Promoting gender equality in science, technology, engineering and mathematics (STEM) education and careers

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The Committee on Women's Rights and Gender Equality adopted the own-initiative report by Susana SOLÍS PÉREZ (ES, Renew Europe) on promoting gender equality in science, technology, engineering and mathematics (STEM) education and careers.

The EU is facing an unparalleled shortage of women in STEM careers and education, not least given that women make up 52 % of the European population and 57.7 % of tertiary graduates in the EU, yet only account for 2 out of 5 scientists and engineers. Women are also under-represented at all levels in the digital sector in Europe. The gap is largest in specialist skills and employment in ICT in the EU, where only 18 % are women, among STEM graduates, of whom only 36 % are women, and in the digital sector, where there are more than three times more men than women.

Raising the profile of women in science, technology, engineering and mathematics and women's professional contributions can establish patterns of success to follow and ultimately lead to more inclusion and gender equality.

Removing barriers

Members reiterated that main goal should be to remove all barriers, in particular sociocultural, psychological and pedagogical barriers that restrict women's and girls' interests, preferences and choices, including gender stereotypes, gender discrimination and a combination of biological and social factors, notably that of motherhood with the most decisive periods in women's careers, without compromising women's freedom to make decisions.

Promoting gender equality

Member States are encouraged to promote the participation of women and girls in STEM studies and careers in their relevant national or regional gender action plans or strategies by providing adequate incentives. These action plans or strategies should, among other initiatives, aim to increase gender equality by focusing on the eradication of gender stereotypes, establish mandatory pay transparency policies, implementing zero tolerance for sexual harassment, and increasing the visibility of female role models.

Member States should invest in developing the skills of primary and secondary STEM teachers to help them to understand and address unconscious preconceptions in their teaching practices and assessments and to engage all learners equally.

The Commission and the Member States are called on to:

- devise policy measures that fully incorporate the gender dimension through awareness-raising campaigns, training, school curricula and, in particular, careers guidance;

- pay careful attention to intersectional discrimination and bias due to ethnicity, religion, sexual orientation, age or disability when devising their action plans;

- create new channels to connect with girls and ensure that digital education reaches them all, and to recognise and invest in teachers as the drivers of cultural change given their potential to boost the continuing participation of girls in science at school;

- find more attractive and creative ways to showcase female role models with successful careers in ICT and STEM to boost girls' self confidence in digital skills and encourage them to pursue ICT and STEM-related studies.

Digital sector

Members regretted the fact that the gender gap exists across all digital technology domains but is especially concerned about the gender gap in innovative technologies, such as the AI and cybersecurity domains, where the average worldwide female presence stands at 12 % and 20 % respectively. The report called for the reduction of the gender gap in the digital economy through targeted measures including EU funds to finance female-led projects in the digital sector, training courses for HR departments on 'unconscious gender-discriminatory bias', annual reports on diversity and the gender pay gap by ICT companies, and EU funds distributed to companies that take into account gender balance criteria.

It also asked the Commission and Member States to foster women's entrepreneurship in innovation and to increase financing opportunities for female entrepreneurs and female-led digital start-ups.

Careers

The report regretted the fact that women face disproportionately more obstacles in their careers than men owing to the lack of a proper work-life balance and an increase in unpaid care work in most households. The COVID-19 pandemic has further aggravated the situation of women, who have had to balance overtime remote working while caring for children and doing unpaid care work.

Member States are urged to establish adequate measures to guarantee zero tolerance policies for sexual harassment, better maternity leave, significantly more and longer paternity leave, and paid and non-transferable parental leave that will allow women and men to take time off to care for their children, and to combat the norm of the woman being the parent to take a career break in order to overcome a major barrier to women advancing their careers, as well as ensuring flexible working hours, on-site childcare facilities and telework.

The report urged the Council to unblock the proposed directive on implementing the principle of equal treatment between persons irrespective of religion or belief, disability, age or sexual orientation, which aims to extend protection against discrimination through a horizontal approach.

Lastly, Members welcomed the Commission's initiative establishing the EU Prize for Women Innovators, which is awarded every year to European women who have founded a successful company and brought an innovation to market.