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

2019/2164(INI) - 10/06/2021 - Text adopted by Parliament, single reading

The European Parliament adopted by 546 votes to 35, with 100 abstentions, a report on promoting gender equality in science, technology, engineering and mathematics (STEM) education and careers.

The EU faces a **shortage of women in STEM careers and education**. Only two out of five scientists and engineers are women, despite the fact that women make up 52% of the European population and 57.7% of higher education graduates in the EU. Women are particularly under-represented in the information and communication technology sector (18%) and among STEM graduates (36%), with three times as many men as women working in the digital sector.

Giving greater visibility to women in STEM and their professional contributions could lead to successful role models and, ultimately, more mainstreaming and ultimately foster inclusion and gender equality.

Removing barriers

Parliament considered it essential to **increase the proportion of women in STEM** by removing all socio-cultural, psychological and educational barriers that limit women's interests, preferences and choices, such as gender stereotypes and discrimination, or the 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.

The Commission is called on to launch and support awareness-raising campaigns and other programmes and initiatives to reduce these barriers in the academic world.

Promote women's participation through incentives

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.

Parliament reaffirmed the importance of integrating gender awareness in all relevant sectors, **including initial and in-service teacher training**. It urged Member States to tackle gender segmentation of the labour market in STEM through investment in formal, informal and non-formal education as well as lifelong learning and vocational training for women.

Education

Members noted that girls seem to lose interest in STEM as they get older, suggesting that interventions are needed from **pre-school and primary school** onwards to support girls' interest in these fields. They called

on the Commission and Member States to create new channels to reach out to girls and ensure that digital education reaches them all. They encouraged gender mainstreaming in primary, secondary and higher education, through educational content, teacher training and gender-sensitive curricula.

In addition, EU funds, programmes and strategies, including Erasmus+, the European Social Fund Plus (ESF+) and the Digital Europe Programme, should be used effectively to actively encourage girls to undertake studies in ICT and STEM fields.

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.

Parliament called for the reduction of the gender gap in the digital economy through targeted measures. Pointing out that on average, start-ups owned by women receive 23 % less funding than those run by men, the Commission and Member States are called on to foster women's entrepreneurship in innovation and to increase funding opportunities for female entrepreneurs and women-led digital start-ups.

Careers

Members regretted 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.

Parliament 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.