

Comments at CSW 2011 by Rangita de Silva de Alwis, Director, International Human Rights Policy Programs and Susan McGee Bailey Research Scholar, Wellesley Centers for Women, Wellesley College

I have been so inspired by the presentation made by the panelists and would like to offer some concrete recommendations to broaden the frontiers of STEM to include girls and women with disabilities.

The transformative potential of STEM for the empowerment of girls and women with disabilities is profound. Similarly, women and girls with disabilities are a huge untapped resource of potential scientists, engineers, technologists, mathematicians, and technicians.

Articles 6 Article 7 of the Convention on the Rights of Persons with Disabilities affirm the rights of women and children with disabilities to the equal right to education and employment.

Article 9 enshrines the guarantees of all persons with disabilities to engage in information and communications, including information and communications technologies and systems, and to eliminate the obstacles and barriers and to enhance access to those communications technologies and systems, including the Internet.

How do we close this gap and how do we transform the social and cultural patterns of conduct of men and women that reinforce and reproduce prejudice, bias and stereotypes against women and girls with disabilities in STEM?

One of the most critical barriers to technology and the sciences is patriarchy and paternalism. That is why a gender disability framework based on equality is a pivotal lens to dismantle the barriers to STEM for women and girls with disabilities. To address patriarchy in STEM, CEDAW's Articles 4 and 5 are critical lenses. That is why both the CRPD and CEDAW must be read together to address critical areas of empowerment for women and girls with disability.

Discrimination often masquerades as paternalism and over protections in labour laws and exclude large categories of women from STEM jobs around the world. For example, in several countries in China, women are asked to retire earlier than men. In several countries in Eastern Europe, Central Asia laws, policies and programmes disallow women to work in underground, above ground including work that is generally perceived to be hazardous or a reproductive health risk. These recreate and reinforce stereotypes that women and especially women with disabilities lack the capacity to engage in bio technology, marine biology, chemical industries and engineering etc. These fields have historically been male dominated and pay far more than the services industries in which a majority of working women are concentrated.

When women are perceived to be weak because of the ways in which women are essentialized into rigid categories and caricatures, this creates a cause and effect relationship between the devaluation of the girl child and son preference.

So in STEM disability alone is not a singular marker. Gender and disability compound stereotyping and bias in the areas of STEM that have been historically male dominated fields.

Transformation does not happen unless it is catalyzed.

Recommendations:

Quotas for Women and Girls with Disabilities in STEM Areas:

Temporary Special Measures policies as guaranteed by the CEDAW and CRPD must be expanded to STEM areas:

In India, the law compels government posts to be identified and reserved for persons with disabilities and reserve not less than three percent of vacancies for persons with disabilities. However rarely is this extended to STEM areas. For example, when applied to schools, research shows that teachers with disabilities are concentrated in music teacher positions.

This quota should be broadened to include in areas of STEM. If not, biases and stereotypes against women and girls with disabilities will be heightened.

Affirmative Action Plans:

Affirmative action will help to address the legacy of discrimination against women and girls with disabilities.

Examples of affirmative action plans can be the Spanish Legislative Decree which reduces by 50 percent the social security contribution for employers who provide training contracts for workers with disabilities.

Companies that employ persons with disabilities also receive preferential bids for government contracts.

These subsidies must be extended in STEM areas.

Levies:

In certain countries an equalization levy must be paid in cases where the obligation to hire persons with disabilities is not met. The levies are used to develop structural measures in favor of persons with disabilities.

This carrot and stick approach will help equalize the playing field for girls and women with disabilities and over time normalize STEM for women and girls with disabilities.

For example, the New Zealand's law relating to Employment Promotion, etc. of the Handicapped of calls for levies to be paid by employers employing fewer persons with disabilities than the standard employment quota rate to be paid to the Minister of Labour as prescribed in the Presidential Decree.

This levy should be expanded to STEM.

Tax Incentives:

Under Thailand's law on the Rehabilitation of Persons with Disabilities, private enterprises are entitled to a 50 percent tax reduction of training expenses connected with persons with disabilities. This should be broadened for women and girls with disabilities.

How do we dismantle stereotypes which overtime become deeply entrenched as normalized characteristics of certain groups of people?

The Law Must Play a Normative Role

The New Zealand law articulates the need to address "outdated concepts about the ability, potential, and rights of people with disabilities---concepts that are no longer appropriate or acceptable

Create Public Private Partnerships

This is consistent with the Philippines Magna Carta for Disabled Persons (1992) which recognizes the role of the private sector in promoting the welfare of disabled persons and shall encourage partnership in programmes that address their needs and concerns

Create media attention and include the images of Girls and Women with Disabilities in Text Books

A picture is worth a thousand words. The media must provide positive images of girls and women in STEM educational fields.

Collaborate with Other Women in STEM areas Forge Alliances

Technologies are wings that can empower all persons. This is more so in relation to women and girls with disabilities whose subordination is often compounded. Technologies also provide the pivotal nexus for persons with disabilities and their peers. We just witnessed a new awakening in the Arab World because of information technology. Women and girls with disabilities must be part of this revolution and this renaissance.