Committee on Women’s Rights in Euro-Mediterranean Countries

Concept Note

“Women's Access to STEM Education as an Agent of Change”

Meeting

Thursday, 15 February 2024, 9.00-11.30

Rabat, Morocco

Room 5 New Building

Foreword

To ensure the best use of the skills and leadership potential of women and girls in the economy and in society it is also essential to fostering their digital education and training in the STEM disciplines: this is one of the main areas of the work of the institutions and organisations dealing with gender equality and the empowerment of women and girls at the European and international levels. For the fact remains that education and research in STEM subjects (science, technology, engineering, mathematics) still predominantly remain a male preserve, while women face significant challenges and barriers of all kinds when aspiring to secure acme positions in these fields.

Bearing these facts in mind, the UfM Parliamentary Assembly's Women's Rights Committee intends to explore the issue of access by women and girls to the STEM disciplines as agents of change, in order to explore ways in which the parliaments can support the dismantling of the obstacles that are preventing or restricting women's and girls' access to the STEM disciplines and to their employment in the STEM professions, and to devise and promote effective initiatives and measures in this regard.

The Background

Globally, the data presented in a 2022 study by UN Women, the United Nations body for gender equality and women's empowerment, reveal that although women outnumber men in terms of access to university education, they only account for 35% of the total number of students taking STEM courses and a mere 3% taking information and communication technology courses. In the
workplace, women account for barely 19.9% of the professionals working in science and engineering.\(^1\)

The European Commission's 'She Figures' report (2021) shows that, in the European Union, women only account for 20% of the graduates in information and communication technologies, and only 17% of the workforce in the technology sector. Women also make up only 24% of members in the technical professions, be it in science, engineering or IT. The pace of change is not promising: between 2011 and 2020 there was only a slight increase from 39% to 41% in the number of women scientists and engineers in the EU Member States.\(^2\) On the other hand, in the MENA region, although the proportions of female students in the STEM disciplines exceed those of male students, women are struggling to get a foothold in the labour market and the proportion of women working in the STEM fields is significantly low.\(^3\)

This therefore confirms the persistence of a significant gender gap at all levels in the acquisition of skills in the STEM disciplines and the need to promote and implement policies at the international, national and regional levels that will facilitate access by women to the acquisition of STEM skills. Numerous areas of intervention have been identified to achieve this.

The Conclusions of the 67th Session of the United Nations Commission on the Status of Women (CSW) in 2023, on 'Innovation, technological change and education for achieving gender equality and the empowerment of all women and girls in the digital age', pointed out that integrating a gender perspective into technology and innovation is essential if the goals of Agenda 2030 are to be attained, recognise that gender stereotypes are creating persistent gaps in science, technology, engineering and mathematics education, preventing women from equal participation in the technology workforce, notably as content creators and entrepreneurs. Hence the call for states to create the conditions for more inclusive education systems and digital environments, with a focus on women in STEM sectors, and to promote and uphold the right to education for women and girls across the lifespan and at all levels, providing universal access to inclusive, equitable and non-discriminatory education, including by promoting financial and digital literacy and ensuring that women and girls have equal access to leadership training, career development and scholarships.

On 15 February 2023, the European Parliament passed a Resolution on the European Union’s priorities for the 67th Session of the United Nations Commission on the Status of Women (CSW). Recommendations addressed to the European Council included: Ensure that the Union adopts a united stance in achieving gender equality in the context of the digital transformation; facilitate and increase, worldwide, women's access to information and education, including in the fields of science, technology and business, thereby improving their knowledge, skills and opportunities; ensure gender mainstreaming in digital education at all levels, as well as the need to abolish the digital gender gap, as well as all gender discrimination in access to education at all levels.

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Also at the European level, action 13 of the European Commission’s Digital Education Action Plan 2021-27 focused on promoting the participation of women in STEM sectors. Among other things, the Plan envisages providing girls with training in digital and sustainable entrepreneurial skills by involving 40,000 young female students in training courses on the circular economy and digital skills by the end of 2027, supporting the creation of national STEM platforms, and disseminating the results of Erasmus+ funded projects and good practices available within the alliances of European universities.

In recent years, this issue has also been addressed by the Union for the Mediterranean (UfM) as part of its activities to promote gender equality and the empowerment of women and girls, beginning with the UfM Ministerial Declaration on Strengthening the Role of Women in Society (Cairo, 2017) – which launched a regional dialogue to enhance the role of women in UfM countries – and ended with the Madrid Declaration of 2022, adopted following the fifth ministerial meeting on Strengthening the Role of Women in Society. Among the commitments undertaken by the 42 countries on that occasion on strengthening the legal framework, improving women's access to leadership in public life and decision-making, increasing women's participation in economic life, and combating and preventing violence against women and girls, there is also the promotion of gender equality and inclusive models of leadership from early education in every field, including science, technology, engineering and mathematics. These commitments have given rise to numerous UfM projects in support of women's entrepreneurship, education with a focus on the STEM subjects, and strengthening the role of women in combating climate change.

According to the 1st UfM Regional Report on Gender Equality, published in March 2022, many countries have strengthened legal frameworks and developed new programmes and policies to increase women's participation in the political, economic and social spheres and are developing programmes to encourage girls and women to choose STEM careers, although - as the report points out - the impact of these programmes is not yet measurable.

Finally, the subject of promoting women's and girls' access to STEM subjects follows on from the work recently carried out by the UfM Parliamentary Assembly's Committee on Women's Rights on the role of women as agents of change with respect to climate-related issues, as evidenced in the Recommendation on climate change and gender policies adopted on 3 December 2021: guaranteeing women and girls access to STEM disciplines is an indispensable step towards promoting the adoption of a gender perspective in developing the technologies needed to combat climate change.

The Objectives

To empower girls in the STEM disciplines a paradigm shift is needed, a commitment to sustainable, long-term programmes and initiatives that acknowledge the existing structural barriers and then work towards removing them. This realisation is the driving force behind the UpM Parliamentary Assembly Women's Committee's deliberations: the Rabat meeting on 15 February will be the first opportunity for members and experts to discuss how to direct parliamentary efforts to promote access by women and girls to STEM disciplines in the Mediterranean countries, sharing ideas on this issue and good practices that have been put in place at national and regional level to identify concrete measures and interventions in this regard:

- developing STEM skills in the school curricula and subsequent study and training pathways, in order to promote the employment of women in the STEM professions, including by creating specific platforms to act as a bridge between vocational training and the STEM labour market;
- combating gender bias and stereotypes in educational and working environments, starting with the appreciation of women’s contribution to STEM;
- promoting a gender perspective in developing the technologies needed for energy transition, environmental conservation and combating climate change;
- including women in leadership positions and policy decision-making in the matter of the environment and sustainability.