Hour of Code: Overview

Executive Summary

Nowadays, the digital transformation provides new avenues for the economic empowerment of women and can contribute to greater gender equality. The digital platforms opportunities for all and can help bridge the divide by giving girls and young women in the possibility to earn additional income, increase their employment opportunities and access knowledge and general information. Twice as many boys as girls expect to become engineers, scientists or architects.[1] Social norms around perceived appropriate skillsets for girls disadvantage them from engagement in employment in the 4th industrial workspace where over 90 % of jobs worldwide have a digital component . Where girls have access to digital spaces, meaningful use is often limited to entertainment and social media rather than education and productive activities.[2]

Gender inequality in the physical world is mirrored in the digital setting, disadvantaging girls from realizing their full potential and contributions. Gender inequality in the physical world is mirrored in the digital setting, disadvantaging girls from realizing their full potential and contributions. ITU's new Measuring digital development series in 2019, estimates that over half the total global female population (52 per cent) is still not using the Internet, compared to 42 per cent of all men.[3] In terms of the digital divide, there is still a gender gap in the Asia-Pacific region; it is still lagging behind the world average. While, on average, 41.3 per cent of women and 48.3 per cent of men used the Internet in Asia and the Pacific in 2019, globally 48.3 per cent of women and 55.2 per cent of men used the Internet that year. Data also show that, in Asia and the Pacific, more men than women were using the Internet in 11 of the 13 countries in 2019 for which data were available.[4]

For girls, education does not always translate into employment, with many finding their future in the home, engaged in unpaid work, or in the informal sector. Girls in Asia are more likely (10:1 ratio) to be not in employment, education or training as compared to boys, where South Asia ranks the highest in the world. Girls with disabilities, and those living in marginalized groups face specific barriers.[5] In terms of STEM (Science, Technology, Engineering and Math) education pursued by female in Asia and the Pacific, women make up almost half of researchers in Central Asia. The average falls to 18.5% in South and West Asia, with women accounting for less than 15% of researchers in India, dropping to single figures in Nepal. [6]

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[1] Gender Equality Forum 2021, ITU and UNICEF
[2] UNICEF, 2020
[3] ITU Measuring digital development: Fact and figure 2019, https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2019.pdf
[4] ITU Digital trends in Asia and the Pacific report.
[5] UNICEF, 2021, https://www.unicef.org/rosa/empowering-adolescent-girls
[6] UNESCO Institute for Statistics, 2020

Global female enrolment is particularly low in certain fields. Just 3% of students joining information and communication technology (ICT) courses across the globe are women. That improves slightly to 5% for mathematics and statistics courses. And it increases to 8% for engineering, manufacturing and construction courses.[7] Women are more attracted to STEM courses in some regions of the world than others, but the global situation remains characterized by gender imbalances.

The Hour of Code is a global campaign to encourage students, teachers, and parents to try a one-hour introduction to computer science with the goal of showing that anybody can learn the basics. Research shows vast benefits from learning computer science and coding skills at a young age. Beyond learning digital literacy, children who learn computer science and coding tend to excel in problem-solving, creativity, math, spatial and reasoning skills, and more. Organizations from around the world have created fun and engaging self-guided tutorials that can be used to participate in the Hour of Code. As the world moves more towards technology, it is important to equip all children and youth with the right skills to excel in both life and the workforce. Girls in particular lack opportunities for acquiring skills in the field of technology. We need to strive for higher female participation in areas which are usually the domain of men, such as ICT and engineering – areas where job growth is the highest in this region. Increased representation of girls and women in the tech sector also has huge benefits in terms of developing gender-responsive technologies and innovation, and for opening up more paths for women's participation in the field.

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• These skills are transferable and are beneficial throughout the lifecycle; from learning to read and write, to improved exam scores, to college or university attendance, and to meaningful careers both in and out of the tech industry.

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[7] World Economic Forum, 2021, https://www.weforum.org/agenda/2020/02/stem-gender-inequality-researchers-bias/