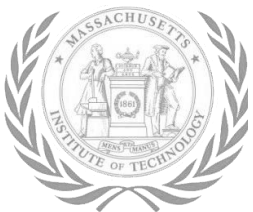


2013

# UNESCO 2013 BACKGROUND GUIDE

MIT MODEL UNITED NATIONS  
CONFERENCE V



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**Topic 1:****WOMEN IN SCIENCE****Introduction**

Gender inequity in the sciences has been recognized as a global problem for decades. Recently, world leaders and organizations have begun to address the problem.

Xi Jinping, General Secretary of the Communist Party of China, pronounced women crucial to the future of science. "The scientific community must seek to provide a greater understanding of nature," he stated. "And to achieve this lofty goal, we need greater participation of women scientists. We thus have an obligation to respond to the needs of women scientists not just for the sake of the scientists but also for the sake of the global community."

However, the problem is persistent and deeply rooted across cultures, and will require a concerted international effort to tackle. The bias against women in science exists all over the world and at all levels of society.

"Bank and teaching jobs are considered safe and respectable for women, whereas executive and engineering are considered respectable and high-paying jobs for men," stated one young woman in urban Indonesia (quoted in the 2012 World Development Report by the World Bank). Women have succeeded in every field of science, but fall behind when it comes to numbers. This problem is exacerbated in the developing world. Kaiser Jamil, former president of the Organization for Women

in Science for the Developing World, stressed that "We need to remove the roadblocks that women face on a daily basis and allow them to assume their rightful place in the workplace equipped with the know-how and skills that they need to succeed."

**The Problem**

No matter the culture or country, the gap between women and men in various scientific fields persists. The National Science Foundation reported that in the United States in 2009, there were disproportionately fewer female students in engineering, computer sciences, physical sciences, and economics. This disparity is not contained within the United States, but rather exists all over the world. The World Development Report in 2012 stated that despite the fact that college enrollments have increased significantly more overall for women than men, there are still widespread gender differences in topics of study. Across the world, women are consistently overrepresented in fields such as education and health, and underrepresented in engineering, manufacturing, construction, and science.

Further, in certain countries, 55% of the men with a science degree are in occupations related to physics, mathematics or engineering, while only 33% of the women are in these fields. There are significantly fewer female physicists, for example, than male physicists in developed countries, and the divide only gets worse in developing countries. In fact, women account for less than a third of scientists in Europe, and

less than a quarter of scientists in the United States.

## General Cause

The exact causes of gender biases against women in science are varied and multifaceted and little understood even with recent research. However, several target areas have been identified by various reports. These areas include gender stereotypes within education systems, relating both to access to science education and choice of field of study; defined cultural gender roles within households and gendered division of labor; gender biased attitudes of employers towards women in scientific and technical fields; and covert barriers and biases in different cultures.

Women, in many cultures, bear the majority of the burden of childcare, elder care, and family responsibilities. This makes it hard to impossible for women to enter academic science careers. Universities and research institutions generally fail to acknowledge the disproportionate responsibilities held by women, and also do not make allowances or help women struggling to balance family life and a career. In addition, the most important years in pursuing an academic career coincide with typical childbearing years, disadvantaging women who attempt to enter research fields.

## Effects of Education

Differences at all levels of education for girls and boys are one of the main causes of the later career gender gap in the sciences.

One striking example of this is shown in textbooks used in Australia and Hong Kong, which feature startling stereotypes about women. These books describe only a limited range of social roles for women, and suggest that women mainly operate in the domestic sphere. In 1988 a study of Chinese History textbooks revealed an almost total lack of references to important women in history, while Social Studies textbooks featured twice as many men as women. Overall, the textbooks were dominated by descriptions and references to men; the few women who were referenced mainly worked in the home or performed chores or stereotypically female jobs. This idea contributes to societal pressure against women entering male fields, like science and technology, because they may not be strong enough to thrive.

Further, there has been shown to be a widespread bias in science textbooks wherein authors tend to omit or marginalize contributions of women scientists. Science is, overall, portrayed as a masculine job, which obviously does not help alleviate gender discrimination in future careers.

The table below shows the gender differences in fields of study, and is taken from the World Development Report's analysis of data from the UNESCO Institute for Statistics.

There is also a general problem related to access to science education for girls. Girls in many areas of the world are denied basic education in math and science or adequate technical training.

Increasing access to education for girls can have extremely beneficial long-term results, both within fields of science and without. An educated girl will earn up to 25% more than an uneducated girl, and will reinvest 90% of those earnings in her family; with an education, she is three times less likely to become HIV-positive, and her children will be 40% more likely to live past the age of 5.

### Efforts to Address the Issue

Studies have shown that tackling gender inequities can have unintended benefits for countries involved. For instance, studies have shown that bettering gender equality in EU member states can, on average and adjusted across countries, increase the country's GDP by 15-45%. It is precisely because of results like this that many efforts are being made to address the gender gap in the sciences around the world.

Momentum is gathering behind science research in general – China plans to support nearly 4 million additional researchers by 2020, Brazil has doubled its science budget in the past few years, and Algeria will double its research budget within the next five years, to name a few examples.

Within the United States, the government began the ADVANCE program to systematically aid women in pursuing academic STEM (science, technology, engineering, and math) careers. The programs funds go towards helping women balance responsibilities from child or elderly care with the demands of a STEM career.

Charities and NGOs are also attempting to alleviate the gap in education between girls and boys in the developing world. For example, Camfed, or the Campaign for Female Education, works in rural communities in sub-Saharan Africa to sponsor girls through school and increase support for female education, including technical training.

Efforts like these will surely have an impact, but they are few and far between, and not nearly sufficient to tackle the widespread causes of the gender gap in the sciences.

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**Topic 2****FREEDOM OF  
INFORMATION****Introduction**

The Universal Declaration of Human Rights states, "Everyone has the right...to seek, receive and impart information and ideas through any media and regardless of frontiers." One of the greatest barriers to the creation of democratic governments today is the suppression of communication by countries. Many means, notably the Internet and print media, deliver vital intellectual resources to a country and foster the development of a literate and educated population.

Online instruction and resources are an increasingly important part of any country's education system, but many nations today severely limit or even ban internet access. At a grassroots level, democratic movements rarely occur in nations without a prosperous middle class and high literacy rates, so suppression of technology and telecommunications has long-lasting negative consequences on the quality of life of a state's people. In an increasingly interconnected world in which 2 billion people already have internet access, falling behind other nations in education, commerce, and manufacturing can permanently disadvantage its economy.

Upon the fall of the Soviet Union, we see the results of a vast influx of information to a region that had been deprived of outside contact under the oppressive Soviet police state. The opening of information to the Eastern bloc, which

included Eastern Europe, India, and China, brought a flood of information that was quickly followed by trade agreements and supply chains that have since brought about the democratization of many nations. Two years after the Berlin wall fell, India had developed a Westernized capitalistic system, and today its economy grows 7% per year consistently. In 2001 China, a Communist country, had even joined the World Trade Organization after adopting a free trade system and majorly cutting down on government regulation of the economy.

Finally, we must keep governments from withholding information about their own activities from the citizenry. In the United States, the Freedom of Information Act has mandated greater government transparency and the declassification of many documents relating to America's exploits in the 20th century. Transparency is the first step towards democratization, which is why totalitarian regimes divulge no information about weapons arsenals, human rights violations, or new policies of the government.

**Debate Format**

The resolution to this issue should take the form of a treaty. In a treaty, perambulatory clauses are used in opening, followed by chapters divided into articles, with Article 1 defining all related terms and the last article including the signatures of all countries in agreement prior to an agreed upon deadline. A sample can be found below, as an arms trade treaty was written by the Disarmament Committee of Robert College International Model United Nations (RCIMUN) in 2010. Treaties may address policies including



government transparency, freedom of knowledge and other forms of media, and/or allowing governments to choose their own path.

(<http://www.rcimun.org/post2010/report%20book.pdf>)

## UN Involvement

Since the Universal Declaration of Human Rights was adopted by the United Nations in 1948, the UN has created more legislation related to Freedom of Information. In December of 1966, the UN adopted the International Covenant on Civil and Political Rights. Article 19 of this international document states “Everyone shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of his choice.” This document not only addresses freedom of information, but created the Human Rights Committee (not to be confused with the Human Rights Council) in order to attempt to prevent violations of the laws in the document. Despite there being an “enforcement mechanism”, it is difficult for the Human Rights Committee to prevent violations of these laws because of the amount of reported violations per year and the amount of time it takes for decisions to be reached.

The UN has attempted to increase the diffusion of information in countries through the creation of World Press Freedom Day. The Third of May was declared an international holiday by the UN General Assembly in 1993 after a

Recommendation made by UNESCO in 1991. The purpose of the holiday is to remind the world that there exists countries where immense censorship of the press exists and encourage initiatives to be taken towards press freedom.

## Suggested Courses of Action

The key to solving this problem is to incentivize countries to lift restrictions on information dissemination and access in their countries. As with many international relations issues, the United Nations must decide whether to offer the carrot or the stick: it can offer rewards to countries for opening access to information or punish those that refuse to comply with a treaty to foster the freedom of information.

The United Nations can offer a variety of financial incentives to countries that currently suppress free information flow. As they are in a position of influence in the global economy, the United Nations may facilitate trade between the country in question and other countries in the region in order to benefit commerce in the region. Alternatively, it can offer injections of capital, cash, or oil to stimulate natural growth of a private sector economy. If the nation is currently placed under economic sanctions or other forms of financial enforcement, the United Nations could reduce or remove such measures if the offending country complies.

On the other hand, further economic sanctions can be put in place over countries who fail to abide by a joint treaty to increase government transparency.

Many countries will abide by a UN treaty if threatened with such sanctions by the UN. In this particular case, other arrangements may be more feasible than a treaty that is enforced solely by the United Nations.

## Country Positions

The following section lists specific countries that have passed legislation related to freedom of information with respect to government transparency.

### *People's Republic of China*

The People's Republic of China passed one of its first freedom of information documents that became active in May of 2008. The "Regulations of the People's Republic of China on Open Government Information" is the result of a mixture of economic and political movements towards a more transparent government. At this time though, there are still many restrictions on the access of information in People's Republic of China.

### *Finland*

Originally in 1951, Finland passed the "Act on the Openness of Public Documents" which established an transparency for government documents. Later on the Finnish history, this document was changed for "Act on the Openness of Government Activities" in 1999 because the previous document had certain loopholes in it.

### *Liberia*

Liberia has just recently passed the

"Freedom of Information Act of 2010". Liberia is the fourth country in Africa and the first country in West Africa to pass a law that allows both the media and individuals the right to demand information from the government.

### *Ukraine*

Before 2011, the Ukrainian constitution only forced the government to reveal information about the environment and personal information. The Ukrainian government preferred to keep secrecy with their defence affairs and other government branches. After the "Law on Access to Public Information", the rights of what citizens have access to has broadened, but not yet to the level of other surrounding countries.

## Questions to Consider

- Where should the line be drawn between censorship and freedom of information?
- How much transparency should a government be allowed to have?
- What method can be used to convince governments to allow more freedom of information?
- What is the role of the UN in terms of enforcing freedom of information?
- Can you create a treaty that all countries would consider signing that will better the educational, scientific, and cultural spread of information?



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