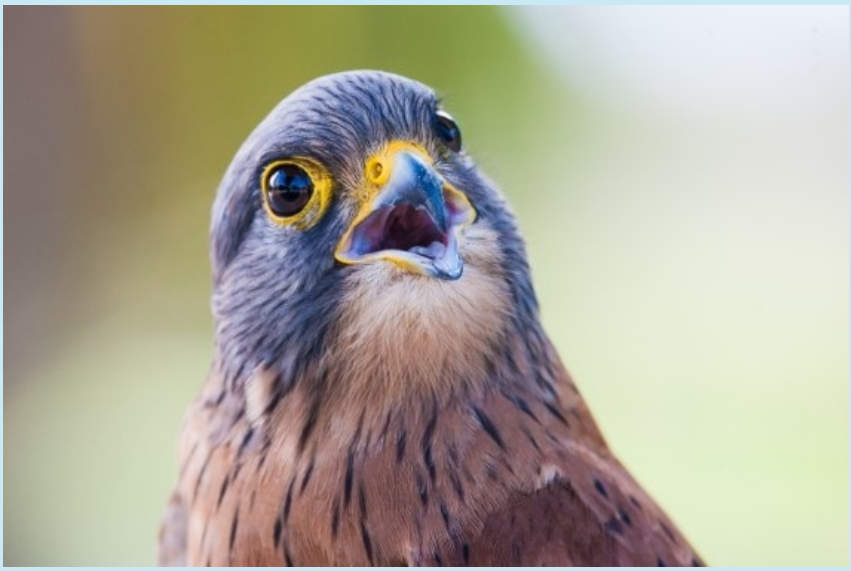
Zonta Says NOW News - MAY 2021



Keeping an Eye on the Digital Technology Gender Gap

A little bird shared a Twitter article on women fighting for digital equality that prompted this month's newsletter theme.

Zonta Says NOW is all about creating a gender-equitable, sustainable world by educating girls, advocating for women's rights and inspiring more female leaders. In today's world, so many actions are carried out on a computer or mobile phone and, if you do not have digital skills, you are left behind.

The article explained how the lack of digital skills could deprive women health care, education, work and financial independence. Did you know there is a digital gender gap? For example, in Africa, 37 per cent of men have access to the Internet, but only 20 per cent of women, and the gap is widening.

This edition looks at mobile phone use and explores why women and girls do not have as much access to the internet as men.

Increasingly our lives depend on digital technologies, and the ICT industry is growing - but there is a gender-equality paradox. Women face many barriers to entering and staying in the industry. This has resulted in an ICT industry dominated by men. With the rise of artificial intelligence and few female programmers, stereotyping biases are magnified that negatively impact women.

Globally, billions of mobile phones are used, new versions are constantly released, and e-waste is a growing problem.

All of these issues ultimately impact sustainability in one way or another. Please follow the links to learn more.

Carole
Carole Theobald
District 23 Futurist/Leadership Coordinator

The Mobile Gender Gap

Globally, 4.88 billion people use a mobile phone, and of these, 3.80 billion use a smartphone with Internet access. There is a stark contrast in smartphone ownership between developed and developing countries. In the UK, UAE, USA, Germany, and France, over 75 per cent of people own smartphones, but only around 25 per cent of people in Nigeria, Pakistan, Bangladesh, Iraq, and India can do so.

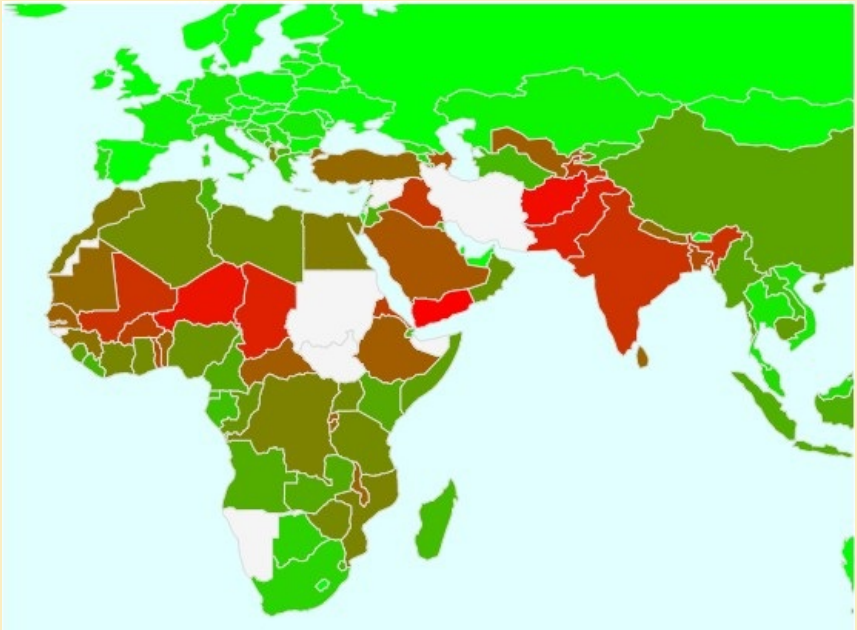
Inequality between men and women can be measured by who has a mobile phone. In low and middle-income countries, women are 20 per cent less likely to own a smartphone than men. Without a smartphone, women cannot access the apps that will help them save money, consult a doctor, sell goods from home-based businesses, assist with farming issues or report domestic abuse.

The most significant barriers to owning and using a phone are cost and digital literacy. With women earning less than men and girls not having access to the same education as boys, they are at a double disadvantage. But there is more.

A pilot project in Uganda aimed to connect women with digital savings accounts. Most women had no formal bank accounts and hid cash to avoid handing it over to their husbands. While more than half the women applied to open the digital bank accounts, none deposited funds after the opening balance requirement. The problem? The women's communities and families would not let them use the phones.

The GSMA Mobile Gender Gap Report 2020 found that 54 per cent of women now use mobile Internet in low and middle-income countries, with 300 million fewer women than men having mobile internet access. South Asia has the widest mobile internet gender gap at 51 per cent, with 'family does not approve' being a particular barrier to women using mobile Internet in Bangladesh (13 per cent) and Pakistan (33 per cent).

The Digital Gender Gaps Project measures global gender gaps in Internet and mobile access. This map uses the Facebook Gender Gap Index to show the ratio of female to male internet use. The green-shaded countries have the most equality and red the least.



An Oxford University study involving over 200 countries found that mobile phones were associated with lower gender inequality, higher contraceptive uptake, and lower maternal and child mortality.

Overall, the findings suggest that boosting mobile phone access and coverage and closing digital divides, particularly among women, can be powerful tools to attain empowerment-related sustainable development goals. Ultimately, this leads to enhanced population health and well-being and reduced poverty.

Action: Check out the Digital Gender Maps Project.

The ICT Gender Equality Paradox

In this digital age, the information and communication technology (ICT) industry is snowballing. So how do women fare in this growth industry?

UNESCO's report, entitled I'd blush if I could, describes the ICT gender-equality paradox and some possible reasons for why it occurs.

Countries with the highest levels of gender equality, such as those in Europe, also have the lowest proportions of women pursuing advanced degrees in computer science and related subjects. Conversely, countries with low levels of gender equality, such as those in the Arab region, have the highest proportions of women completing advanced technology degrees.

Why is this so? The UNESCO report explains that initially, post-WWII, computing was seen as 'women's work' - mainly because of the stereotyping of women as meticulous and good at following step-by-step directions. (See photo above). As the computer became integrated into all aspects of life, it became clear that programmers wielded tremendous influence; women were pushed out, and the field became more male-dominated.

With the introduction of home computers, parents were more likely to give them to boys than girls. Girls gained less computing experience than boys and so were disadvantaged when it came to going to university. In popular culture and the media, computing was seen as a male domain, cementing the stereotype. The gendering of digital technology appears to have unfolded in a single generation.

Today, in primary and lower secondary levels, girls are more digitally competent than boys. However, as they enter the senior school years, girls perceive their abilities to be lower than boys – even if they outperform them. This shift usually happens when students choose their subjects, meaning girls opt-out of STEM subjects earlier than boys and are less likely to have technology-related careers.

Globally women constitute less than one-third of ICT university students. A smaller number of women studying ICT in secondary school and college translates into a gender gap in the labour market. Women hold 24 per cent of all digital sector jobs, and only 6 per cent of mobile application and software developers are female. The attrition rate is also disproportionately high for women in technology-related fields, likely due to gender discrimination, competitiveness and a lack of female peers.

The lack of diversity in technology can have a severe multiplier effect as big data and algorithms become influential in day-to-day life. We use artificial intelligence (AI) to automate decision-making from the health care industry to the legal system. AI may be responsible for making choices that affect people's life trajectory, such as which medical treatment they receive, whether they are eligible for life insurance or a loan, or if they get a job interview. When deep learning systems use data that contain gender biases, these biases show in the software – exacerbating gender inequalities. As one prominent female researcher in the AI field put it, such systems are 'bias in, bias out'.

For example, Amazon's AI recruiting software downgraded résumés that contained the word 'women's', as in 'women's chess club captain', because it was trained on men's résumés. There are more examples in the report that are very disturbing.

If technology is to help communities and countries become more gender-equal, women and men must steer the development of this technology.

Zonta International's Women in Technology Scholarships encourage women to pursue education, career opportunities and leadership roles in information technology. There are 20 scholarships valued at US$8,000. Applications close on 15 October 2021.

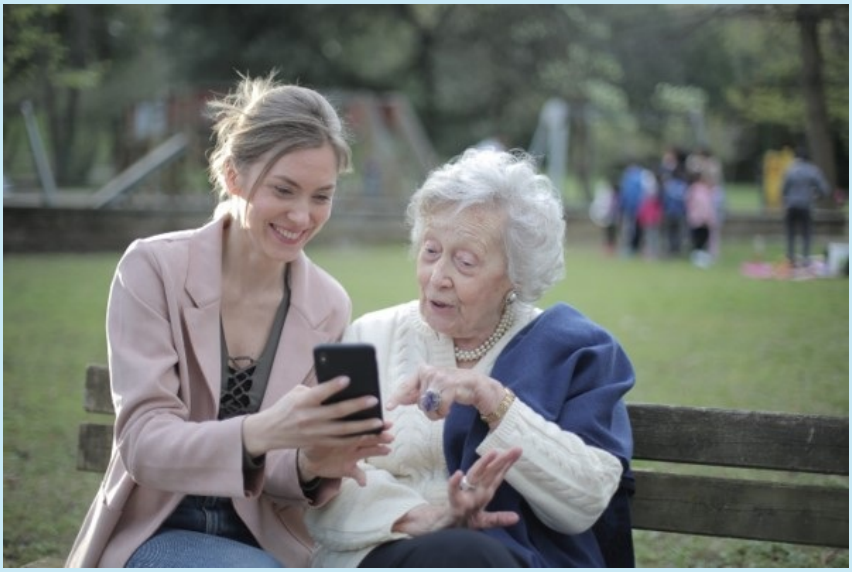
Action: Promote the Women in Technology Scholarships - they could make a big difference to women entering the ICT industry

New STEAM Power

We have all heard of the importance of getting more women and girls into STEM – Science, Technology, Engineering and Mathematics. However, this is being taken one step further by including the Arts – humanities, language arts, dance, drama, music, visual arts, design and new media (hence STEAM).

The main difference between STEM and STEAM is STEM explicitly focuses on scientific concepts. STEAM investigates the same concepts but does this through inquiry and problem-based learning methods used in the creative process.

Action: Explore these Women in Steam resources.



Ageing in a Digital World

Digital technology is not just for the young.

The International Telecommunication Union (ITU) is the United Nations specialized agency for information and communication technologies. Its latest report explains that today, and for the first time, people aged 60 or older outnumber children under 5.

Older persons from Australia and New Zealand have the highest life expectancy (86 years), followed by Europe and Northern America (84 years). Globally in 2019, there were 81 men for every 100 women aged 65 years or older, yet only 63 men for every 100 women aged 80 years or older. Although men's longevity is expected to improve, women will likely continue to outlive men on average.

During the pandemic lockdowns, we have relied on digital technology to communicate using Zoom and other apps to keep in touch with family members, do banking, online shopping, and have telehealth consultations. Older people need digital skills so they can access these services.

Having financial and digital skills is especially important for older women as, on average, they receive lower pensions than men. Sometimes the pensions are too low to meet their basic needs fully. Therefore, they need access to digital tools to help make the most of their income and access services when ends don't meet.

This report highlights the importance of lifelong digital learning: it will help protect older people, particularly women, from poverty - and provide access to social protection.

Action: Share your digital skills as there may be others that can use them!

Calculating the Carbon Footprint of Digital Technology

Carbon emissions are produced when electronic devices are made, used, and dumped!

Most emissions are produced when electronic devices are manufactured due to the energy used in the mining and processing the minerals required to make them. The emissions can be higher or lower depending on the fuel source used to generate the power.

More emissions are produced when we use the equipment. The International Energy Agency has a calculator that shows the carbon dioxide emissions associated with streaming a movie for one hour on various devices in over 30 countries.

For example, the CO2 emissions used in Australia for streaming a Standard Definition video for one hour using high-speed WiFi are: on a smartphone (15g), tablet (16g), laptop (30g), or 50" LED television (100g). In contrast, in New Zealand, these figures are 2g, 2g, 5g, and 15g, respectively. These figures reflect Australia's fossil fuel-based energy network and New Zealand's low carbon system.

Every SMS, text and email sent adds to the carbon footprint. A UK study found that sending one less thank you email a day would save 16,433 tonnes of

carbon a year - equivalent to taking 3,334 diesel cars off the road. The top 5 most unnecessary emails sent are: Thank you, Thanks, Have a good weekend, Received, Appreciated. How many of these do you send?

Do we need more renewable energy so we can be digitally polite without feeling guilty!

The next problem is disposing of digital technology. E-waste includes discarded products with a battery or electrical plug. The United Nations reported that in 2019 over 53 million tonnes of e-waste was dumped – including US$57 billion of recoverable materials such as gold, silver, copper and platinum. Only 17 per cent of e-waste was collected and recycled. Take a look at this map to see how the various countries compare. (In Australia, we generated 21.7 kg of e-waste per capita in 2019.)

Of course, we could reduce our e-waste if we could repair and upgrade our phones more easily. Fairphone is leading the way in this area. This Dutch company has designed a modular phone that can be repaired and upgraded by consumers. It uses fair and sustainable materials sourced with conflict-free minerals and takes us closer to a circular economy. Wouldn't it be great if more companies took this approach?

Action: Check with your local government about where you can send your e-waste.

Add Your Voice to 1 Million Women

Taking climate action is a time for hope and 1 Million Women's You're the Voice campaign will get your feet tapping.

The famous song 'You're the voice' has been transformed into a powerful anthem that has had more than 3 million views.

There's never been a more important time for women to be prominent in climate solutions and for us all to join together in one voice. This is how you can do it - and have some fun at the same time.

Action: Use your digital skills to sign up for the campaign and sing along to the video.

A Present for the Future

Digital literacy is a key tool to educate girls, advocate for women's rights and inspire more female leaders. Through Zonta's service programs we can support projects that train women and girls to use digital technology effectively.

Action: Consider giving a present for the future so we can achieve gender digital equality. Donate to the Zonta Foundation for Women's Endowment Fund today!

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