Towards gender equality in Technology: Research findings, educational programs and policies in Higher Education in Latin America

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Women in S&T careers and in their professional development: Main screening questions

Why so few women in S&T careers? (Rossi, 1965)

Why so slow the increase of women in scientific areas and particularly in technological fields?

Why so low presence in decision-making positions in S&T education, research, business and policy environments?

Do gender stereotypes influence their attitudes towards choosing S&T careers?

Do they receive equal recognition and retribution (salary) as men for the same jobs?

Are there gender inequalities in authorship of publications and/or patent registration?

Are there gender biases in scientific research and technological developments?

Why considerable number of them drop out during their careers or along their professional lives?

Their past and present contributions to S&T, are known and valued by society and education?

Are they encouraged and evaluated with the same criteria as men?

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Growth in female participation in Higher Education. An encouraging as well as a worrying information

Proportion of female and male graduates by level of Higher Education and as researchers. Global data, 2017 or most recent year available.

Source: “LAS MUJERES EN CIENCIAS, TECNOLOGÍA, INGENIERÍA Y MATEMÁTICAS EN AMÉRICA LATINA Y EL CARIBE” ONU Mujeres.
Gender inequalities according to fields of knowledge: changes and persistence

### Female students by field of knowledge in selected regions and countries (2020 or latest available)

<table>
<thead>
<tr>
<th>Field of Knowledge</th>
<th>CL</th>
<th>AR</th>
<th>CU</th>
<th>PO</th>
<th>ES</th>
<th>PA</th>
<th>UY</th>
<th>BR</th>
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<th>PE</th>
<th>HN</th>
<th>CO</th>
<th>AL</th>
<th>IB</th>
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</thead>
<tbody>
<tr>
<td>Educación</td>
<td>80%</td>
<td>79%</td>
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<tr>
<td>Salud y bienestar</td>
<td>76%</td>
<td>76%</td>
<td>67%</td>
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<td>74%</td>
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<tr>
<td>Ciencias sociales, periodismo e información</td>
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<td>70%</td>
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<tr>
<td>Administración de empresas y derecho</td>
<td>55%</td>
<td>58%</td>
<td>70%</td>
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<td>Artes y humanidades</td>
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<tr>
<td>Ciencias naturales, matemáticas y estadísticas</td>
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<tr>
<td>Agricultura, silvicultura, pesca y veterinaria</td>
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<td>52%</td>
<td>52%</td>
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<tr>
<td>Ingeniería, industria y construcción</td>
<td>21%</td>
<td>36%</td>
<td>41%</td>
<td>27%</td>
<td>26%</td>
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<tr>
<td>Tecnologías de la información y la comunicación</td>
<td>12%</td>
<td>21%</td>
<td>32%</td>
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<td>14%</td>
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Source: “Panorama de la educación superior en Iberoamérica a través de los indicadores de la Red INDICES: panorama 2020” OEI

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Women graduates in STEM careers: differences by disciplines and countries

Source: “LAS MUJERES EN CIENCIAS, TECNOLOGÍA, INGENIERÍA Y MATEMÁTICAS EN AMÉRICA LATINA Y EL CARIBE” UN Women, 2020.
Aspirations and realities of women in the technology industry

➔ Just 22% of the professionals working in the field of artificial intelligence are women.

➔ They continue being a minority in technical areas and leadership positions.

➔ Many leave their jobs due to unequal recognition of their skills and contributions, lower salaries than men for the same position, and/or being asked to assume multiple and simultaneous responsibilities at the work and domestic environment.

➔ If they want to start their own technology companies, they usually face more obstacles than men in accessing financing.

WHY AND HOW TO ENCOURAGE WOMEN'S PARTICIPATION IN TECHNOLOGY EDUCATION AND IN ITS DEVELOPMENT?

The gender gap in technology "is not a game of numbers"*. Gender ≠ women.

Compensatory measures

Encourage girls and young women to get interests and develop technological skills in order to increase their number in these fields and their employability. Is this "THE SOLUTION"?

Transformative measures

Mainstream gender equality perspective across all dimensions of technological careers and work environments in order to contribute to its quality, relevance and its impact in socio economic development.

*Irina Bokova
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“DigitAll: Innovation and technological change, and education in the digital age for achieving gender equality and the empowerment of all women and girls”


"The development of inclusive, digital education and transformative technology is a fundamental requirement for a sustainable future"
GENDER EQUALITY IN IT: A PRIORITY IN INTERNATIONAL, REGIONAL AND NATIONAL AGENDAS

8 March 2023 - UNESCO: International Women's Day "For an inclusive digital world: Innovation and technology for gender equality".

In May 2022, UNESCO organized a high-level session at the WSIS Forum on “Mainstreaming Gender Equality on Digital Transformation through Capacity Building”.

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Ongoing Actions to contribute to those proposes
UNESCO Regional Chair on Women, Science and Technology in Latin America

- Gender equality policies and plans in universities and research centers
- Research, teacher training and policy advice

Communities of practice of LA universities and research centers

2019-2021
2022-2026

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Gracias.

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