## Gender equality and women's and girls' autonomy in the digital era: contributions of education and digital transformation in Latin America and the Caribbean

Reference document

Regional Consultation prior to the Sixty-Seventh Session of the Commission on the Status of Women, whose priority theme is "Innovation and technological change, and education in the digital era to achieve gender equality and the empowerment of all women and girls," within the framework of the 64th Meeting of the Presiding Officers of the Regional Conference on Women in Latin America and the Caribbean.

8 February 2023









#### The context

The region faces a series of cascading crises that exacerbate the historical gaps and the structural challenges of gender inequality. In the last three years, the region has shown setbacks that threaten the achievement of the Sustainable Development Goals and the Regional Gender Agenda

The pandemic accelerated the trend towards digital transformation and made visible pending demands regarding education systems and the gaps in connectivity and use of digital devices

Digital transformation is an opportunity to create highly productive and better paid jobs, however, it presents a series of challenges for the region and especially for women It is necessary to move towards economies with minimal carbon emissions and high technological content, but also that are more inclusive and sustainable. Considering the multifaceted dynamics of the digital age, comprehensive and proactive public policies that address the structural challenges of gender inequality are needed.









#### Milestones in the Regional and Global Agenda

Concern for the full participation of women in fields of science and technology has been addressed in various agreements and recommendations at the regional and global levels





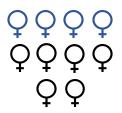




#### Use of technologies in the region and situation of women



**244 million** people do not access the Internet in Latin America and the Caribbean<sup>1</sup>



**4 out of 10 women** in the region are not connected and/or cannot afford connectivity<sup>4</sup>



Less than half of the population has digital skills, and less than **9%** declare that they are competent in complex activities such as programming, configuring software or devices, using Excel, among others<sup>2</sup>



Women experience more precarious conditions of Internet access: poor connection, lack of regular access, absence of appropriate devices or insufficient data.



**68%** of urban households had an internet connection in 2018, while only **23%** of rural households had access<sup>3</sup>

<sup>&</sup>lt;sup>4</sup>Vaca Trigo and Valenzuela (2022), "Digitalization of women in Latin America and the Caribbean: urgent action for a transformative recovery and with equality", Project Documents (LC/TS.2022/79), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC).





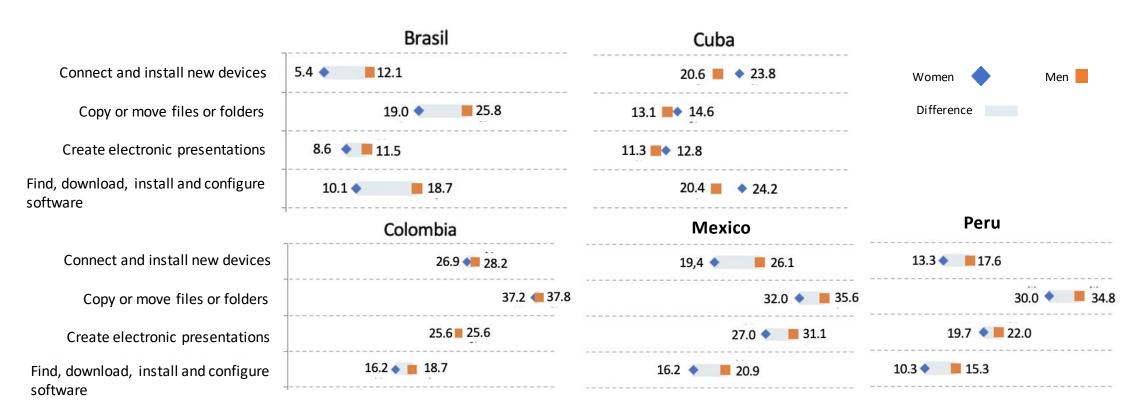




lICA (Inter-American Institute for Cooperation on Agriculture) and IDB (Inter-American Development Bank) (2020), "Rural connectivity in Latin America and the Caribbean. A bridge to sustainable development in times of pandemic"

<sup>&</sup>lt;sup>2</sup>UNESCO Institute for Statistics. In the "Connect and install new devices" category, the data for Mexico and Peru correspond to 2018. <sup>3</sup>ECLAC (2020), "Universalize access to digital technologies to face the effects of COVID-19", Special Report COVID-19, No. 7, Santiago.

## The digital skills deficit is one of the main barriers that women face in harnessing the potential of digital technologies



Latin America (5 countries): youth and adults with ICT skills, by type of skill and sex, around 2019 (Percentages)

Source: Own elaboration based on data from the UNESCO Institute for Statistics. In the category "Connect and install new devices", the data for Mexico and Peru correspond to 2018. In the category "Write a computer program using a specialized programming language", the data for Peru also correspond to that year.







#### Inequalities in education and in the labor market in the digital age



The access of women and girls in the region to education has increased. Currently, the completion rate of women in secondary education is 6.1 percentage points higher than that of men, and in all countries the participation of women in higher education is higher than that of men.



However, women's higher educational credentials do not translate into better jobs and wages once they enter the job market. Only 1 in 2 women participate in the labor market, while in the case of men this figure is 1 in 4.





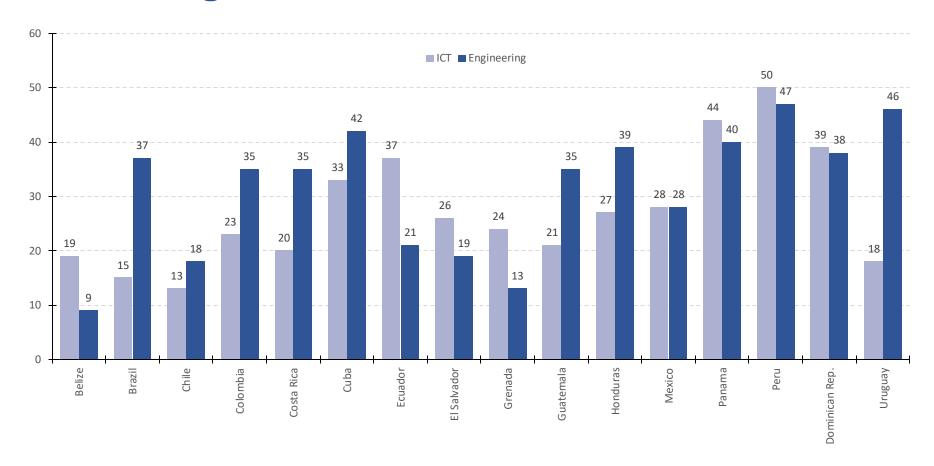
In addition, there are participation gaps in the areas of Science, Technology, Engineering and Mathematics (STEM), where the proportion of women graduated from higher education does not reach 40% in most countries in the region. This proportion is even lower in the areas of information and communication technologies (ICT), which are key in the context of the digital age.







#### Fewer women graduate in STEM fields, and even less in ICT areas



Latin America and the Caribbean (16 countries): proportion of women in the total number of graduates of tertiary education in engineering and information and communication technologies (ICT) (Percentage)

Source: United Nations Educational, Scientific and Cultural Organization (UNESCO), "A new generation: 25 years of efforts in favor of gender equality in education", World Education Monitoring Report, Paris, 2020. Note: Latest information available; Percentage of women graduating from tertiary education according to UNESCO Institute for Statistics classifications: information and communication technologies, and engineering, manufacturing and construction











## Structural challenges of gender inequality in STEM education and the digital ecosystem

- Difficulties in accessing devices and quality internet connection
- Difficulties in lower-income households to access STEM studies
- Gender gaps in entering the labor market

- Social context does not support the interest and motivation of girls in STEM areas and generates gender biases in educational settings
- Violence against women through digital media
- Gender stereotypes in academic and scientific communities, and stereotypes regarding women's lack of STEM skills

1.
Socioeconomic inequality and poverty

2.
Sexual division of labor and unfair social organization of care

- Overload of domestic and care work as a barrier in training
- Time limitations for women to learn ICTs and STFM studies

3.

Patriarchal and discriminatory sociocultural patterns

Concentration of power

- Male-dominated teaching environments and careers in STEM and technology companies
- Absence of role models
- Androcentric production of knowledge and techno-scientific developments
- Unequal valuation of the technical capacities of women and men: unequal treatment and opportunities









## Implications of the digital transformation for women in the labor market

Technologies are creating jobs related to digitalization and platform economies and they are altering the structure of occupations and employment. **26,7%** of the jobs held by women have a medium or high risk of substitution.

Jobs in the technological field tend to reproduce biases of the traditional labor market, as well horizontal segmentation (women employed in sectors with lower productivity) and vertical segmentation (occupations in the lowest rungs of the ladder). **59,6%** of women are occupied in sectors with lower productivity, being left out of more dynamic sectors.

The unequal unpaid care system perpetuates gender gaps in the context of the digital age. In the region, close to 76% of care work and unpaid domestic activities are carried out by women. 60% of women in households with the presence of children under 15 years of age declare that they do not participate in the labor market.







#### The continuum of gender violence against women and girls is reproduced inside and outside the digital space

Online violence limits the interaction of women, girls and adolescents in digital spaces, their autonomy and the exercise of their rights

The accelerated digitalization in the context of the pandemic has generated more exposure to gender-based violence online

Gender-based cyber violence is exacerbated for human rights defenders, female politicians and leaders in the public space, and journalists

The normalization of online violence and the lack of access to justice faced by victims is yet another reflection of symbolic, structural and systemic gender violence.









#### Gender gaps at all stages of digital development

Access

 4 out of 10 women are not connected or cannot afford effective connectivity

Use

• Digital skills deficit, especially advanced digital skills

Appropriation

 Limited participation of women in the online labor market, and less access to digital services (online education, social services, financial services)

Creation and Development

• Low presence of women in STEM-related careers, especially ICTs. Digital gender violence hinders their full inclusion in digital ecosystems.

The development of emerging technologies (AI, robotics), is a paradigmatic example of the exclusion of women







# Recommendations to advance towards the autonomy of women in the digital era









Incorporate the gender perspective in the transformation of the productive matrix and the digital transformation of the dynamic sectors of the economy

Promote the **transformation of education** for an inclusive recovery and improve the situation of girls and women

Design comprehensive universal care systems that promote greater digital inclusion of women

Guarantee **labor rights for women**, particularly in digital and platform employment

Reduce **digi** the autor

Reduce **digital gender gaps** to promote the autonomy and participation of women

Strengthen **governance and multisectoral alliances**, reorganize institutional
conditions and reaffirm social pacts to
guarantee compliance with the SDGs

Promote **digital trust and security** for women and girls and ensure digital rights

Produce **information** to make visible the situation of women in all their diversity in the context of innovation and digital transformation processes

6







Incorporate the gender perspective in the transformation of the productive matrix and the digital transformation of the dynamic sectors of the economy

1.1

Develop inclusive digital ecosystems and transform the productive matrix of countries in the region to guarantee gender equality

1.2

Harness digital transformation to build an inclusive digital society









#### Design comprehensive universal care systems that promote greater digital inclusion of women

2.1

Consider in an integrated manner the different components that make up a comprehensive care system, taking advantage of the benefits of the digital age

2.2

Develop a governance model for comprehensive care systems that considers inter-institutional articulation supported by digitalization









#### Reduce digital gender gaps to promote the autonomy and participation of women

3.1

Implement policies for universalizing access to digital technologies, especially for women (eg. basic digital basket)

3.2

Increase network coverage and quality, especially in underserved areas, to reduce the digital gender gap









#### Promote digital trust and security for women and girls and ensure digital rights

4.1

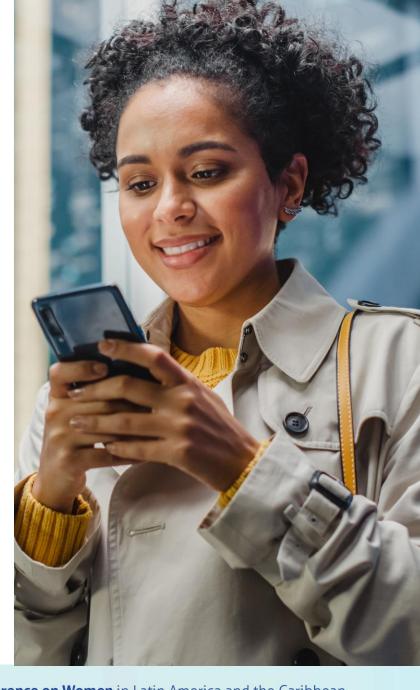
Develop regulatory frameworks and build a national strategy for the protection of women and girls in the digital world

4.2

Promote training programs on digital citizenship for safer access and use of technology

4.2

Produce and disseminate knowledge for decision-making and to understand and track patterns of violence









### Promote the transformation of education for an inclusive recovery and improve the situation of girls and women

5.1

Promote and finance inclusive digital transformation processes of educational systems to renew education in the region

5.2

Promote comprehensive and intersectoral public policies to foster the participation, permanence, and graduation of girls, adolescents, and women in STEM areas and career paths

5.2

Support the creation, access, reuse, conversion, adaptation and redistribution of quality inclusive and equitable Open Educational Resources (OER) for all stakeholders

5.2

Promote lifelong learning opportunities for women, mainly with a view to foster jobs in the digital economy and occupations that respond to the demands of new realities and that allow for participation in generating innovations









#### Guarantee the rights of women to work and at work, particularly in digital and platform employment

Guarantee rights to work and at work 6.1

> Prevent the precariousness of atypical and emerging forms of employment

Promote fiscal and financial policies with a gender approach to promote the participation of women in the digital economy 6.2 and ensure their autonomy.





6.2





Strengthen governance and multisectoral alliances, reorganize institutional conditions and reaffirm social pacts to guarantee the achivement of the Sustainable **Development Goals** 

7.1

Strengthen the governance of the digital ecosystem and data with a gender perspective

7.2

Strengthen multisectoral alliances and regional cooperation









#### Produce information to make visible the situation of women in their diversity in the context of innovation and digital transformation processes

- Generate and facilitate the use of data from a gender perspective to account for gender inequalities in progress and challenges in the face of 8.1 technological, economic and political transformations
- Have information on digital skills, women's participation at the different levels of the educational system in STEM and TVET areas, as well as access 8.2 to digital technologies, from an intersectional perspective
  - Generate alliances for the production, analysis and use of statistical information, guaranteeing necessary budgets to do so
    - Strengthen the capacity of statistical offices and other informationproducing areas to collect, analyze, and disseminate data, disaggregated by sex, and other relevant variables for gender and intersectional analysis





8.2

8.2







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Sixty-fourth meeting of the Presiding Officers of the Regional Conference

Virtual meeting, 8 and 9 February 2023

GENDER EQUALITY AND WOMEN'S AND GIRLS' AUTONOMY IN THE DIGITAL ERA: CONTRIBUTIONS OF EDUCATION AND DIGITAL TRANSFORMATION IN LATIN AMERICA AND THE CARIBBEAN

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