



United Nations Security Council

Directed By: Jon Pinela

TSMUN XXVII BACKGROUND GUIDE 2023

Topic I: Discussing initiatives and technologies to bridge the digital divide in rural and remote regions

Topic II: Examining how AI and technology can enhance education

Dear Delegates,

Welcome to Tallahassee Southern Model United Nations. My name is Jon Pinela and I am the Director of the United Nations Educational Scientific and Cultural Organization for TSMUN 2024. Your Assistant Director is Joshua Adams. Currently, we are members of the TCC Model United Nations team.

Dear Delegates,

Welcome to the Tallahassee Southern Model United Nations. My name is Jon Pinela and I am the director of the United Nations Educational, Scientific and Cultural Organization for TSMUN 2023.

The topics under discussion for this year's United Nations Education, Scientific and Cultural Organization are:

- I. Discussing initiatives and technologies to bridge the digital divide in rural and remote regions.
- II. Examining how AI and technology can enhance education.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) aims to contribute to and foster peace by promoting collaboration between nations through education, science and culture in order to further universal respect for justice, for the rule of law and for the human rights and fundamental freedoms which are affirmed for the peoples of the world, without distinction of race, sex, language or religion, by the Charter of the United Nations.

I hope you find this background guide useful in your preparation for the conference. This background guide is meant to introduce delegates to the topics that will be discussed in committee and provide guidance as delegates begin their research. Delegates are strongly encouraged to research the positions, views, and opinions of their Member States as well as relevant regional and international frameworks, past resolutions, and organizations initiatives.

Each delegation will submit a position paper for the committee. Delegates must turn in their papers before the start of the first committee session. Papers may be emailed to positionpapers@tsmun.org and can also be submitted through a USB drive or hard copy. For a position paper guide and an example, please visit <https://www.tsmun.org/position-papers.html>. Papers that are not in the correct format will not be eligible for awards. For conference information, scholarships, and other useful information, visit <https://www.tsmun.org/>. If you have any questions leading up to the conference, feel free to contact sg@tsmun.org. I look forward to seeing you all in committee.

Sincerely,

Jon Pinela, United Nations Education, Scientific and Cultural Organization Director

Introduction

UNESCO is a UN body with the mission of contributing to the building of a culture of peace, the eradication of poverty, sustainable development and intercultural dialogue through education, the sciences, culture, communication and information. UNESCO is unique and highly-specialized, while also being innately academic in nature.¹ Its mandate tasks the committee with promoting and creating consensus on important social and cultural pressing concerns on diverse issues ranging from cultural heritage to scientific developments.² The Executive Board has the responsibility of focusing the workings of the UNESCO General Committee, thus, it is made up of only a limited subset of all Member States participating in UNESCO.³

History

Founded in 1945 following the second world war, UNESCO seeks to build a just, inclusive, and peaceful global society by fostering the exchange of knowledge and ideas among nations. The organization is known for its efforts to protect and preserve cultural heritage, promote universal access to education, advance scientific cooperation, and encourage freedom of expression. Through various programs and initiatives, UNESCO works to enhance mutual understanding and respect for diverse cultures while addressing global challenges related to education, sustainable development, and the safeguarding of cultural and natural heritage. Although UNESCO has yet to set any policies or take a stance on artificial intelligence (AI), it has been involved in multiple discussions regarding its implications.

Governance, structure, and membership

UNESCO has 194 Members and 12 Associate Members. Membership of UNESCO is governed by Articles II and XV of the Constitution and by rules 98 to 101 of the Rules of Procedure of the General Conference. UNESCO currently employs around 2200 staff, valuing competency, efficiency, and integrity.

Conclusion

In a world developing and changing as quickly at an alarming rate, UNESCO serves as a key proponent of cooperation and peaceful negotiations and understanding between conflicting nations. UNESCO aims to develop the necessary tools for people to become global citizens free of prejudice and hate, and as a laboratory of ideas, UNESCO helps countries to adopt

¹ "UNESCO in Brief" UNESCO

² *ibid*

³ *ibid*

international standards and manages programmes that foster the free flow of ideas and the exchange of knowledge.

1. Discussing initiatives and technologies to bridge the digital divide in rural and remote regions.

Introduction

The digital divide is, as defined by the Organisation for Economic Co-operation and Development (OECD), “the gap between individuals, households, businesses, and geographic areas at different socio-economic levels with regard both to their opportunities to access information and communication technologies (ICTs) and to their use of the Internet for a wide variety of activities”.⁴ This divide exists along lines of gender, age, education, income, social grouping, and geographic location.⁵ As critical infrastructure, digital technology impacts virtually all of the UN’s Sustainable Development Goals (SDGs), but for the purposes of the United Nations Educational, Scientific and Cultural Organization (UNESCO), and with relevance to rural and remote areas, it particularly impacts SDG 3 - Good Health and Well-Being, SDG 4 - Quality Education, SDG 8 - Decent Work and Economic Growth, SDG 9 - Industry, Innovation and Infrastructure, SDG 10 - Reduced Inequalities, and SDG 16 - Peace, Justice and Strong Institutions.⁶ In 2018, UNESCO finalized the ROAM-X indicator framework for assessing the universality of Internet access in countries.⁷ The framework consists of 303 indicators paired into categories of **R**ights, **O**penness, **A**ccess to All, and **M**ulti Stakeholder Participation. Category A, Theme D is Equitable Access; indicator AD.1 is, “Are there significant differences in broadband access and use between regions and between urban and rural areas?”⁸ It is therefore the recognized duty of Member States to ensure equitable access to ICTs for their rural residents.

Current Situation

Across both urban and rural areas in the developed world, the internet has largely already become a part of life, in spite of remaining discrepancies.⁹ It is a platform for the dissemination of educational and scientific resources, engagement with public services, and cultural information, and has taken up a fundamental role in economic activity at all scales.¹⁰ The world’s least developed countries (LDCs), by contrast, suffer from dismally low levels of digital penetration; in a world where 63% of the population is online, only 27% of the population in least developed countries can be counted as internet users.¹¹ Between these two extremes,

⁴ “Understanding the Digital Divide.” OECD.

⁵ “Glossary: Digital divide.” Eurostat.

⁶ “The 17 Goals.” United Nations.

⁷ “UNESCO’s Internet Universality Indicators: A Framework for Assessing Internet Development.” UNESCO.

⁸ *ibid*

⁹ “How do digital competence frameworks address the digital divide?” UNESCO.

¹⁰ “Productivity Growth in the 1990s: Technology, Utilization, or Adjustment?” NBER.

¹¹ “Widening Digital Gap between Developed, Developing States Threatening to Exclude World’s Poorest from Next Industrial Revolution, Speakers Tell Second Committee.” United Nations.

however, lie the world's developing nations, where the most severe intranational urban-rural digital divides exist.¹² In the cities of the developing world, access to the digital space has already cemented itself in the rapidly evolving societies of newly industrialized nations, while rural areas are often little more connected than LDCs.¹³ Since the beginning of the Industrial Revolution, human economic activity has been rapidly concentrating in ever-larger urban environments.¹⁴ Whereas the largest cities on the planet some three centuries ago were approximately one million strong, today there are dozens of cities around the world that are over an order of magnitude more populous.¹⁵

This problem has historical precedent: At each step in the process of urbanization, technologies have been developed which have changed society as a whole, but which have reached rural areas later than other regions. A pertinent example is electrification in the United States, where urban and suburban electrical service became widespread decades before rural service did.¹⁶ A 20th century in which the rural United States had remained unelectrified would be one in which entire regions of the country never experienced the cultural developments of radio or television, and never benefited from the productivity or quality of life gains derived from electric machinery or light. A 21st century in which internet access never reaches rural areas in today's developing nations can be surmised to end similarly, with great swaths of territory becoming completely disenfranchised from the cultural and economic progress of the wider societies of which they are nominally part. This being the case, it is clear that the continued survival and thriving of rural communities hangs in the balance of decisions made with regards to telecommunications infrastructure in the ongoing development of the knowledge society.

Actions Taken by the UN

From 2009 to 2017, the International Telecommunications Union (ITU) prepared an annual report called the ICT Development Index (IDI), which attempted to objectively quantify the level of sophistication in different Member States' telecommunications infrastructure. The report was discontinued after a 2018 revision of ITU Resolution 131, which found that the IDI required data which was too sparsely available to rely on in preparing a comprehensive index.¹⁷ The IDI is now on track to be revived, with a new methodology having been finalized in December of 2023.¹⁸ In contrast to UNESCO's ROAM-X framework, the IDI is a technological assessment, concerned more with technical capacity than with equity.

¹² "Bridging the urban-rural digital divide and mobilizing technology for poverty eradication: challenges and gaps." University of the West Indies, St. Augustine.

¹³ *ibid*

¹⁴ "Urbanization." Our World in Data.

¹⁵ "The World's Cities in 2018." United Nations.

¹⁶ "Rural Electrification Administration." Economic History Association.

¹⁷ "The ICT Development Index." International Telecommunications Union.

¹⁸ "ICT Development Index 2023." International Telecommunications Union.

The UN General Assembly (GA) has adopted four resolutions on the World Summit of the Information Society (WSIS), including 56/183, 57/238, 57/270 B, 59/220, and 60/252.¹⁹ Each of these resolutions has built upon the last, with 2006's Resolution 60/252 establishing May 17th as World Information Society Day, in an effort to raise awareness for the challenges that are presented by the digital divide.²⁰ Resolution 60/252 additionally specified the need for a review of WSIS outcomes in 2015, which was performed in Resolution 70/125.²¹ The review in 70/125 found that digital divides remain significant, identified the potential for universal service funds and publicly funded network infrastructure to help bridge this gap in rural areas, and set the goal for progress forward from an information society to a knowledge society, in which information is used for the express benefit of humanity.²² Further review in the UN Economic and Social Council's (ECOSOC) Report 2023/49 identified accelerating technological progress since the COVID-19 pandemic as having exacerbated the digital divide's impact on employment opportunities, but did acknowledge that the majority of the world's population is now Internet-connected in some form.²³ In 2016, UN Human Rights Council (HRC) Resolution 32/13 identified the digital divide as impeding access to education.²⁴ While the UN has produced many reports and words of encouragement to other actors, it has not, as of yet, taken an active role in remedying the digital divide, neither with respect to rural or remote areas, nor to any of the many other dimensions of the divide.

Regional and International Framework

Most efforts to resolve the rural digital divide thus far have come from national-level institutions, or other governing bodies with binding powers. The United States has responded to its digital divide by authorizing \$42.45 billion in funding to expand broadband infrastructure through the Broadband Equity, Access, and Deployment (BEAD) Program.²⁵ The European Union has set the goal to connect all households in the Union with gigabit infrastructure by the year 2030, pulling funding from several active programs.²⁶ The African Union has developed the Digital Transformation Strategy for Africa, issuing recommendations to improve rural infrastructure, provide farmers with the digital tools necessary to more effectively target their markets and more efficiently grow crops with scheduled irrigation.²⁷ Worldwide, satellite internet connectivity is being expanded by private firms such as SpaceX, which has been launching thousands of

¹⁹ "General Information: UN and ITU Resolutions on WSIS." International Telecommunications Union.

²⁰ "World Summit on the Information Society." United Nations.

²¹ "Outcome document of the high-level meeting of the General Assembly on the overall review of the implementation of the outcomes of the World Summit on the Information Society." United Nations.

²² *ibid*

²³ "Progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society at the regional and international levels." United Nations ECOSOC.

²⁴ "The promotion, protection, and enjoyment of human rights on the Internet." UNHRC.

²⁵ "The Broadband Equity, Access and Deployment (BEAD) Program Overview." National Telecommunications and Information Administration.

²⁶ "EU Funding for Broadband 2021-2027." European Commission.

²⁷ "The Digital Transformation Strategy for Africa." African Union.

Starlink satellites since 2019, covering countries on six continents thus far, with plans to expand its service area to include all of Africa, the Middle East, South and Southeast Asia, the remote Pacific, and most of Latin America.²⁸

Perhaps the most relevant example for developing countries is historical, once again in the United States. Beginning in 1936, the Rural Electrification Administration (REA), operating as a self-sustained financing agency, began to aid in lending money and expertise to rural communities for the purpose of constructing electrical infrastructure.²⁹ Working through electric cooperatives, electricity was purchased from generating firms and distributed along cooperative-owned lines to rural households, overcoming the hesitance of private electrical firms to extend their services to rural areas.³⁰ Through this means, the United States effectively closed its electrical divide. Following this success, the REA was authorized to repeat this effort for rural telephone infrastructure from 1949 onward.³¹ The REA still exists at present as the Rural Utilities Service (RUS) of the Department of Agriculture, and the programs created under the REA remain available to rural areas.³² Through this means, the United States has achieved approximately 100% rural electrical coverage and 98% rural telephone coverage.³³

Conclusion

For the past two decades, the United Nations has become increasingly adamant about the inequities inherent to the rural digital divide, but has yet to act decisively to bridge it. In the meantime, both new problems and new solutions have come about by the hands of private actors and Member States. The basic connection which would have sufficed in 2004 is no longer adequate for accessing the full spectrum of opportunities birthed from the Internet. The digital divide is not a have and have-not problem- network bandwidth makes all the difference, language makes all the difference, and income makes all the difference. The intersectional nature of the digital divide encourages creative solutions to enable a wide variety of Sustainable Development Goals to advance. To give focus to your delegation's approach in this committee, here are some questions to keep in mind:

What are the quantitative and qualitative differences between the rural digital divide in developed, developing, and least developed Member States? What can the United Nations, and particularly UNESCO, do to form a more proactive framework with which to approach the rural digital divide? Should developed Member States be directly involved in providing technical and

²⁸ "Availability Map." Starlink.

²⁹ "Rural Electrification Administration." Economic History Association.

³⁰ *ibid*

³¹ *ibid*

³² *ibid*

³³ *ibid*

financial assistance to less developed Member States in order to bridge the lower end of the rural digital divide (between no connection and some connection) first, or should they focus on bridging their own divides (between some connection and a good connection) instead? What funding mechanisms can the United Nations use to proactively participate in bridging the rural digital divide, if they ought to?

2. Examining how AI and technology can enhance education

Introduction

As we progress further into the digital age, education has the potential to be immensely transformed by advancements in artificial intelligence (AI) and technology. From personalized learning experiences to online platforms and virtual reality, these technologies offer innovative approaches to engage learners, improve educational outcomes, and bridge knowledge gaps. While there may not be any specific United Nations (UN) resolutions or precedents solely dedicated to artificial intelligence (AI) at this time, the UN has recognized the growing significance of AI and its potential impact on various aspects of society. Some discussions within the UN regarding AI can be seen in UNESCO and The United Nations General Assembly (UNGA), with UNESCO engaging in discussions on the implications of AI in the fields of education, science, culture, communication, and information, highlighting the need to develop inclusive and ethical AI technologies that prioritize human rights and sustainable development. The UNGA has focused more on the ethical implications of AI, including issues like data privacy, bias, and accountability.

Current situation

With constant advancements in AI technologies being made every year, many people look to AI for the future in the education of students. Properly utilized, AI has the potential to overhaul much of the current educational system, yielding better results on an individual level. By analyzing data on an individual student's strengths and weaknesses, AI can tailor a more efficient educational plan based on what would best suit each student, as opposed to broad state or district regulation which may not be what best works for the students.³⁴ Additionally, AI helps to ensure a student's mastery over topics before moving on, helps with engagement, provides real time feedback, and can even detect learning gaps preemptively.³⁵ While the main draw towards AI is for the sake of students, teachers may also benefit from the swift application of these technologies.³⁶

Those opposed to the integration of AI technologies in educational settings cite many reasons as to why this should not happen, or at least be regarded as the definitive next step in education. One notable concern is the potential for increasing educational inequalities. AI systems heavily rely on data, and if the data used to train these systems contain biases, it could perpetuate and even magnify existing disparities in education,

³⁴ "AI in Schools: 4 Transformative Ways AI Can Improve Education." Classpoint.

³⁵ *ibid*

³⁶ *ibid*

essentially defeating its own purpose. Moreover, there are ethical considerations surrounding data privacy and security, especially when dealing with sensitive student information. Striking the right balance between technological advancement and maintaining a human touch in education remains a challenge as AI continues to evolve in the educational landscape.

Actions Taken by the UN

As previously mentioned, there are currently no existing UN resolutions regarding the use of AI. Despite this, many UN entities have engaged in conversation regarding the ethical implementations of its application in different settings, such as in education and government. The UN Human Rights Council, for example, has discussed the human rights implications of AI, focusing on issues like privacy, freedom of expression, and the right to work.³⁷ The focus on privacy reflects concerns about the potential encroachment on individual liberties as AI systems collect and analyze vast amounts of personal data. The examination of the right to work in the context of AI involves multifaceted considerations including potential job displacement and the creation of new types of employment. The UN Human Rights Council's engagement highlights a concerted effort to ensure that as AI technologies advance and that they do so with ethical boundaries.

Regional and International Framework

Nations are currently facing a pressing need to adapt current laws and even create new ones as the prominence of AI grows globally. Many of these laws seek to dictate the type and amount of information made available to these automated systems. The United States has yet to set a national precedent on this matter, with most of the action being taken by the states so far. One of these is California Assembly Bill No. 302.³⁸ When discussing the use of AI in schools, it is important to also take data collection into account. According to the United Nations Conference on Trade and Development (UNCTAD), 137 out of the existing 194 countries have some form of legislation outlining protections against data collection. The European Union (EU), for example, has the General Data Protection Regulation (GDPR), which is often regarded as one of the strictest laws regarding data protection.³⁹ Even though it was created and approved by the European Union (EU), the regulations imposed by them extend their obligations to organizations worldwide, as long as they gather or target data concerning individuals within the EU.

³⁷ "Secretary-General Announces Creation of New Artificial Intelligence Advisory Board." United Nations.

³⁸ "Global perspective on the legal frameworks on artificial intelligence (AI)." Veriff.

³⁹ "What is GDPR, the EU's new data protection law?" European Union.

In regards to its ties to AI in education, the laws of many countries reflect what is possible under such restrictions and protections between data collection and AI powered educational tools for education. These laws mostly have these factors in common; children possess equal rights to anyone else according to the GDPR, with additional safeguards in place for the protection of their data.⁴⁰ If deemed competent, children can provide consent for processing, similar to adults; otherwise, consent must be granted by their parent or guardian.⁴¹ Notably, consent is not typically the lawful basis for most data processing within a school setting.⁴²

Conclusion

The integration of AI in education holds great promise for transforming learning experiences and improving outcomes. While the United Nations recognizes the importance of AI and its ethical implications, especially in education, there are currently no specific resolutions in place. The discussions within UNESCO and the United Nations General Assembly emphasize the need for inclusive and ethical AI technologies, while also addressing and taking concerns about potential educational inequalities, and ethical considerations regarding data privacy and security into account. On the regulatory front, various countries are grappling with the need to adapt laws to address AI's global prominence, with examples like California Assembly Bill No. 302 and international frameworks such as the GDPR shaping discussions on data protection. As nations navigate this unprecedented front, finding the right balance between responsible development and technological innovation remains an issue of dire importance.

⁴⁰ *ibid*

⁴¹ *ibid*

⁴² "GDPR for schools - a quick intro." GDPR for Schools.

Citations

“The 17 Goals.” *United Nations*, United Nations. Accessed 3 Jan. 2024.

<https://sdgs.un.org/goals>.

“A/HRC/RES/32/13.” *United Nations*, United Nations Human Rights Council, 18 July 2016,

<https://documents-dds-ny.un.org/doc/UNDOC/GEN/G16/156/90/PDF/G1615690.pdf?OpenElement>.

“A/RES/60/252.” *ITU*, United Nations, 27 Apr. 2006,

<https://www.itu.int/net/wsis/docs/background/resolutions/60-252.pdf>.

“A/RES/70/125.” *United Nations*, United Nations, 1 Feb. 2016,

<https://documents-dds-ny.un.org/doc/UNDOC/GEN/N15/438/42/PDF/N1543842.pdf?OpenElement>.

“Availability Map.” *Starlink*, SpaceX. Accessed 3 Jan. 2024. <https://www.starlink.com/map>.

“Broadband Equity Access and Deployment Program.” *BroadbandUSA*, National Telecommunications and Information Administration. Accessed 3 Jan. 2024.

<https://broadbandusa.ntia.doc.gov/funding-programs/broadband-equity-access-and-deployment-bead-program>.

“The Digital Transformation Strategy for Africa.” *African Union*, African Union, 18 May 2020,

https://au.int/sites/default/files/documents/38507-doc-DTS_for_Africa_2020-2030_English.pdf.

“E/2023/49.” *United Nations*, United Nations Economic and Social Council, 16 Jan. 2023,

<https://documents-dds-ny.un.org/doc/UNDOC/GEN/G23/006/50/PDF/G2300650.pdf?OpenElement>.

“EU Funding for Broadband 2021-2027.” *European Commission*, European Union, 15 Dec. 2022,

<https://digital-strategy.ec.europa.eu/en/library/eu-funding-broadband-2021-2027>.

Fernald, John G., et al. “Productivity Growth in the 1990s: Technology, Utilization, or Adjustment?” *NBER*, National Bureau of Economic Research, July 2001,

<https://www.nber.org/papers/w8359>.

“GDPR for schools - a quick intro.” *GDPR for Schools*, GDPR for Schools. Accessed 3 Jan. 2024. www.gdpr.co.uk/gdpr-compliance-in-schools/gdpr-for-schools.

“General Information: UN and ITU Resolutions on WSIS.” *ITU*, International Telecommunications Union. Accessed 3 Jan. 2024.

https://www.itu.int/net/wsis/documents/background.asp?lang=en&c_type=res.

“Glossary:Digital divide.” *Eurostat*, European Statistical Office. Accessed 3 Jan. 2024.

https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Digital_divide.

Henry, Lester. “Bridging the urban-rural digital divide and mobilizing technology for poverty eradication: challenges and gaps.” *United Nations*, University of the West Indies, St. Augustine, 2019,

<https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2019/02/Henry-Bridging-Digital-Divide.pdf>.

“The ICT Development Index.” *ITU*, International Telecommunications Union. Accessed 3 Jan. 2024. <https://www.itu.int/en/ITU-D/Statistics/Pages/IDI/default.aspx>.

Malone, Laurence J. “Rural Electrification Administration.” *EH.net Encyclopedia*, Economic History Association, 16 Mar. 2008,

<https://eh.net/encyclopedia/rural-electrification-administration>.

Nguyen, Sylvia. "AI in Schools: 4 Transformative Ways AI Can Improve Education." *ClassPoint*, ClassPoint, 22 Dec. 2023, www.classpoint.io/blog/ai-in-schools-4-ways-ai-can-improve-education.

Ritchie, Hannah, and Max Roser. "Urbanization." *Our World in Data*, Global Change Data Lab, Nov. 2019, <https://ourworldindata.org/urbanization>.

"SG/A/2236." *UN Press*, United Nations, 26 Oct. 2023, press.un.org/en/2023/sga2236.doc.htm.

Souter, David, and Anri Van der Spuy. "UNESCO's Internet universality indicators: a framework for assessing Internet development." *UNESCO*, UNESCO, 2019, <https://unesdoc.unesco.org/ark:/48223/pf0000367617/PDF/367617eng.pdf.multi>.

Tsuiman, Aleksander. "How Countries Around the World Approach the Creation of Legal Frameworks on Artificial Intelligence (AI)." *Veriff*, Veriff, 27 Dec. 2023, www.veriff.com/blog/legal-frameworks-on-ai.

"Understanding the Digital Divide." *OECD iLibrary*, Organisation for Economic Co-operation and Development, 1 Jan. 2001, https://www.oecd-ilibrary.org/science-and-technology/understanding-the-digital-divide_236405667766.

"UNESCO in Brief." *UNESCO*, UNESCO. Accessed 3 Jan. 2024. www.unesco.org/en/brief.

Wolford, Ben. "What is GDPR, the EU's new data protection law?" *GDPR.eu*, Proton Technologies. Accessed 3 Jan. 2024. gdpr.eu/what-is-gdpr.

“The World’s Cities in 2018.” *United Nations*, United Nations, 2018,
[https://www.un.org/en/development/desa/population/publications/pdf/urbanization/the_w
orlds_cities_in_2018_data_booklet.pdf](https://www.un.org/en/development/desa/population/publications/pdf/urbanization/the_worlds_cities_in_2018_data_booklet.pdf).