UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION

STUDY GUIDE

TOPIC I

PRESERVING INDIGENOUS LANGUAGES, CULTURES, AND HERITAGES FOR A MUTUALLY-UNDERSTANDING SOCIETY

TOPIC II

PROMOTING GENDER EQUALITY IN STEM

GMUN 2023
GENIUS MODEL UNITED NATIONS CONFERENCE

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INTRODUCTION TO BOARD OF DAIS

Daniel Iskandar
Chair

History, Heritage, Traditions. These are remnants of who we once were and in fact are as close as we get to understanding our DNA without using a microscope. So Youth Diplomats, I welcome you to the United Nations Educational, Scientific, and Cultural Organization (UNESCO) at GMUNC 2023. My name is Daniel Iskandar, but you may refer to me as Alex, and it is my honour to serve as your Council Chair.

Currently in pursuit of my Bachelor's in Law at HELP University, I have served within the MUN scene as early as my first days in college close to 3 years ago. For my chairing style I enjoy a heated and lively debate being a debater myself, however I also aim to create an experience that will be comfortable for my delegates, whether they are seasoned MUNers or beginners. Should you need any assistance in this portion of your MUN experience please do not find it difficult to ask me, I may not have all the answers, but I promise to get you one. I hope you will take this opportunity to network above all else and use it as a means to improve your skills to greater heights.

Have a great debate, and bid you good luck in resolving the agendas in hand. Should you need to reach me, you may seek my contact from the list below. See you in Council, Diplomat.

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Rasheka Mahendra

Co-chair

Good day Youth Diplomats! I will be your Co-Chair, my name is Rasheka Mahendra but you can call me Rasheka. UNESCO is a great opportunity for young diplomats to step foot in the MUN world. With addressing concerns pertaining to indigenous cultures and women empowerment in STEM, this area will subtly bring you into the MUN experience.

I am currently a UK Law undergraduate pursuer at Brickfields Asia College (BAC), and I have a deep and huge interest for International Affairs. The Model United Nations is a great opportunity to know more in depth about the international issues, agenda, and amendments. I too have been a delegate a couple of times and the most recent one being the upcoming 28th Youth Assembly hosted in the UN headquarters in August this year. My chairing style is quite similar to the head chair's style, whereby I do enjoy a meaningful, heated but most importantly healthy debate. It is important to remember that as much as people may have various opinions, one should handle it by maintaining the peace amongst ourselves.

Looking forward to see you all soon, and looking forward to witnessing a great debate. Feel free to contact me for any questions, and we will try to answer them all. See you soon Young Diplomats!

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UNESCO

The goal of UNESCO is to use education, the sciences, culture, communication, and information to promote the establishment of a culture of peace, the eradication of poverty, sustainable development, and intercultural understanding.

UNESCO seeks to foster conversation across civilizations, cultures, and peoples that is founded on respect for shared ideals. The world can attain global ideals of sustainable development—all of which are at the core of UNESCO's mandate and activities—through this discussion, which encompasses respect for one another, observance of human rights, and the reduction of poverty.

A number of goals in the global priority areas of "Africa" and "Gender Equality" are the focus of UNESCO.

Moreover, on a number of major goals:

- Ensuring lifelong learning and high-quality education for everyone

- Utilising research to inform decision-making and promote sustainable development

- Addressing new ethical and societal issues

- Building inclusive knowledge societies through information and communication through promoting cultural variety, intercultural discussion, and a culture of peace

TOPIC 1: PRESERVING INDIGENOUS LANGUAGES, CULTURES, AND HERITAGES FOR A MUTUALLY UNDERSTANDING SOCIETY

INTRODUCTION

Preserving indigenous languages, cultures, and heritages is essential for fostering a mutually-understanding society that values diversity and promotes inclusivity. This study guide aims to provide an overview of the importance of indigenous languages, cultures, and heritages, as well as strategies and approaches for their preservation. By studying this guide, you will gain a deeper understanding of the challenges faced by indigenous communities and the steps that can be taken to support their cultural preservation efforts.

IMPORTANCE OF PRESERVING INDIGENOUS LANGUAGES, CULTURES, AND HERITAGES

Cultural Diversity and Inclusivity is the root of what makes our world the beauty that its. Indigenous languages, cultures, and heritages contribute to the richness and diversity of human civilization. Preserving them helps maintain a harmonious and inclusive society that values and respects different ways of life. Connection to Identity and Heritage: Indigenous languages, cultures, and heritages are integral to the identities of indigenous communities. They provide a sense of belonging, pride, and continuity with ancestral traditions, strengthening individuals and communities' self-esteem and resilience. Knowledge and Wisdom Preservation: Indigenous languages carry valuable traditional knowledge and wisdom accumulated over generations, including ecological knowledge, medicinal practices, storytelling, and spiritual beliefs. Preserving these languages ensures the transmission of this knowledge to future generations. Environmental Stewardship: Indigenous cultures and languages often have a deep connection with the natural environment. Preserving these cultural practices can contribute to sustainable and respectful relationships with the land, promoting environmental stewardship and conservation.

STRATEGIES FOR PRESERVING INDIGENOUS LANGUAGES, CULTURES, AND HERITAGES

Language Revitalization Programs: Implementing language revitalization programs that focus on language learning, immersion, and documentation can help revive endangered indigenous languages. Education and Curriculum Integration: Incorporating indigenous languages, cultures, and histories into mainstream education systems and curricula promotes awareness, appreciation, and active preservation efforts among younger generations. Oral Tradition Preservation: Recognizing the importance of oral traditions in indigenous cultures and utilizing storytelling, music, and dance as means of preserving cultural knowledge and language can be effective strategies. Cultural Centers and Institutions: Establishing cultural centers, museums, and institutions dedicated to preserving indigenous languages and cultures provides spaces for community engagement, knowledge sharing, and cultural activities. Community Engagement and Empowerment: Engaging and empowering indigenous communities in decision-making processes and supporting grassroots initiatives fosters a sense of ownership and enhances the sustainability of preservation efforts.

THE ROLE OF TECHNOLOGY IN LANGUAGE AND CULTURAL PRESERVATION

Digital Archives and Documentation: Technology allows for the digitization and preservation of indigenous languages, cultural artifacts, and oral histories, making them more accessible and facilitating their long-term preservation. Language Learning Applications and Resources: Language learning apps, online courses, and interactive resources can support language revitalization efforts, making language learning more engaging and accessible for individuals and communities. Social Media and Online Communities: Social media platforms and online communities provide spaces for indigenous peoples to connect, share language and cultural resources, and collaborate on preservation efforts, transcending geographical boundaries. Virtual Reality and Augmented Reality: Virtual reality and augmented reality technologies offer immersive experiences that can be utilized for cultural preservation, allowing users to interact with indigenous languages, cultural practices, and historical sites in virtual environments.

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ETHICAL CONSIDERATIONS IN PRESERVING INDIGENOUS LANGUAGES AND CULTURES

Collaboration and Consent: It is crucial to engage and collaborate with indigenous communities, respecting their rights, cultural protocols, and self-determination. Consent should be obtained, and decision-making processes should be inclusive and participatory. Intellectual Property and Traditional Knowledge: Respecting intellectual property rights and safeguarding indigenous traditional knowledge from exploitation or misappropriation is essential. Legal frameworks and ethical guidelines should be in place to protect indigenous cultural expressions. Power Dynamics and Representation: Recognizing power imbalances and actively promoting indigenous voices, representation, and leadership in preservation efforts is necessary to ensure that decisions are made in ways that prioritize the interests and perspectives of indigenous communities.

CONCLUSION

Preserving indigenous languages, cultures, and heritages requires a comprehensive approach that addresses the challenges faced by indigenous communities. By implementing strategies, supporting community initiatives, embracing technology, and engaging in ethical practices, we can contribute to the preservation and revitalization of indigenous languages, cultures, and heritages, fostering a mutually-understanding society that values diversity and inclusivity.

TOPIC 2: PROMOTING GENDER EQUALITY IN STEM

INTRODUCTION

Despite the vast advancements and significant progress within the field, gender disparities appear to be the main issue when it comes to aspects of STEM involving education, career advancements and mere representation. Although both men and women possess equal capacities when it comes to STEM involvement, women are severely underrepresented and are not sufficiently encouraged to make a mark in the field. The main cause of this begins when a girl steps foot in education institutions, and this grows overtime as the student passes through multiple growth steps. Girls are generally told from a young age that boys are even brilliant in comparison to girls. This affects the mentality of a girl when it comes to subjects pertaining to Mathematics, and Science as it has been labelled only 'brilliant – minded' kids would excel in that field. A research entitled "Reshaping the future: Women, girls, ICTs and the SDGs" in 2017, show cases the severity and impact of discouragement by the environment a girl grows in and the limitations she faces in wanting to step into the STEM field.

KEY ISSUES FOSTERING "STEM GENDER GAPS"

The main issue can be highlighted when it comes down to stereotyping. This comes about as STEM fields being often portrayed as a 'manly' field and this makes it unwelcoming for women to be a part of it. The masculine depiction begins in the schooling ages where educators as well as guardians undermine the abilities of girls within the STEM fields as young as pre-schooling ages. Educators which mostly are compromised with women also develop 'math anxiety' which is passed down to girls. This has caused girls up taking STEM subjects to be told and required to put in almost twice as much effort than boys in order to achieve similar rankings as boys within the institution. It is often argued that the complexity within the field will not be suitable for a girl to handle, or a girl will not excel within the said field. Encounters like these discourage girls and women from pursuing STEM careers and can create a hostile environment for those who do.

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Next, the male dominated culture of the field is portrayed to be intimidating for women to be a part of it. Women only represent 28% of the workforce in the STEM field. This percentile only narrows less in the rapid-growing and higher paying jobs of the future such as computer science and engineering. There are several incidents of bias, discrimination, and harassment towards women in the STEM field. These elements lead to a hostile workplace, which may discourage women from pursuing STEM fields or obstruct their advancement.

Lastly, the lack of females in the higher ends of the STEM fields brings about the lack of role models for women to look up to. For aspiring female scientists and engineers, the dearth of visible female role models and mentors in STEM disciplines can be frustrating. Limited representation impedes opportunities for networking, mentorship, job progresses and reinforces the idea that women do not belong in these sectors. This makes it harder for young and aspiring girls to step out of the negative bubble they are brought up in and will make it almost next to impossible to go against the societal norms.

COMBATING GENDER INEQUALITY IN STEM FIELDS

In order to prevent or reduce the gender gap, girls should be encouraged from a young age that they are capable of making an impact regardless in any field and they are not limited to choose careers, even if its predominantly males in that sector. By giving them early exposure, educational chances, and practical experiences, equal possibilities should be given to girls and young women to explore STEM fields. This can include programs like outreach efforts in schools and communities, summer camps, workshops with a STEM focus, and mentorship programs. Improvisations by the UN are already being put in play and goals have been set in order to bridge the gender gap by 2026. It is hoped that by the year 2026, women and girls in all forms will have an equitable opportunity to engage with technology and innovation in a way that is secure, meaningful, and full of creative freedom and limitless potential.

Moving on, regional aspects play a vital role for aspiring women and their involvement in the STEM fields. Countries like India has one of the greatest percentages of female graduates in the world in the fields of science, technology, engineering, and mathematics at a whopping 43%, yet only 14% of scientists, engineers, and technicians work in research development organizations and universities. There is no shortage of aspiring women, however the STEM field is often times defined and portrayed as a 'mans playground'. In the sphere of scientific research, there is an even bigger gender difference. The only woman to get the Nobel Prize in Physics (1903) and the Nobel Prize in Chemistry (1911) twice is Marie Curie. Between 1901 and 2022, only 60 women in total received the Nobel Prize. However if we shift our focus to the United States, women made up 45% of students majoring in STEM areas in 2020, up from 40% in 2010 and 34% in 1994, according to data from the Integrated Postsecondary Education Data System (IPEDS). From this we can conclude that, regional aspects gives a more advanced approach in terms to what extent a woman is limited to in the STEM field.

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Going against stereotyping should also be brought to making people aware of gender biases and prejudices in STEM professions and take action to combat them. Promoting diverse role models and promoting the accomplishments of women and non-binary people in STEM fields should be the focus of conversations and teaching materials. This can aid in dispelling the myth that STEM fields are only for men. Another way to lessen stereotyping is to break the stigma that women are incapable of complexity in the workforce. This can be done by creating mentorship programs that pair aspiring STEM professionals with knowledgeable mentors, both male and female, who can offer support, encouragement, and career counselling. Encouragement from and by STEM professionals from a variety of backgrounds provide the ability to connect through networking events, conferences, and workshops in order to promote collaboration and mentoring.

Another crucial disadvantage for women is workplace biasness mostly circling within STEM based industries. The pay or compensation given to women affirms gender bias at all employment levels, regardless from entry level to executive level. The average entry-level wage for a male employee is more than $4,000 greater than that of his female peers, according to a research conducted by Stanford School of Business . The pay difference between women and their male coworkers widens with time because women are less likely to receive promotions than their male counterparts. By putting in place regulations that prohibit discrimination and harassment, STEM organizations may promote inclusive workplace cultures. A clear reporting process should be established, and training on unconscious bias, diversity, and inclusion should be given. Working towards creating teams and leadership positions that are gender-balanced and promote diverse recruiting practices should be prioritized.

Finally, the responsibilities of a women that changes after childbirth and expansion to the family brings a halt to a women pursuing her career in STEM. According to a University of California research, 43% of women in STEM occupations quit their full-time jobs between four and seven years after the birth of their first child, as opposed to 23% of new dads. Men are able to be both without having their devotion to their careers or their ability to raise children called into question, whereas women are frequently pushed to choose between making a significant contribution to the STEM sector and being a mother. In reality, according to a research by the Department for Business, Innovation and Skills (BIS) and the Equality and Human Rights Commission, a third of employers in the private sector say that they think pregnant or recently gave birth women are "generally less interested in career progression." Women are frequently passed over for promotions, and without opportunities for advancement within their own organizations, many of them pursue positions at other businesses, and occasionally in alternative industries, that provide career advancement prioritization. Companies and organizations within the STEM industry can make work-life balance-supporting policies and practices, such as flexible work schedules, parental leave, and reasonably priced childcare choices. Encouraging businesses to implement family-friendly practices that take into account the requirements of all staff members, regardless of gender. This way women can feel empowered, motivated and encouraged to not let go of their hopes and dreams within the STEM field.

EFFORTS AND PROGRESS MADE BY THE UN

UNESCO has already been made aware of the current gender gap within the STEM sector, recent reports have reiterated that women make up only 40% of computer science and informatics graduates and only 28% of engineering graduates. The current situation has since been claimed as 'alarming' in the eyes of UNESCO. As an effort to help close the gender gap the UN 2030 Agenda for Sustainable Development, benefits greatly from the advancement of gender equality in STEM fields. Eliminating norms and prejudices that restrict girls' expectations is necessary, and educators must inspire girls to become entrepreneurs, changemakers, and innovators. This effort has shown drastic improvements in countries like China and the UAE.

The UAE placed first internationally in four of the report's measures, including the percentage of women in parliament, the gender split at birth, literacy rates, and enrollment in elementary school, according to the World Economic Forum's 2021 Global Gender Gap Report. The UAE is ranked 35 out of 189 nations in the world in terms of women's empowerment in the 2019 UNDP Human Development Report. 70% of UAE women who have completed higher education in the country are graduates, and 77% of UAE women will continue their education after high school. STEM courses now have 46% of female students in higher education in the UAE. In the public sector, women occupy two thirds of the jobs, 30% of which are leadership roles.

It is important to celebrate the achievements of women who specialize in STEM disciplines so that others will be inspired to do the same. As two examples, Hu Qiheng was a pioneer in expanding Internet access in China and was admitted into the Internet Hall of Fame in 2013 as a worldwide connection. Tu Youyou was China's first recipient of the Nobel Prize in Physiology or Medicine in 2015 for her invention of a malaria treatment. There are outstanding mentors and role models in the private sector, such Zhou Qunfei, a billionaire who became the richest self-made woman in the world after starting out as a migrant worker. She established an empire as the CEO of Lens Technology, which produced glass for industry heavyweights like Tesla, Apple, and Samsung. In Shenzhen, the business community is now taking its civic duties seriously, with organizations like Alibaba, Tencent, and Huawei implementing programs to attract and advance women in STEM professions.

Besides that, The UN established a designated agency devoted to empowering women and promoting gender equality which is widely known as UN Women. UN Women, a global advocate for women and girls, was founded to hasten the process of addressing their needs on a global scale. UN Women works with governments and civil society to develop the laws, policies, programs, and services necessary to guarantee that the standards are properly implemented and actually benefit women and girls around the globe. UN Women helps UN Member States as they define global standards for attaining gender equality. It focuses on five priority areas: increasing women's leadership and participation; putting an end to violence against women; including women in all aspects of peace and security processes; enhancing women's economic empowerment; and making gender equality a central part of national

development planning and budgeting. It works globally to make the vision of the Sustainable Development Goals a reality for women and girls. It also supports women's equal participation in all aspects of life.

CONCLUSION

Promoting gender equality in STEM fields is not only a matter of social justice but also aligns with the United Nations' Sustainable Development Goals (SDGs) and their commitment to creating a more inclusive and equitable world. The UN recognizes that achieving gender equality and empowering women and girls is not only a fundamental human right but also a necessary foundation for sustainable development.

The UN's SDG 5 focuses specifically on achieving gender equality and empowering all women and girls. Within this goal, promoting women's participation and leadership in the fields of science, technology, engineering, and mathematics is a critical component. By recognizing the significance of gender equality in STEM, the UN acknowledges the importance of ensuring that women and girls have equal access to education, career opportunities, and decision-making positions in these fields.

Promoting gender equality in STEM is also closely linked to other SDGs. For instance, SDG 4 aims to ensure inclusive and equitable quality education for all. By addressing gender disparities in STEM education, we can ensure that girls and young women have equal opportunities to acquire the skills and knowledge needed for future careers in science and technology.

Furthermore, gender equality in STEM aligns with SDG 8, which focuses on promoting inclusive and sustainable economic growth, full and productive employment, and decent work for all. By promoting gender diversity and inclusivity in STEM fields, we can tap into a broader talent pool, foster innovation, and drive economic growth.

In conclusion, promoting gender equality in STEM fields is not only a matter of social justice but also aligns with the United Nations' vision for a more inclusive and sustainable world. By empowering women and girls in STEM, we can address gender disparities, unlock untapped potential, and promote economic growth and innovation. It is through collective efforts, involving governments, institutions, organizations, and individuals, that we can create an environment where everyone, regardless of gender, can thrive and contribute to the advancement of science, technology, engineering, and mathematics for the betterment of society as a whole.

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Beyond Borders: Bridging the Divide