of the challenges experienced by diversity practitioners trying to influence change in their institutions, and strategies to enable success.

Next steps

Let's keep the conversations going and focus on achieving change as a collective of dedicated and passionate practitioners. Reach out to the IRU network or any other practitioners or contacts who can support your journey.

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Table 1.
Key themes discussed in the workshop ‘Implementing actions: the role of equity practitioners and project officers’

Theme	Issues	Strategies
Mission fatigue and managing resistance	<ul style="list-style-type: none"> • Receiving backlash for women-only events and opportunities • ‘Quota girl backlash’—is this a barrier? • Parental leave • Some plans lose sight of what they are trying to achieve or address when key action priorities are not interconnected or embedded • Not enough people are aware of SAGE 	<ul style="list-style-type: none"> • Point males towards opportunities that will enable them to get involved • Shouldn’t be gender specific leave policies; ensure policies are not discriminatory • Actions and teams need to be coordinated and consistent • Open and frequent communication
Governance and managing upwards	<ul style="list-style-type: none"> • Most key decision-makers are men • ‘Structural gaps’ • Importance of governance and establishing templates to monitor and measure implementation and progress is not always clear 	<ul style="list-style-type: none"> • It is crucial there are ‘male champions of change’ in decision making positions • Need to establish clear lines of responsibility, reporting and accountability for follow-up
Accountable vs responsible	<ul style="list-style-type: none"> • No clear distinction between accountable and responsible • Disconnect between agreeing to be responsible and actually fulfilling the action, leading to incomplete actions or little/slow progress • Overall accountability of the action plan sits with HR (which is under-resourced and also responsible for >50% of actions) • The administrative burden is onerous and extremely complicated 	<ul style="list-style-type: none"> • Not too late to distinguish between accountable and responsible—seek sponsor input; • Split the action plan delivery into projects • Step back and review plan, be sure to engage academics! • Move the accountability out of HR (to Provost, for example) • Manage expectations (timeframes, budget changes)
Collaboration and workload	<ul style="list-style-type: none"> • Workload is often carried by a small number of individuals—mainly women • Resistance to collaborate where there are conflicting business priorities • Work is often viewed as a ‘nice to have’ rather than a strategic business initiative • Workload ‘behind the scenes’ is often not visible 	<ul style="list-style-type: none"> • Get the NTEU involved in supporting the initiative • Have more than one person responsible for gender equity • Early communication to ensure preparation, awareness and support for action plan
Measuring impact	<ul style="list-style-type: none"> • Complexity of data analytics and implementing data driven actions • People talking, not acting • Waiting for perfection before action • Difficulty of finding and collecting data— inadequate systems and reporting 	<ul style="list-style-type: none"> • Measure cultural safety of people. Challenge is knowing how to measure this • University-driven cultural surveys (e.g. on update of flexible work opportunities or on the expectations of new staff) • Transparency in data collection strategies. What constitutes data? Consider mixed methods of data collection • Ensure diverse teams manage implementation of initiatives

Fair play in competitive selection and defining ‘merit’

Dr Alexie Papanicolaou – Co-Deputy Chair, EMCR Forum, Western Sydney University

Dr Vanessa Wong – Co-Deputy Chair, EMCR Forum, Monash University

Dr Justine Shaw – Member, EMCR Forum, University of Queensland

Dr Timothy Lau – (Member) University of Adelaide

Jo Bartley – ANSTO

Dr Adi Paterson – ANSTO

[SURVEY LINK](#)

Objectives

- Identify the inherent inequities of the current Australian merit system including promotions and employment, grant structures, peer-review, and uneven distribution of grant funds
- Unpack the pitfalls of a metrics based culture, traditional concepts of excellence, and arbitrary definitions of merit
- Identify new definitions of merit that equitably focus on performance, and real-world employer expectations

Workshop summary

Scientists are required to be multi-skilled. They have incredible demands as managers, accountants, media writers, organisers, public speakers, authors, editors, teachers, mentors and, if time allows, research scientists. For early- and mid-career researchers (EMCRs), maintaining a competitive research profile can be insurmountable causing EMCRs to leave research, ultimately resulting in a loss of talent.

Under the guise of excellence, EMCRs are often pitted against each other, through the competitive construct of research and academia, based on arbitrary definitions of merit. Quality of peer review is variable and unregulated, with judgement passed by peers who may not necessarily have a strong understanding or awareness of the research. Meanwhile the Productivity Commission inquiry and the EMCR Forum collected stories of mental distress, sexual harassment and bullying. Currently, outdated views of effort (first/communicating authorships) is founded on the heroic model of individualist researcher who is divorced from team effort, and (un)conscious bias. The consequences permeate beyond spreadsheet metrics: the propagation of stereotypes (the overachieving woman, the supervisor god etc), widespread mental ill health, and disincentives to collaborate. Ultimately this view cripples our efforts to bring equity and diversity in STEM and a new model needs to be found.

The workshop

A total of 101 participants attended the workshop which consisted of 82% women with presence from academia, industry, and government. The career stage of the participants was about 30% team members, 35% team leaders or managers, 20% section heads or executives and 15% independent professionals.

During the workshops, participants were asked to initially identify skills and qualities which they valued in a scientist. Collectively they identified the following values: resilience,

perseverance, communication, curiosity, empowerment, collaboration, openness, empathy, teamwork and flexibility. It was discussed that these values turn out to be at odds with how *current* assessments of merit are undertaken in the STEM sector.

The challenges in redefining merit, according to these values, were then unpacked. The fallback to ‘traditional’ metrics is relatively straightforward to quantify but does not recognise these qualities, and can potentially contribute to negative behaviour and unsupportive environments. Participants formed breakout groups to determine methods to measure these qualities which can then be applied to ROPE and merit assessments and peer-review, promotions, awards and employment.

Key outcomes

It was acknowledged that women experience more obstacles with the current assessment of merit. The first part of the group discussion identified what actions can bring about or drive equity. For example, the creation of positions with female-only applicants is contentious but we found this to be surmountable through more effective communication. While some participants explained that they don’t want to be seen as a ‘diversity hire’ through an application process with ‘lower’ benchmarks, the experience of one university DVCR shows that this is a myth. Professor Tanya Monro explained how they received more than 80 applications when women-only positions were advertised in the engineering department, which had a chronic gender imbalance. Those applications spanned the entire range of quality showing that top calibre candidates can be found to fix departments with systemic issues.

In the second phase of the workshop we focused on solutions. Participants identified that the key traits for a positive, productive researcher ought to include resilience, empathy, perseverance, curiosity and openness to collaboration. These were identified as traits not commonly recognised in traditional measures of merit, particularly by funding bodies and upper management.

The majority of the participants (~55%) who were in leadership or management positions noted that they were in the best position to advocate change. In particular, the long-term solution would be to culturally embed the new, updated definitions of merit into existing systems. This will involve leaders promoting a positive team culture that allows researchers to thrive; senior management understanding that the traditional measurement of research outputs, such as publication rates, are not necessarily linked with high quality sustainable research; together with new workplace policies and reward systems that take into account a range of non-traditional research metrics, such as teamwork and collaboration. Other solutions include promoting mentorship of younger and less experienced researchers, as well as establishing resources for upcoming researchers.

Importance of mentoring to career development

Zainab Farouk – EY STEM Initiative

Dr Marguerite (Maggie) Evans-Gala – Industry Mentoring Network in STEM (IMNIS)

Dr Melina Georgousakis – Franklin Women

Alison Johns – Advance Higher Education (HE) Aurora

[ACCESS RESULT SLIDES](#)

[ACCESS FRANKLIN WOMEN SLIDES](#)

Objectives

- Use the knowledge and experience gained through evaluated STEM focused mentor programs, and the first-hand experience of delegates, to discuss how to overcome the common barriers of mentoring programs and determine the requirements for successful mentoring programs
- Highlight areas and opportunities for measurement and evaluation so individuals and organisations can identify if their own mentoring experience or program is working

Workshop summary

This workshop explored the importance of mentoring to career development, the barriers to accessing mentors, and best practice principles for successful mentoring programs through experiences of mentoring programs across industry and academia.

Each panelist gave an overview of their experiences leading mentoring programs, discussed the importance of mentoring to career development, and provided examples of best practice principles that make a successful mentoring program. A facilitated discussion was also undertaken on overcoming common barriers to participating in mentoring initiatives, how to measure a successful mentor relationship and evaluation of mentoring programs.

Key outcomes

- There is clear merit in progressing formal and structured mentoring programs as they are a proven way to support women progress and expand their careers in STEM. Although mentoring programs alone will not achieve gender equality, they play an important role in addressing gender parity issues within the STEM ecosystem.
- Mentoring programs can be measured and evaluated in various ways; there is no clear definition of success and this could vary depending on the unique goals of each program. The key consideration for measurement and evaluation is to have clear 'SMART' (specific, measurable, achievable, relevant and time-bound) goals where progress and feedback can be measured and implemented within reasonable time periods.
- Diversity and inclusion is a key consideration when designing and implementing mentoring programs. It is important to include all intersectionalities of STEM women including those from minority and CALD backgrounds;

those with disabilities; those in remote locations; and those who may have fallen out of common networked groups (e.g. due to maternity leave).

- There are current successful, women-focused mentoring programs and tools within the STEM ecosystem. It would be beneficial to share and leverage the learnings and experiences from these existing initiatives when creating new mentoring programs or a formal national program as part of the Women in STEM Decadal Plan.

Next steps

The workshop outcomes will be instrumental in advancing recommendation 3.3 of the decadal plan, which highlights the need for formal national programs to foster mentorship of women in STEM.

Gender equity tools for conferences

Professor Jane Latimer – University of Sydney and Elizabeth Broderick & Co.

Professor Billie Bonevski – University of Newcastle

Associate Professor Darren Saunders – UNSW Sydney and Elizabeth Broderick & Co.

[ACCESS SLIDES](#)

Objective

To provide an audience-driven workshop that discusses strategies and tools for raising the visibility of women in public fora including conferences and seminars, strengthening the 'visibility' pillar of the Women in STEM Decadal Plan.

Summary

This workshop highlighted current data related to the poor representation of women in STEM conferences and the negative impact of this for Australia, such as lack of diverse perspectives, reduced opportunity for innovation and reduced career development for women. Evidence from mathematical modelling demonstrates that this is not a random event but is due to a systematic bias that excludes women. Participants were asked to consider the timeframe for planning a conference and identify points where intervention could improve the diversity of the conference delivered. Interventions were then described that could be directed at the host or organising committee, the speakers and the delegates. Comprehensive diversity policies were described that could be followed by conference organisers or hosts, including firstly ensuring that the organising and scientific committees are diverse. Databases of women in STEMM speakers were identified and strategies such as identifying and inviting female speakers before seeking male speakers were discussed. Ideas regarding travel support and equity grants, conference location, inclusion of prayer rooms and childcare, the pros and cons of virtual conferences, and the importance of seeking gender diversity in session Chairs was also highlighted. Strategies developed by Male Champions of Change that have been adapted for use in academic and research environments were also discussed including the University of Sydney Panel Pledge and the Leadership Shadow tool.

Key outcomes

Participants learnt about, and discussed, different strategies that could target the organising committee, speakers and delegates to ensure delivery of a highly successful conference presenting a range of perspectives and a richness of conversation.

Next steps

Based on recommendation from facilitators, the Australian Academy of Science will create a collection of useful resources for conference and event organisers and share it through STEM Women.

Walking in the shoes of others: seeing and overcoming the complexities of intersectionality

Associate Professor Cate Thomas – Charles Sturt University

Dr Colleen MacMillan – CSIRO

[ACCESS SLIDES](#)

[ACCESS INTERSECTIONALITY WALK RESOURCE](#)

[ACCESS INTERSECTIONALITY WALK VIDEO](#)

Objectives

An action-based experience into how intersectionality affects engagement at work, and how inclusion of intersectional input can create positive change to structural barriers and improve outcomes for individuals and organisations. Specifically:

- participants have the opportunity to actively contribute to understanding and educating others in why intersectionality is important for innovative organisations
- participants interact to see intersectionality at work in individual lives through the intersectionality walk and how organisations can make the most of diversity and remove structural barriers that have negative consequences
- participants engage in a research project following the workshop
- the intersectionality walk is provided for and used as an educative tool in participants' organisations.

Summary

An overview of intersectionality in the context of the Women in STEM Decadal Plan and the Athena SWAN Principles was provided as a guide to incorporating intersectionality when considering gender equity rather than enabling a siloed approach to cultural and organisational change. The workshop challenged participants to see individuals via a holistic approach rather than components or labels of differing aspects of one's life. The workshop, with this new way of conceptualising human experiences and inclusivity, undertook a recently developed 'Intersectionality Walk' by stepping into other personas' shoes (metaphorically). These personas had several characteristics from vulnerable or minority population group, such as gender, age, social

economic status, cultural diversity, disability and LGBTIQ+. Experiencing work-based scenarios in another's shoes (personas) and responding to how this may impact created real insights for participants. With reflection participants gained further empathy for an understanding of challenges that organisations experience around intersectionality and inclusivity, and opportunities to innovate.

Key outcomes

- a high-impact workshop, with many participants registering strong engagement and value in participating in the workshop
- substantive interest from participants from multiple organisations across the national footprint to continue work and research in intersectionality
- 29 individual institutions and organisations signed on to be involved in the research led by the workshop authors and all requested the Intersectionality Walk for implementation in their own organisations.

Next steps

- Distribution of workshop materials to 29 institutions for implementation through SAGE host platform
- Research-analysis of pre- and post-workshop survey data to identify further research and publication in the area of intersectionality

Achieving gender equity targets through systemic change

Dr Kierny McKay – Western Sydney University

Professor Janice Aldrich-Wright – Western Sydney University

Alicia Pearce – University of Technology Sydney

Annie Fenwicke – University of Sydney

Matthew Pye – University of Sydney

Professor Renae Ryan – University of Sydney

Jo Hatton – Macquarie University

Professor Lesley Hughes – Macquarie University

Maree Mahoney – Defence Science and Technology

Kylie Owens – University of New South Wales

Therese Donlevey – ANSTO

[ACCESS SLIDES](#)

Objectives

To generate productive discussion around how institutions might work together to mitigate sector-wide barriers to achieving gender equity targets, and to identify recommendations for how SAGE and other relevant national bodies might support this collective action as we move into the post-pilot Athena SWAN implementation phase

Workshop summary

Introduction (Kieryn McKay):

- Targets enumerate gender equity objectives but are often not accompanied by detailed strategies to achieve them. Shared difficulties in achieving targets crystallises sector-wide challenges.
- SAGE pilot process required inward-facing institutional analysis, post-pilot phase could engage the breadth of the STEM sector (higher education, industry, NGOs, government bodies, and broader communities) in shared work and collective action.
- Aim of workshop is to identify some of the ways in which systemic change can be effected by sector-wide (global) strategy, connectedness, and responsiveness.

Findings from the UTS Symposium: 'Strategies of success: implementing gender workforce targets in STEM', July 2019 (Alicia Pearce)

Every Australian Athena SWAN Bronze Institutional application set gender equity targets, including for STEM female participation, senior representation, recruitment, progression, succession planning, and/or pay equity.

The way we implement targets will affect their success. Targets need to be:

- socially ambitious and focused on diversity beyond gender
- multifactorial and applicable at all levels of organisational process
- supported and scaffolded
- measured and rewarded.

A full report on the UTS Symposium is available from the UTS Centre for Social Justice and Inclusion at <http://tiny.cc/StrategiesForSuccess>.

Practical experiences of target setting in STEM

Case study 1: local strategies, local solutions (Janice Aldrich-Wright)

Western Sydney University (WSU) has strong gender equity numbers already: 53% of all STEM staff are female; 44% of STEM academic staff are female. However, female underrepresentation persists in certain areas, such as the School of Computing, Engineering and Mathematics.

In 2015, WSU set university-wide targets for 40% female academic job applications, 40% female academic shortlists, and 40% female senior representation by 2020. No targets were set for cultural diversity or other intersectional factors.

University-level (global) strategy was implemented, including gender equity policy, strategy, and action plans; oversight by VC's Gender Equality Committee; strengthened processes in recruitment, induction, mentoring, and promotions; and establishment of a gender equity research fund.

School-level (local) KPIs were set for Deans and Directors regarding gender mainstreaming, induction, workload, impacts of short-term contracts, professional development, flexible work, promoting entitlements, family friendly work hours and reporting. However, no KPIs were enumerated, no mechanism was installed for enforcing or reporting on KPIs,

and no data was provided to Deans and Directors to measure progress.

WSU achieved its targets at university-level, but most local-level analysis does not show significant improvement, with one stand-out exception (see below).

Key local initiative: In 2017, the Deputy Dean of the School of Computing, Engineering, and Mathematics established the 'Western Women Transforming the Built Environment' (WTBE) initiative, with strong support from the VC and DVC-Academic. A working group and action plan were instituted, with a focus on industry networking and role modelling, recruitment, induction, mentoring, and reshaping gender norms. The initiative saw an increase from 3 female academics to 10 and from 58 female undergraduates to 93 in the Construction Management domain.

Global response: Drawing on the success of the WTBE initiative, WSU has now established Equity and Diversity Working Parties (EDWPs) in every School, one combined working party for Research Institutes and one-for-all Divisions. These EDWPs are designed to enable local contexts to respond to and tailor the implementation of global university-level strategies; enable local contexts to *inform* global equity strategies; and to learn from each other through collaborative partnerships. EDWPs are fed local data on a regular basis and formal reporting processes have been instituted, including gender equity standing items on all Executive Committees, simplified and enforceable KPIs for Deans and Directors, and annual reports from EDWPs to the VC's Gender Equity Committee.

Case Study 2: Fixing the System (Jo Hatton)

Macquarie University has adopted a university-wide 'Fix the System' approach to diversity and inclusion. The strategy addresses both STEM and HASS disciplines and both academic and professional staff. The 'fix the system' approach seeks to address the causes of gender inequity, rather than the symptoms.

Data analysis indicates that there are no significant gender equity differences between STEM and HASS disciplines at Macquarie. However, there are differences between each academic faculty and professional portfolio. For example, women represent 29% of academic staff in Macquarie's Faculty of Science and Engineering, while the Faculty of Human Sciences has 61% female academic staff—not only the highest female representation among STEM disciplines, but the highest of any faculty in the university.

Global level: Targets have been set at organisational level. Executive Group members have individual KPIs and report to the VC annually. The VC also reports on gender equity progress and broader D&I issues to the university's Council each year.

Local levels: Diversity and Inclusion committees were established across the institution in 2017, designed to address local-level issues, trends, and priorities. Each is guided by SMART action plans that have been developed in response to detailed analysis of local contexts. D&I Committees are supported by a university-level team, who provide data and help to identify priorities and recommendations. D&I Committees are encouraged to

collaborate at regular ‘Gender Equity Summits’ and analysis of impact continues.

Note:

An audience member raised concerns about the lack of focus or detail on cultural diversity and other intersectional factors within these case study presentations, and further expressed concern about the lack of visible cultural diversity among the facilitators. The facilitators appreciated the audience member’s comments and acknowledged that the lack of cultural diversity among presenters reflects the same lack within the NSW Regional Network. Facilitators also noted the absence of intersectional targets at case study institutions is a reflection of difficulties in collecting cultural diversity data to measure targets against, the displacement of intersectionality within SAGE and other application frameworks, and is an unfortunate representation of the slow pace at which organisations are diversifying their gender equity practice.

Local and global responsiveness (Kiernyn McKay)

Drawing from the case studies presented, UTS Symposium findings, and further discussion within the NSW Regional Network, the following guidelines for successful target-setting were identified:

- SMART targets should be evidence-based and data-driven where possible
- regular reporting keeps progress on track
- multidimensional ‘fix the system’ approaches work
- strong top-level leadership is essential
- action is needed at multiple levels of the organisation
- innovation needs room to move.

Reflecting on the relationship between global (institution-level) strategy and local (Department/School/Faculty or organisational unit) strategies, the following was recommended:

- Global level requires commitment and accountability with intent and focus (especially among Senior Leadership)
- Local level requires capacity for ownership and individuation, underwritten by clear responsibilities and clear communication
- Global and local strategies need to be aligned and responsive
- These learnings can and should be applied to the sector at large.

Table discussions

The audience was split into themed discussions aimed at generating recommendations for collective cross-institutional action and sector-wide support from relevant national bodies. The themes were:

- the merit principle (Therese Donlevy, Lesley Hughes)
- staff recruitment, retention, promotion and succession planning (Kylie Owens, Jo Hatton)
- measuring impact and ensuring accountability (Janice Aldrich-Wright, Alicia Pearce)
- building capacity for cultural change (Matt Pye).

An outline of each discussion and its outcome is provided in Table 2.

Note:

In response to the audience provocation around culturally diverse representation, an additional small group discussion was held with specific focus on setting intersectional targets. Recommendations arising from this discussion are included in the ‘Measuring impact and ensuring accountability’ theme in Table 2, and are marked with an asterisk *.

Key outcomes

See [Table 2 on page 11](#).

Next steps

The SAGE NSW Regional Network will submit workshop recommendations to SAGE for consideration. All participants are encouraged to engage the SAGE NSW Regional Network in further discussions. Please contact our NSW Regional Network Coordinator, Mrs Annie Fenwicke at annie.fenwicke@sydney.edu.au.

Table 2.
Key outcomes of the workshop ‘Achieving gender equity targets through systemic change’

Theme	Local collective action	Global sector support
<p>The merit principle</p> <p>Addressing gender bias in the concept of ‘merit’; redefining heroic models of academic achievement</p> <p>Common challenges:</p> <ul style="list-style-type: none"> • Definitions of ‘merit’ can be influenced by gender bias • Legacy effect of gender bias in National Competitive Grant Schemes (e.g. NHMRC and ARC) • Narrow or biased definitions of ‘merit’ and ‘success’ applied in promotion and at recruitment • Gender pay gap is influenced by biased definitions of ‘merit’ • Definitions of merit reward heroic models of academic achievement (as opposed to collectivity and shared achievement) 	<ol style="list-style-type: none"> 1. Exploring an expansion of the definition of merit that considers holistic achievement and potential of the whole person and shifts focus from heroic models of academic merit toward collectivity and shared achievement. If merit is redefined, can this increase mobility across organisations? 2. Promotion guidelines that increase emphasis on leadership and governance 	<ol style="list-style-type: none"> 1. Drive change and advocate for more ambitious gender equity action within the National Competitive Grant Scheme frameworks (including redefining merit within these programs, anonymising grant applications to remove unconscious bias) 2. Convene sector discussions on redefining the merit principle
<p>Staff recruitment, retention, promotions and succession planning</p> <p>Neutralising selection bias; establishing a culture of female STEM participation; counteracting the ‘boys club’; understanding achievement relative to opportunity</p> <p>Common challenges:</p> <ul style="list-style-type: none"> • How to attract diverse applicants • Mitigating bias in recruitment and selection • Addressing the gender pay gap • Mitigating bias in promotion processes • Recruiting and promoting diverse candidates for senior leadership roles • Poor understanding of ‘achievement relative to opportunity’ • Supporting the transition from fixed-term ‘post doc’ positions to permanent ‘academic’ roles 	<ol style="list-style-type: none"> 1. Local-level application of global strategies in recruitment, including normalising female-only advertisements and active oversight of junior-level recruitment 2. Introduce gender equity KPIs for both academic and professional recruitment, ensuring these are tied to global-level strategies and targets and that there are tools to support the achievement of these KPIs 3. Offer visible success narratives for fixed-term post-docs transitioning to permanent academic appointments 4. Leadership shadowing programs, including some cross-institutional and cross-industry partnerships 5. Recognise the cycles of academic progression over the long term by partnering with industry to increase continuity of employment 	<ol style="list-style-type: none"> 1. Facilitate industry partnerships 2. Expand future leader programs, fellowships and laureates 3. Facilitate sharing of innovation across the sector, including case study examples

TABLE 2 CONTINUED ON PAGE 12

TABLE 2 (CONTINUED)

Theme	Local collective action	Global sector support
<p>Measuring impact and ensuring accountability</p> <p>Building an evidence-base for future strategy; bringing transparency and accountability to the sector; contextualising success</p> <p>Common challenges:</p> <ul style="list-style-type: none"> • Availability of adequate benchmarking data to inform action • Measuring cultural diversity in the sector • Establishing real accountability for equality and inclusion • Clearly articulating what ‘success’ and ‘impact’ look like for gender equity • Setting targets that speak to culture change (not just numerical change) 	<ol style="list-style-type: none"> 1. Data transparency at all levels, including pay equity 2. Set targets that speak to culture change, not just numerical change 3. Acknowledge challenges to collating cultural data, and that lack of data can drive marginalisation 4. Charge Deans and Heads of Schools with responsibility for recording cultural diversity data against targets* 5. Hold each other to account for breaking panel pledges* 	<ol style="list-style-type: none"> 1. Provide national STEMM workforce benchmarking data by discipline for cross-institutional comparison, including sector-wide intersectional benchmarks 2. Require cultural diversity and intersectional considerations to be central to Silver Institutional Awards 3. Clearly articulate examples of what ‘success’ and ‘impact’ look like for gender equity 4. Lead a cross-institutional research project to develop recommendations for the gathering and analysis of cultural diversity data and the relevant and appropriate development of cultural diversity targets*
<p>Building capacity for cultural change</p> <p>Embedding capacity within our staff cohorts; navigating resistance to gender equity; laying the groundwork for ambitious and aspirational strategies</p> <p>Common challenges:</p> <ul style="list-style-type: none"> • Setting clear expectations for behaviour and inclusion • Changing behaviours to address bullying and harassment • Building understanding and capability amongst staff when traditional ‘diversity training’ has been found to largely be ineffective • Influencing ‘up’ (e.g. shaping attitudes among managers, supervisors and executives) • Increasing male participation in gender equity work • Avoiding burnout, ‘mission fatigue’ and backlash 	<ol style="list-style-type: none"> 1. Extend gender equity beyond the binary logic that currently dominates the sector 2. Expand inclusive language in all policies, strategies and action plans, and HR systems 3. Apply change management practices to cultural change 4. Be more cautious of language that marginalises male allies 5. Raise awareness and visibility of safe spaces; champion organisations that show strong leadership on gender diversity, disability, and cultural diversity 	<ol style="list-style-type: none"> 1. Revise SAGE application framework to properly embed intersectionality and gender diversity at the core of gender equity considerations 2. Revise language of ‘women in STEMM’ etc. to be more inclusive of gender diversity 3. Partner with key organisations (e.g. Pride in Diversity) and utilise their skills and expertise more actively 4. Ensure an intersectional approach to speakers and representatives at all conferences, seminars and events 5. Reconsider timing of the SAGE Symposium and other conferences to enable greater academic participation (i.e. do not schedule in conflict with ARC submission deadlines).

Shifting the spectrum of male engagement with gender equity—has the pendulum swung too far?

Christine Gunson – Edith Cowan University

Professor Jo Ward – Curtin University

[ACCESS SLIDES](#)

Objectives

We know male advocates are out there, and we need more. We know some men are pushing back as they feel threatened. Some argue the benefits of gender equity are only starting to be realised. Others think gender equity has progressed too far. What should our response be?

In this workshop, we consider scenarios or situations where individuals have felt comfortable to communicate their true feelings or concerns about gender equity—has it gone too far, what's in 'it' for men, the Athena SWAN pilot, or some of the Athena SWAN initiatives, and observers have been uncertain about how to respond in a way that is constructive and encourages further engagement or discussion.

The aim of this workshop was to increase the engagement of a minority of resistant or less engaged men (and women) with the changes needed to achieve gender equality. This will be achieved by developing responses to several presented scenarios that will increase engagement rather than disengage. These responses (and those for other scenarios that will follow) will be used to develop a resource to assist staff to respond to such situations: 'If this, then that ...?'

Workshop summary

This session opened with a reference to the Bain report [Better Together](#) to reinforce the aim of the session was to increase the engagement of a minority of resistant or less engaged men (and women) with the changes needed to achieve gender equality. The keynote speaker Professor Steve Wesselingh (SAHMRI) told the group he did not believe there was widespread 'push-back' and that referring to macro level system policies could defuse the incidents of push back or backlash so they are not taken so personally. "I do not hear passionate opposition to gender equity. Men do see an unfairness at a micro-level where merit is not the decision base". It is likely that supportive men in leadership roles may be unaware of how this backlash presents because it is less likely to occur in their presence.

The session then moved to the micro-level for group discussion and focused on specific scenarios or vignettes that came from the direct experience of the regional network members. These described interpersonal interactions with resistant colleagues related to promotion panel outcomes, gender pay gap, part-time work, recruitment decisions, affirmative recruitment criteria, manager engagement and women-only events.

Participants were given a draft 'Gender Equity Fast Facts' resource, and invited to comment on its usefulness in developing potential responses to presented scenarios.

The participants, in the main, reported strong recognition of the vignettes and many had experienced similar situations. The group discussions were robust and structured towards coming up with suggestions about 'if this, then that ...?'

The group facilitators presented summaries of the discussion and recommended responses to their assigned vignette towards the end of the session—there was insufficient time to get comments on the usefulness of the Fast Facts resource and ideas for other scenarios to be addressed. (The facilitators' reports were recorded.)

Key outcomes

Ideas and scripts from the groups' output provide valuable input for the development of the proposed resource for staff. This will be further developed—borrowing the 'rehearsing narratives' approach from social psychology.

There has been strong interest following the workshop in the proposed resource. The SAGE WA Regional Network is happy to take further submissions towards this—for example, suggestions about other scenarios that should be considered (and how they might be responded to). It is happy to share the vignettes discussed at this workshop to assist with this.

The network also welcomes input about the usefulness of the Gender Equity Fast Facts document—What's useful? What's missing?

The agreed goal is to further develop these resources that will then be shared via the SAGE website.

Next steps

- Refine the presented vignettes and a selection of the best responses into a set of guidelines and rehearsal narratives
- Add vignettes and responses—input from WA Regional Network members and from other sources such as other workshop attendees or regional networks
- Further refine the Gender Equity Fast Facts resource to support self-help development of additional scenarios
- Publish these resources via the SAGE website

Connecting girls and STEM careers

Dr Rebecca Vivian – The University of Adelaide

Leanne Robertson – Education Services Australia

[ACCESS SLIDES](#)

[WATCH VIDEO](#)

Objectives

- To increase participant understanding of the factors influencing girls' decisions in subject and career pathway selection and ways schools can increase the likelihood girls will pursue STEM activity and pathways
- To investigate the opportunities for applying evidence-based principles for a gender-inclusive learning environment to the workplace or post-secondary school learning environments

Summary

This workshop presented research from various studies regarding girls' and women's participation and engagement in science, technology, engineering and mathematics (STEM) studies, careers and implications for the Australian workforce. A new Government-funded platform, [the Girls in STEM Toolkit](#) (the GiST), developed by Education Services Australia (ESA), was introduced and is described as providing support for students, schools and families in STEM engagement. Based on a review of literature, family, media, peers, schools and teachers were identified as key to influencing STEM decisions, resulting in the development of the evidence-based '[Seven Principles for a Gender Inclusive Learning Environment](#)', providing a framework of good practice for STEM engagement.

The 7 principles are:

1. Create a gender-neutral learning environment
2. Ensure everyone gets hands-on
3. Embrace context and problem solving
4. Connect learning to careers and role models
5. Engineer collaborative learning
6. Provide choice and creative opportunities to demonstrate understanding
7. Encourage a growth mindset.

Examples of practices across K-12 and tertiary contexts addressing these principles were highlighted, drawing on the [CEW Engaging the Future Report](#) and research by ESA in developing the GiST. Participants had the opportunity to workshop in small groups how the seven principles apply to tertiary studies and workplaces and recommended actions that can be taken in their own workplaces and to build their own contextualised strategies. A3 posters for each of the seven Principles were placed around the room and participants were provided with post-it notes and pens to record their ideas. At the end of the session, strategies for some of the principles were shared with the group with all of the ideas being curated and posted onto a [Padlet](#) for dissemination. Participants could take away printed hand-outs, session slides and the Padlet ideas to share with colleagues in their workplaces.

Key outcomes

- Increasing awareness of girls' and women's STEM engagement statistics, challenges and opportunities based on published research
- Building participant networks, between individuals, programs and organisations, who are interested in and passionate about engaging girls and women in STEM study and careers
- Sharing challenges and solutions to address the [Seven Principles for a Gender Inclusive Learning Environment](#) for workplaces through brainstorming and discussions
- The provision of strategies and resources that participants can take-away with them, including the [Seven Principles for a Gender Inclusive Learning Environment](#), the GiST platform and generated practices on the [Padlet](#)

Next steps

- Investigate opportunities to undertake further work to create a white paper from the Seven Principles for a Gender Inclusive Learning Environment to develop into a practical guide and identify further opportunities for development or research
- Investigate opportunities for content for the GiST with research on adolescents' self-report of self-satisfaction and STEM pathways: focus on disability and gender
- Liaise with interested session participants to create career profiles for the GiST
- Share activities and opportunities identified by participants with the GiST network

Diversity and inclusion framework for Australian small and medium enterprises (SMEs)

Lachlan Blackhall – Australian Academy of Technology and Engineering (ATSE)

Leeanne Bond – ATSE

David Haley – ATSE

[ACCESS SLIDES](#)

[ACCESS PROJECT PLAN](#)

Objectives

To share an update of the project being undertaken by the Australian Academy of Technology and Engineering (ATSE) to develop a diversity and inclusion framework for Australian small and medium enterprises (SMEs). This project was commenced in 2019, as one of the implementation activities arising from the 6th opportunity outlined in the Women in STEM Decadal Plan.

Workshop summary

The workshop consisted of three key elements:

- an overview of the work completed in this project to date, including a summary of the diversity and inclusion framework that has been adopted by ATSE
- a presentation by David Haley (CTO, Myriota) highlighting how SMEs deal with diversity and inclusion (D&I) in the absence of a more formal D&I framework
- a discussion session where feedback was sought on the proposed structure and elements of a D&I framework for Australian SMEs.

Key outcomes

The workshop was well received by attendees and led to interesting brainstorming and discussion between the attendees and the facilitators. The key outcome of this interaction was to gain new ideas and insights that can be used to inform the development of the D&I framework for Australian SMEs.

Some of the key insights obtained from the workshops include:

- the importance of a simple framework, with at most three key areas of focus, to ensure that SMEs are not overwhelmed when adopting this framework. This suggestion has been captured in the proposed framework structure that has a Recruit, Retain, Accelerate focus
- the importance of providing SMEs with the ability to capture data that will allow them to measure progress towards their D&I goals
- the recognition that diversity and inclusion shouldn't start from a binary perspective, it needs to include intersectionality from the beginning.

Next steps

The Australian Academy of Technology and Engineering (ATSE) will continue to undertake this project through 2020, which will include piloting the toolkit with an SME cohort, before publishing the toolkit at the end of the year.