

World Café, 5 and 7 November, 2019

There were about 100 participants distributed into 12 small discussion groups. Each group discussed three questions in successive 30-minute sessions at three tables, each table being facilitated by a table leader. Each participant had received the preliminary report. The aim of the World Café was to provide relevant suggestions, from the experience of the participants, to supplement the recommendations in the report.

Question 1. Based on your experience, what are the initiatives you recommend in the direction of instructors and parents for reducing the gender gap in science?

- Provide parents with early awareness, especially opportunities to learn about science fields they may have thought were unsuitable for their girls.
- Reach parents with material on gender equity and the success of women in STEM. Use toys to build the ability to explore.
- In the home environment teach girls how to negotiate, how to take on team work, and how not to shy away from responsibilities. Teach boys about gender equity.
- Parents often make efforts to protect girls, but should develop girls' self-confidence to defend them from insecurity. Don't push a path based on the objectives (or the failure) of the parent.
- Teach children to handle intimidation in online social networks sites and how to counter boys' overestimation of their abilities, and girls' underestimation, when these occur.
- Teachers and parents should not avoid STEM as a career suggestion for girls, or direct most girls towards health-psychology-education.
- Revise career information, present opportunities for getting a science education, and provide information on the jobs that women in science occupy.
- At schools, include gender issues in curricula, provide gender short courses, workshops, summer schools or picnics for teachers and parents, and create public scientific spaces.
- Make available books and media written by women, biographies of women, and media releases. Avoid books that promote the gender gap.
- Educators should receive gender awareness training, and use inclusive language.
- Teachers should track who they are calling on in class to ensure that every student has a chance to participate and that girls speak in class, and should encourage girls in class.
- Develop career counselling and information on opportunities.
- Consider the benefits of single-sex classes.

Question 2. Based on your experience, what are the initiatives you recommend in the direction of your local institution for reducing the gender gap in science?

- The Global Survey has shown that there is a significant problem of harassment and gender-based violence for scientists. Safe laboratories for after-hours work are very much needed. Put in place an ombudsperson, someone to whom complaints can be made, and who acts on them, and is a woman. Protect schoolgirls and university women from violence without compromising their education: find better solutions to stop violence and protect girls and women than closing libraries, labs and campuses to them. Consider campus security for women.
- Address gender equity and equality in relevant institutional policies, with clear anti-harassment policies and lines of action.
- Make public case studies with different regulatory frameworks and cultural contexts.

- Implement effectively and monitor carefully: gender-related data has to be reliable to get the real situation.
- Diversity action plans should have financial consequences if not met.
- Provide grants that are predicated on certification like that of Athena Swan.
- Help women write proposals better to get grants and therefore power.
- To change salary gender gaps, change the way that evaluations and promotions are made. Make selection processes transparent, and ensure female and male representatives are on recruitment committees but provide unconscious bias training for all members. Use quotas if necessary. Make the gender lens the responsibility of a dedicated person on each committee.
- Put in place committees for women in every organization, including countries where culturally women are expected to be married and fit into specific roles. Involve men in identifying barriers and addressing them.
- Assign Gender Champions who have the seniority to make significant change.
- Foster informal and formal networks. Involve both retired scientists, and young voices. Increase gender gap literacy within the different cultures in the organization: there are unlikely to be universal recommendations.
- Make ways for distance PhDs or switching universities for Master's graduate women who are left to stagnate by harassment and discouragement. Retain and promote women onto the staff to reduce harassment in PhD supervision.
- Replace assessment of publications by "bean counting" by nomination of an individual's best 5 papers.
- Make statistics on salaries, loadings, bonuses, hiring and promotion transparent. Monitor support, wellbeing, mentoring and progress of female academics. Provide re-entry grants, resource women returning to their country after a PhD abroad, a research-only year after maternity leave, parental leave, and a child-friendly working environment. Allocate teaching loads with suitable hours for parents.
- It was noted that there is a reverse gender gap in some aspects of academia in some countries.

Question 3. Based on your experience, what are the initiatives you recommend in the direction of the national (or beyond) organizations you belong to for reducing the gender gap in science?

- Make scientific Unions, members and societies, aware of this Gender Gap project and continue to foster action in the coming years.
- Make information available: write ethical manifestos¹ or charters for gender equity and equality; share best practices, and develop toolkits for activities. Train scientific Union staff in gender and implicit bias. Share policy, toolkits and learning to enable member organisations and members (e.g. creating welcoming work environments, how to be a good mentor, guidance for parents and families, etc.).
- Develop anti-harassment protocols and support services to deal with sexual and gender harassment. Share these since smaller organisations may not have the resources to develop their own.
- In leadership, appoint Gender Champions in the highest positions and in decision-making bodies.

1 E.g. The Manifesto for Non-Hostile Communication for Science
<https://paroleostili.it/the-manifesto-of-non-hostile-communication-for-science/?lang=en>

- A committee or chapter for women and/or gender should exist in every organisation, with a certain level of independence, and an assigned budget line. Provide grants, prizes and fellowships specifically for women; mandate representation on award committees; make a quota for the pool of nomination for awards, under which no award will be made; or consider two awards, at least one of which goes to a woman.
- Make policies on funding conferences with representative speaker and panel lists, Scientific Organizing Committees and Local Organizing Committees. Have a reporting mechanism for concerns at the conference. Assign a Gender Champion to monitor these. Develop guidelines for the provision of child friendly arrangements in academic conferences including the provision of childcare facilities, grants for paying for childcare arrangements, family friendly schedules, child friendly social activities, etc. Always hold a women's networking event that is open to all.
- In all outreach programs, make an aim of reducing the gender gap. Provide training in critical thinking. Offer membership to high school girls with outreach to parents.
- Mount campaigns to increase awareness of the benefits to society of reducing the gender gap. When role models are introduced, include diverse backgrounds, ages and those who did not necessarily have a straightforward traditional career, including scientists not working in academia.
- For organizations with publications, adopt humane practices for review that address gender pronouns in addressing the author and reviewer. Use double blind review. Manage constructive feedback on submitted papers.
- Gather information from members: hear disenfranchised groups, and aid in developing plans. Consult with members on policies. Connect members to each other: foster networks and mentorship schemes. Define discontinuous careers better and understand how to translate that to hiring and funding policies.
- This question also elicited responses for government advice and influence, including: use unions to advocate good gender policy; create laws on affirmative action and flexible working, with consequences for those who do not respect them; improve pay for science teachers; change curricula and material; require specialist committees that will systematically check laws, practices and policies for equality and diversity; mandate and resource more school time (compatible with children's educational interests) in places where the common practice is for school to last only half a day; and mandate family leave (maternity, paternity, family care).
- Invite relevant government ministers, secretaries, etc., to gender events for the profession. In order to do this, connect across organisations and scientific Unions.