Technology and Inequality: How are modern societies shifting to address gender inequality in the fields of science and technology?

Introduction

The gender gap in STEM (Science, Technology, Engineering, and Math) fields is a widely discussed topic in professional and social settings. Modern society has shifted to address this inequality, and the gender gap is narrowing.[4]

However, this is not enough. Men continue to overtake women, who seem to be left behind.

Despite major progress, there is a lot of work to be done through both structural and organizational changes to modern society.

Background

Some Quick Facts:

- ☆ Women make up only 28% of the STEM workforce [7]
- ☆ Men vastly outnumber women majoring in most STEM fields in college [7]
- ☆ Some of the higher-paying STEM fields, such as Computer Science and Engineering, are male dominated [7]
- ☆ The annual salaries of Men in STEM are approximately 15,000 dollars higher per year than the average woman in STEM [7]

What's Being Done?

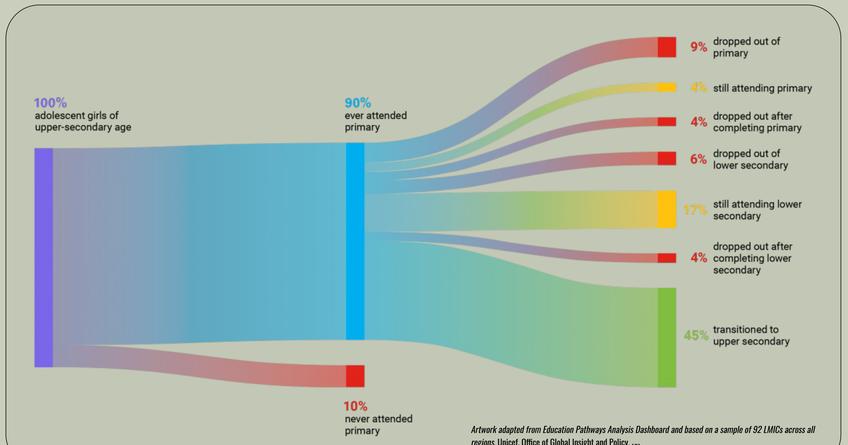
In these past years, the existing gender inequalities in STEM fields have been recognized and regulations have been put in an effort to decrease the gap. Some examples:

- ☆ **1995 Beijing Platform for Action**:
  - Also known as the "Women's Bill of Rights" [1,7]
  - Reported 12 key areas where immediate action was needed to ensure greater equality and opportunities for all genders [1,7]
- ☆ **Education 2030 Framework for Action:**
  - Focuses towards more inclusive and better quality of education [3,7]

Obstacles

- ☆ Widely held stereotypes that males are superior and more likely to succeed in STEM related careers [6]
- ☆ The idea that it is not suitable for a woman to hold a career in a male-dominated field of work [6]
- ☆ Cultural attitudes that investing in an education for a male is more worthwhile a female's
- ☆ The internalized idea that males and females fundamentally different [6]
- ☆ Society socializes young boys and girls differently (Example: young boys are encouraged to play with mechanical toys while young girls are encouraged to play "house") [8]
- ☆ The structural discriminatory treatment of women by organizations [8]

"With an approximate strength of 50 per cent of the global population, women have access to much less than half of the resources in terms of technology, financing, land, training and education, and information." [6]

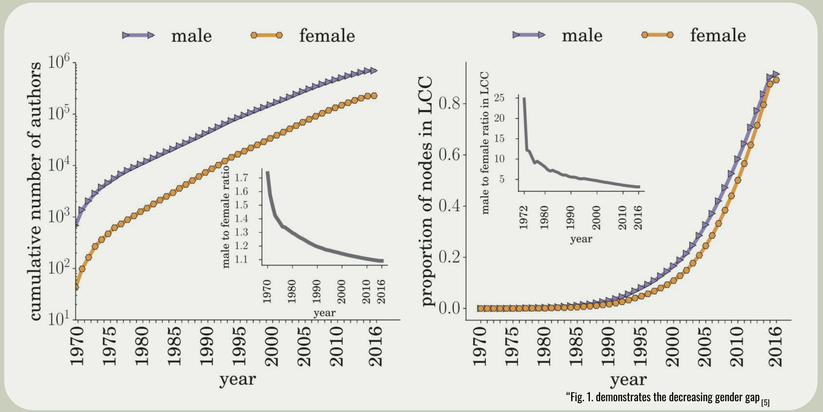


Artwork adapted from Education Pathways Analysis Dashboard and based on a sample of 92 LMICs across all regions. Unicef. Office of Global Insight and Policy. [2]

Conclusion

The gender inequality gap in STEM fields has been decreasing exponentially since becoming a prominent topic. Women are achieving more than in previous times due to more opportunities. Yet not enough development has occurred.

Women still average lower in wage, publication, hirings, position, and education. Men are continuing to dominate STEM fields through structural design bias. Cultural differences also play a role in the inequality gap.



"Fig. 1. demonstrates the decreasing gender gap [5]

Proposed Solutions

- ☆ Diversity committees dedicated to mentoring and leading training sessions to eradicate internal bias
- ☆ Re-imagining hiring and promotion procedures to eliminate internal or structural bias

Citations

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