



THE UNIVERSITY OF
SYDNEY



NETWORK
GENDER
& STEM

educational and
occupational pathways
and participation



NATIONAL
EXPERT ORGANISATION
ON GIRLS/WOMEN AND
SCIENCE/TECHNOLOGY

Network Gender & STEM Conference 2020

in partnership with the STEM Teacher Enrichment Academy

STEM Education for the New Work Order: Policy, Practice and Partnerships



Network Gender & STEM Conference

Thursday 30 July – Saturday 1 August 2020

The 2020 Network conference represents a partnership with the STEM Teacher Enrichment Academy to bring together researchers, educators, policymakers, industry representatives and the public to interrogate person- in-context influences towards, or away from, diverse STEM pathways across stages and settings. What are the needs for a STEM workforce of 2030? New, interdisciplinary drivers are transforming work and education policy and practice in response to social and environmental challenges and technological advancement. What is the role of STEM for the new work order, and how can we engage and prepare all young people including girls and women?

Themes will include:

- individual, family, teacher and peer processes which impact STEM engagement and participation;
- key factors and good practices to promote vs deter STEM engagement and learning within school, university and workplaces;
- positive action measures: STEM initiatives, schemes, networks and organisations;
- developments in STEM & preparing workers for the future;
- the role of higher education institutes, government, industry, public policy and career development policies to enhance women's and men's participation in STEM research, commercialisation and public impact.

Where

The University of Sydney - Camperdown Campus

www.genderandSTEM.com

Contact

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Sydney, one of Australia's largest cities, is best known for its harbourfront Sydney Opera House, with a distinctive sail-like design. Darling Harbour and Circular Quay are hubs of waterside life, with the Sydney Harbour Bridge and extensive Royal Botanic Gardens nearby. <https://www.sydney.com/>



The STEM Teacher Enrichment Academy

Thursday 30th July 2020

A focused one-day event will be run in parallel with the Network Gender & STEM Conference to support teachers implementing STEM approaches in schools. While also focusing on the needs of a STEM workforce and the role schools might play to prepare students for the new work order, the STEM Teacher Enrichment Academy will provide opportunities for teachers, school leaders, school system personnel and policymakers to share successful STEM practices, and learn about the latest research into STEM education. Participants are welcomed to additionally attend the Network conference.

Contact

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Special Issue, **Guest Editors:** *Penelope Watson, Audrey Cooke, John Thornby*
GIRLS' AND WOMEN'S PARTICIPATION IN STEM: PAST LESSONS AND POSSIBLE FUTURES

Selected papers of the 3rd Network Gender & STEM Conference, 2016, Newcastle UK

Guest editorial: Girls' and women's participation in STEM: Past lessons and possible futures.
Penelope Watson, Audrey Cooke, John Thornby

Evolution of the Gender & STEM Network
Helen M. G. Watt, Noortje Jansen, Jenefer Husman

A Lab of One's Own: Science and Suffrage in the First World War
Patricia Fara

Breaking into the Lab: Engineering Progress for Women in Science and Technology
Sue V. Rosser

Self-to-prototype similarity as a mediator between gender and students' interest in learning to code
Janine Neuhaus, Andreas Borowski

Can a Serious Game Attract Girls to Technology Professions?
Pia Spangenberg, Felix Kapp, Linda Kruse, Martin Hartmann, Susanne Narciss

"Keep It Going, Girl!" An Empirical Analysis of Gender Differences and Inequalities in Computer Sciences
Silvia Maria Förtsch, Anja Gärtig-Daug, Sandra Buchholz, Ute Schmid

The Roles of Teachers, Classroom Experiences, and Finding Balance: A Qualitative Perspective on the Experiences and Expectations of Females Within STEM and Non-STEM Careers
Meeta Banerjee, Katerina Schenke, Arena Lam, Jacquelynne S. Eccles

Parental Influences on Those Seeking a Career in STEM: The Primacy of Gender
Adam Lloyd, Jenny Gore, Kathryn Holmes, Max Smith, Leanne Fray

Are you African or African-American? Exploring the Identity Experiences of Female STEM Students Born in Africa Now Living in America
David M Sparks

Gender and Disciplinary Differences in Future Plans of Postgraduate Students in Pakistan
Munaza Nausheen, Paul William Richardson

Previous Special Issues in association with Network Gender & STEM:

2nd biennial conference, Berlin, 2014: "Gender and STEM: What schools, families, and workplaces can do?"

Guest Editors: *Rebecca Lazarides & Angela Ittel*

Part 1: Vol. 7, No. 2 (2015) <http://genderandset.open.ac.uk/index.php/genderandset/issue/view/21>

Part 2: Vol. 8, No. 1 (2016) <http://genderandset.open.ac.uk/index.php/genderandset/issue/view/23>

1st biennial conference, Haarlem, 2012: "Gendered pathways towards (and away from) STEM fields"

Guest Editors: *Helen Watt, Noortje Jansen, & Gertje Joukes*

Vol. 5, No. 3 (2013) <http://genderandset.open.ac.uk/index.php/genderandset/issue/view/16>

The fifth biennial conference is planned for July 30 - August 1, 2020 @ The University of Sydney, Australia
Save the date! Further details will be announced as they become available at the Network website:

www.genderandSTEM.com