United Nations
Educational, Scientific and
Cultural Organization

Celebrating the International Day for Women and Girls in Science

UNESCO Headquarters Paris, 7 Place de Fontenoy - Room IV
From 09:00 to 12:30
Friday, 9 February 2018

Gender Equality and Women's Empowerment through and for Science

I. Agenda

9:30 – 10:00 Welcome Coffee
10:00 – 10:30 Welcome Remarks

10:30 – 11:50 Round table: "Closing the gender gap in computer sciences"
Video: Cracking the Code

11:50 – 12:10 Recommendation on Science and Scientific Researchers

12:10 – 12:30 Closing remarks

II. Background

On 22 December 2015, the UN General Assembly adopted a resolution establishing 11 February as the International Day for Women and Girls in Science. On this Day, the international community rallies together to recognize the critical role women and girls play in science; to promote girls' and women's full and equal access to, and participation in, science; and to achieve gender equality and the empowerment of women and girls.

Science and gender equality are both vital for the achievement of the 2030 Agenda for Sustainable Development, including the Sustainable Developments Goals (SDGs) to eradicate poverty, achieve food security, fight diseases, improve education, address climate change, among others.

Over the past 15 years, the global community has made significant efforts to inspire and engage women and girls in science education and careers. Yet despite remarkable gains, women and girls continue to be excluded from participating fully in science, and progress is uneven. While a growing number of women are enrolling in science studies at university, many drop out at higher levels required for research careers. According to estimates by the UNESCO Institute for Statistics (UIS), only 28% of the world's researchers are women. Furthermore, women are still underrepresented in the fields of science, technology, engineering and mathematics (STEM), both in the number of graduates (especially at the Ph.D. level), and in research professions (see for example *UNESCO Science Report: Towards 2030* or the UIS *Women in Science* visualisation). The gender gap is particularly apparent in disciplines such as mathematics, engineering and computer science.

UNESCO's *Cracking the Code report* highlights the numerous factors impacting on girls' and women's participation, learning achievement and progress in these fields. This includes the socialisation process whereby girls are falsely perceived as being less interested or talented than boys in science; the learning process whereby girls are not encouraged or motivated through formal and informal

education, and other factors. Although the development of STEM fields is widely regarded as beneficial for the expansion of national economies, the underrepresentation of women in STEM represents the loss of a critical mass of talent and ideas.

Achieving gender equality is an overarching UNESCO priority, both as a matter of human rights, women's rights and a social and economic issue. A country cannot afford to have half, or the majority, of its population excluded from the advancement of social and economic matters. The contribution of women scientists in enhancing countries' scientific, technological and innovative capacities cannot be neglected.

UNESCO works towards providing strong role models for women and girls in science throughout the world, building capacities of women in STEM, as well as supporting and promoting the contributions of women to scientific knowledge generation and dissemination to advance sustainable development. For instance, since its creation in 1998, the UNESCO-L'Oréal For Women in Science (FWIS) partnership continues to be an outstanding vehicle to celebrate role models from all over the world and to support and inspire women and girls to engage in and pursue scientific careers, while networks such as the Organization for Women in Science for the Developing World (OWSD) serve to strengthen dialogue and lessons learned among women in science.
The STEM and Gender Advancement project (SAGA) also aims to contribute to reducing the gender gap in STEM fields in all countries at all levels of education and research, by determining, measuring and assessing sex-disaggregated data, as well as undertaking an inventory of policy instruments that affect gender equality in STEM, in order to generate new and improve indicators to support future evidence-based policy making.

III. Objectives

By celebrating the International Day of Women and Girls in Science, UNESCO intends to gather experts and innovators from different sectors and backgrounds who are contributing to fostering the participation of girls and woman in science. The event will focus on the following objectives:

- Share good practices and actions that governments, academia, research institutions and technology companies can take to bridge the gender gap in computer sciences;
- Strengthen the key message that gender equality in science is a crucial element that countries and international organizations need to take into account in formulating and monitoring action plans and roadmaps for Science, Technology and Innovation (STI) for the achievement of SDGs;
- Share information on initiatives, resources and international regulation to strengthen the participation of women and girls in scientific careers.

IV. Key issues

Reaching gender equality in STEM implies encouraging further the participation of girls and women at all levels of education, and providing equal opportunities and conditions for scientists and engineers throughout their careers, including in computer sciences. In this framework, this year's edition will address two topics that will be discussed during the event:

1. Closing the gender gap in computer science

One of the largest gaps is in one of the most high-demand and well-paid careers: computer sciences. Originally pioneered by women, computer sciences has become a career path largely dominated by men. This means that an enormous supply of ideas, human resources and creativity is going to waste. The lack of gender equality in this field is inextricably linked to gender stereotypes, as well as women's more limited participation and continuation in STEM studies and careers.

This round-table will discuss the current gender gap in computer sciences as well as the different factors that may motivate more girls and women to engage in computer science. It will also share inspiring stories and experiences to overcome stereotypes towards women in computer science and identify the greatest barriers that women face throughout their careers in computer science. Furthermore, it will draw on findings from UNESCO's groundbreaking "Cracking the Code" report.

2. Recommendation on Science and Scientific Researchers

The "Recommendation on Science and Scientific Researchers" adopted by the General Conference of UNESCO at its 39th session in 2017 stresses importance of promoting equality including gender equality, encourage women to pursue careers in sciences and calling for Member States to remove barriers against women to do so. This recommendation could be a strong reference to promote equality and equity in scientists including women scientists. Moreover, the UNESCO's Recommendation, is based on the ECOSOC Covenant stating the it is a human right to have access to the fruits of science and technology. The Venice Statement on the Right to Enjoy the Benefits of Scientific Progress and its Applications (2009) as well as the Report of the IBC (International Bioethics Committee) on the Principle of the Sharing of Benefits (2015) clearly affirm that this right implies also the possibility to create the knowledge, which means education and professional opportunities for development.