



Oasis International School Model United Nations

Economic and Social Council: Sub commission 1: Status of Women
Economic and Social Council: Sub-commission 2: Science and Technology

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Guiding Package - Guide de Recherche

Topic (2): The Access of Women to better living conditions through Scientific and Technological education

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Abstract:

When it comes to gender equality, no matter what arguments are given, we cannot still find the balance between both sexes. Men are given the upper hand of taking any decision, while women suffer. Opportunities and chances for men are more various than the ones presented for women, especially in the poor countries. Women are born, few of them are given the opportunity of having an education, while the majority learns to be a good housewife and serve her husband. While some can be offered a job, there are still too many rules about offering a “female-friendly” job. Even the salary varies depending on their gender, men are offered way more than women are. Women have the ability to improve the world we live in, however many of them are being brainwashed and not knowing that the basic human rights offer them a proper education and a good job with a relatively good salary, as well as the freedom of taking any decision they want. For the past decade women have been paving the way towards gender equality as well as proving how important they are, and how they can accomplish great things, such as Oprah Winfrey, Hillary Clinton, and Maya Angelou. Each of them affected the world in a different way. For instance, Angelou inspired both African American men and women to stand against gender and racial discrimination through her literature, public speaking and powerful writing. It is time to provide for all women the opportunity of education, work, and all their basic rights that they have not received. Many organizations have taken the first step, but many more obstacles are yet to come, and other decisions should be taken in order to achieve the goals. The UN Sustainable and Development Goals (SDGs) include gender equality, good education for everyone, economic growth, and other goals. They are supposed to be achieved by the year 2030.

Introduction:

Since the existence of humans on earth, women have always been underestimated, undervalued and not been given the same rights as their male counterparts. These rights include the freedom to work, freedom of expression, and, first and foremost, the right to a quality education. Yet, in today's developing world, women have reached heights that were only fathomable even during the middle ages; modern women such as Angela Merkel, Christine Lagarde and Zaha Hadid have broken barriers by holding positions and beating records that were previously only held by men. However, women in underdeveloped and developing countries are still deprived of these breakthrough achievements by being told that they are inferior to men and that their only purpose is to please their husbands and take care of the children. This ideology is instilled in girls that aren't yet even pubescent and is transmitted from one generation of women to another. In order to fight this wide spreading epidemic, women have to be taught at a young age to stand up for themselves and know that they are equals of men and have the potential to excel in whichever domain they choose to pursue. Furthermore, seeing as societies have grown dependent and rather invested in STEM (Science Technology Engineering and Mathematics) related fields, girls should have the right to attend a science and technology centered education which will, in return, let them choose their career path and give them the opportunity to earn their own income and become self-sufficient. By doing so, we as humans will be able to benefit from the contributions of women that would have been in their homes if they were not given access to a STEM education. This will hereby increase the active world population and getting closer to a sustainable future.

Definition of Key Terms:

- **Sustainable development:** Economic development conducted without depleting natural resources
- **Sustainable Development Goals (SDG):** 17 goals with 169 targets that aim to end poverty, protect the environment and eliminate injustices and inequalities, etc by the year 2030.

- **Quality education:** Education that meets minimum standards, and meets the guidelines set by the UNICEF (check link for said guidelines)¹
- **Gender Equality Index (GII):** An index set to measure gender disparity and inequality in all sovereign states around the world, and measured yearly by the UNDP².
- **Downtrodden:** Being oppressed or treated poorly, especially by people in power.
- **Emerging countries:** Countries that are seeking to attain a more advanced economic and social status.
- **Innovation:** Making changes in an established organ, system, etc, usually outdated or dysfunctional.
- **STEM education:** Science, Technology, Engineering and Math education.³
- **SAGA :** STEM And Gender Advancement is an initiative started by UN Women

Background Information:

One of the important criteria for a country to be considered “developed” is gender equality and equal opportunities for both sexes. Neglecting female education, denying women equal payment, denying them of basic human rights and not providing them with equal opportunities as men are all major setbacks for any country aspiring to become modernized. In 2010, the United Nations Development Programme (UNDP) developed an index – the Gender Equality Index (GII) – in order to shed light on the countries that need to end all discrimination against women. The UN now also uses this index as a reference document in order to help “guide the way” towards sustainable development worldwide by 2030. The sad truth remains that, even in developed countries, the work path where there is the largest gender gap is STEM. This is due in part to the preconceived notion that scientific research is a man’s job, and that women do not belong there, which means that women are encouraged from a young age to either be housewives or seek a different, more “female-friendly” work path. The biggest reason however is a lack of quality education for women, especially in emerging countries. Girls are typically taught to cook and sew. In more developed areas, they usually seek an education in humanities or literature, leaving science

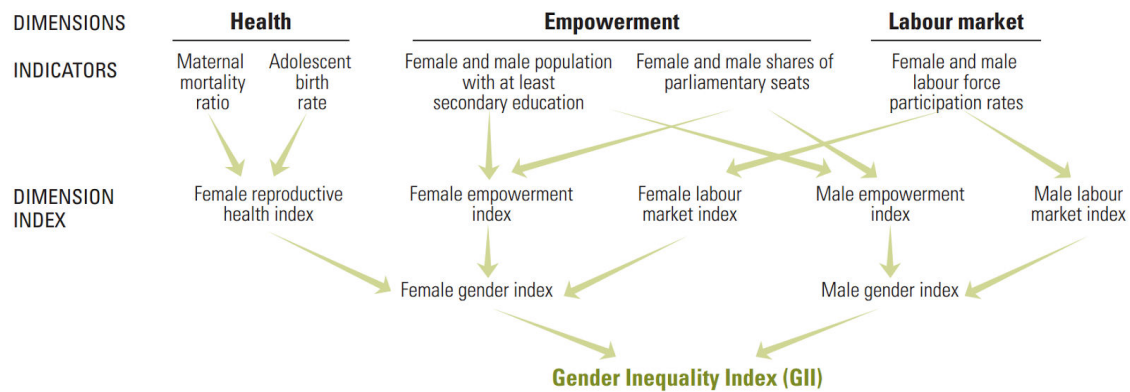
¹ <http://www.unicef.org/education/files/QualityEducation.PDF>

² United Nations Development Program

³ <http://www.livescience.com/43296-what-is-stem-education.html>

and math to their male counterparts. Moreover, some women choose to avoid STEM due to fear of lack of acceptance by their male coworkers/student counterparts. This, again, is due to a discriminative culture intertwined with societal beliefs.

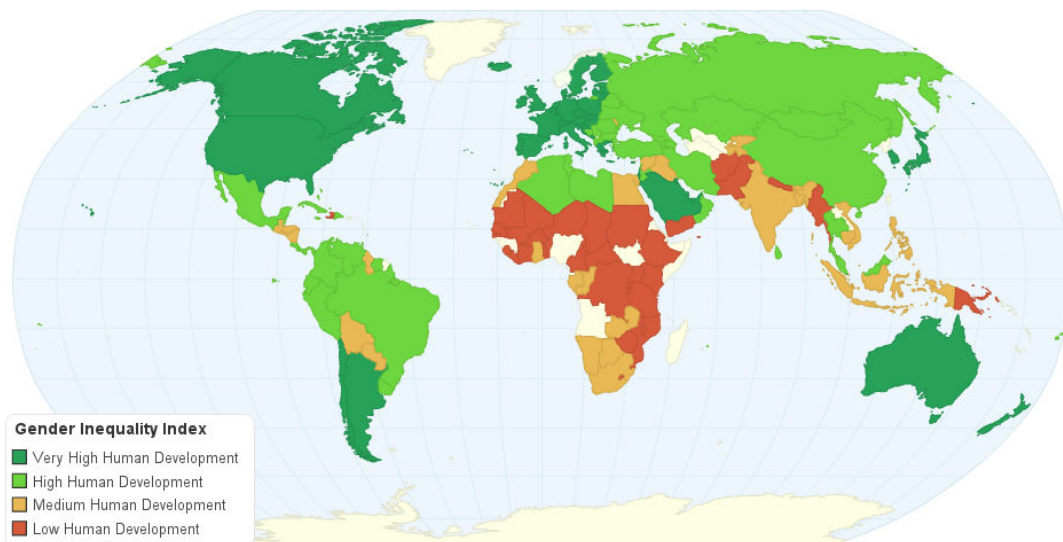
1) Gender Inequality Index (GII):



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This is an explanation of the different criteria that the UNDP uses in order to determine the GII index of a sovereign state.

2) World GII Map



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As presented in this map, we can see that the countries with the highest inequality index are African, Latin American and western/southeast Asian countries. On the other hand, western European and Scandinavian countries fall among the countries with the least inequality index.

⁴ <http://hdr.undp.org/en/content/gender-inequality-index-gii>

⁵ <http://chartsbin.com/view/4319>

The ECOSOC council and Sustainable Development:

The Economic and Social council aims to reach collective and plausible solutions which will lead to the advancement of sustainable development and the achievement of the Sustainable Development Goals (SDGs) by the year 2030. De facto, there are four SDGs that are in correlation with this particular issue:

- 4) Quality Education
- 5) Gender Equality
- 8) Decent Work and Economic Growth
- 10) Reduced Inequalities

Due to the fact that women are not usually thought of as potent workers, the UN has decided to dedicate two goals out of seventeen to abolish the discrepancy between the sexes in all domains. Therefore, it is paramount that women get access to a scientific and technology-centered education (such as a STEM education).

Female involvement in the scientific and technological field has become more and more noticeable. There are a lot of women who are outstanding in the field, and are now gaining more recognition such as Zaha Hadid.⁶ However, women in various regions of the world are still fighting for the right to a proper education. In a number of underdeveloped countries, women are denied any education at all, and are instead taught to be housewives. One example would be Malala Yousafzai's fight for female education in Pakistan. On the 15th of January 2009, Taliban⁷ banned all girls from attending school in Mingora⁸, having already destroyed many all girls' schools in the region. Yousafzai was very outspoken on this issue, and raised awareness on the matter through her blog entries as a BBC blogger. However, Malala was victim of a failed assassination attempt conducted by the Taliban on the 9th of October 2012. A lot of women around the world face similar threats for demanding the basic right to a proper education.

⁶ Zaha Hadid is a world-renowned architect. She is best known for designing the aquatic center in the 2012 London Olympics and designing the Guangzhou Opera House in China.

⁷ Taliban is an islamic movement that seizes control over much of the Pakistani and Afghani land.

⁸ A region in Pakistan.

Organizations involved:

1. UN Women

UN Women have started SAGA, STEM And Gender Advancement, which is a UNESCO supported project that aims to decrease the gender gap in STEM fields.⁹

2. National Girls Collaborative Project (NGCP)

The NGCP, which was created in 2011, is based in the US and aims to encourage young girls into pursuing a career in a STEM field if they desire through effective teaching.¹⁰

3. National Math and Science Initiative (NMSI)

NMSI is an initiative that is based in the US and believes in the early education of STEM subjects to children. This organization has noticed that the US is falling slightly behind other countries in STEM subjects such as mathematics and sciences. Therefore their approach is to train teachers to inspire and motivate students to participate in STEM activities.¹¹

4. Women in Engineering Proactive Network (WEPN)

*“WEPAN is a non-profit educational organization founded in 1990 to be a catalyst for change to enhance the success of women in the engineering professions”*¹²

5. Million Women Mentors (MWM)

Having over 1 million mentors and MWM aims to increase the interest and confidence of women and girls in the STEM fields¹³.

⁹ AnonymousANONYMOUS, *UNESCO*. Available at: <http://unesdoc.unesco.org/images/0024/002450/245006E.pdf>, consulted on: 09/20/2016

¹⁰ AnonymousANONYMOUS, *National Girls Collaborative Project*. Available at: <http://ngcproject.org/about-ngcp>, consulted on: 09/20/2016

¹¹ AnonymousANONYMOUS, *National Maths and Science Initiative*. Available at: <https://www.nms.org/AboutNMSI/OurStrategy.aspx>, consulted on: 09/20/2016

¹² AnonymousANONYMOUS, *Women in Engineering Proactive Network*. Available at: <https://www.wepan.org/>, consulted on:09/20/2016

¹³ AnonymousANONYMOUS, *UNESCO*. Available at: <https://www.millionwomenmentors.org/about>, consulted on: 09/20/2016

6. Scientista

“The Scientista Foundation is a national organization that empowers pre-professional women in science, technology, engineering and math (STEM) through content, communities, and conferences”¹⁴

Countries involved:

1. United States of America (USA)

The United States has taken notice of the importance of a STEM education and is slowly implementing a STEM centered curriculum with a “no students left behind” policy. It also provides financial aid to families who cannot afford to pay for such a rigorous and costly education.

Useful link: <http://www.ed.gov/stem>

2. India:

The non-profit organisation *India STEM Foundation* aims to encourage young adults to the STEM fields by offering real life applications of the learnt subjects, and the *Institute of International Education* (IIE) aims to increase the proportion of women who decide to pursue a STEM oriented career.

Useful Link: <http://www.indiastemfoundation.org/>,
<http://www.iie.org/Blog/2013/December/STEM-Education-Program-India#.V-HAhZN961s>

3. United Kingdom:

The United Kingdom has launched the National STEM center in 2004 which improves the engagement of the young generation in STEM subjects by providing teachers and students with the right resources. They have also established a program that is implemented in the vast majority of the secondary schools, with a pole of 98% of students having attended the course. There are also several NGO’s (Non-Governmental Organizations) such as the WISE campaign which aims to inspire girls and women to pursue careers in STEM subjects by advising companies and organizations on how to create the right environment where those women can achieve greater things.

¹⁴ ANONYMOUS,, *Scientista*. Available at: <http://www.scientistafoundation.com/about-us.html>, consulted on: 09/20/2016

Useful Links: <https://www.stem.org.uk/about-us>; <https://www.wisecampaign.org.uk/about-us>

4. France

In the French educational system, students during the last 2 years of their education get the possibility to choose a STEM oriented baccalaureat. Other than that, the French government has not publicly taken action yet regarding STEM education.

5. Australia

The non-profit organisation *Women in Science* created in 2014 is nationally recognized for women in STEM subjects. They aim to connect every woman, regardless her career, to STEM

Useful Link: <https://womeninscienceaust.org/about-2/>

Government bodies involved:

1. European Union

The EU has created the *Mind The Gap* organisation which currently has 5 EU members, including Spain, the UK and the Netherlands and which aims to decrease the gap between the number of women and the number of men pursuing STEM careers.

Useful Link: <http://mindthegaproject.eu/>

* Note that most countries are trying to apply STEM programs in their educational systems, but each one is doing it depending on its capacities and abilities.

UN Involvement:

Over the past decades, the global community has put a lot of effort into engaging women and girls in science and technology. It all started when 189¹⁵ UN Member States agreed to the Beijing Declaration and Platform for action in 1995, their goal was to make education and training of women non-discriminatory and to improve women's access to training and

¹⁵ ANONYMOUS. *World Conferences on Women*. Available on: <http://www.unwomen.org/en/how-we-work/intergovernmental-support/world-conferences-on-women> Consulted on the 21st of septembre 2016.

employment alternatives. However, these goals were not achieved. The Millennium Development Goals were agreed upon in the year 2000 and had as one of its main targets to ensure primary education by 2015 for all boys and girls. However, the years passed and this goal was also not achieved in many countries.

On September 25 2015, countries around the world adopted a set of 17 goals to transform the world by the year 2030. These goals could eventually end poverty, protect the planet and ensure equality to all. These goals include universal quality education, gender equality, decent work, economic growth and reduced inequalities. Moreover, all of the sustainable development goals highlight the importance of gender equality.

In addition, the United Nations General Assembly approved the resolution that declared 11 February as “the International Day of Women and Girls in Science” to further empower and encourage girls to achieve full and equal access in science. One of the clauses mentioned in the resolution states as follows “The outcome document of the twenty-third special session of the General Assembly (2000) highlights the need to encourage and support the education of girls in science, mathematics, new technologies, including information technologies, and technical subjects, and to encourage women, including through career counselling, to seek employment in high-growth and high-wage sectors and jobs (para. 82 (i)). It also stresses the importance of providing access to and 4 EGM/ST/2010/REPORT control over technology, particularly for women living in poverty and for women entrepreneurs (paras. 74 (a) and 82 (g))”¹⁶

¹⁶United Nations Division for the Advancement of Women . *Gender, Science and Technology*. Available on: <https://www.itu.int/en/ITU-D/Digital-Inclusion/Women-and-Girls/Documents/ReportsModules/Final-Report-EGM-ST%20Gender%20science%20technology%20expert%20group%20report.pdf> Consulted on the 19th of september 2016.

Possible solutions:

To ensure that the Sustainable Development Goals are met successfully:

- The United Nations should assist countries with a large gender gap in education in order to develop policies and programs that encourage women to pursue their education.
- Raising Awareness among communities about the importance of education for women.
- Successful examples of women in science, technology and literature from third world countries should be encouraged and considered as role models for younger generations.
- Eliminate gender stereotypes that associate men with mathematics and science and women with humanities. Biased textbooks and curriculums that affect girls' mentality and self-assessment sometimes reinforce these stereotypes.
- Abolish unequal pay between women and men to stop women from feeling isolated and from preventing "dominant masculinity".

Guiding Questions:

- Does your country have minimal education level to all its citizens (boys and girls)? If yes, what is it?
- What is the percentage of educated girls in your country (based on the education level required by the government)?
- Does your country support girls to be educated or to be taught how to become housewives?
- Are there any organizations present or actions taken in your country to support girls' right and be fully educated based on the STEM education?
- Are there any memorable women from your country who made a difference?
- To sum up: What is your country's opinion towards girls' education?

Useful Links:

- <http://ehrweb.aaas.org/archives/UN.pdf>
- <http://stemwire.org/2013/06/04/eight-organizations-promote-women-in-stem/>
- <https://www.collegeraptor.com/blog/higher-education/7-organizations-working-to-promote-women-in-stem/>
- <http://www.stemedcoalition.org/> (Recommended)
- <http://epws.org/> (Recommended)
- <http://womeninscience.net/> (Recommended)
- <http://www.win-global.org/> (Recommended)
- <https://www.uschamberfoundation.org/content/meet-players-stem-education-focused-advocacy-organizations>
- http://www.un.org/en/ecosoc/newfunct/pdf13/edis_phase_i_-summary.pdf
(Recommended) *Go down to page 6*
- <https://www.iteea.org/File.aspx?id=40511&v=3cef257a>
- https://en.wikipedia.org/wiki/List_of_organizations_engaged_in_STEM_education_a_cross_Africa
- <http://www.usnews.com/news/stem-solutions/articles/2016-02-12/women-scientists-in-developing-countries-buck-stem-trend>
- <http://www.uis.unesco.org/ScienceTechnology/Pages/women-in-science-leaky-pipeline-data-viz.aspx> (HIGHLY Recommended)

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- NEUHASER Alan, *Women Scientists Face Down Men in Developing World*. Available on: <http://www.usnews.com/news/stem-solutions/articles/2016-02-12/women-scientists-in-developing-countries-buck-stem-trend>. Consulted on the 20th of August 2016.
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