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UN Educational, Scientific and Cultural Organization Background Guide 2023

Written by Maike Weitzel, Jacob A. Sarasin, Lisa N. Huynh, and Tomas Paramo



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Dear Delegates,

Welcome to the 2023 National Model United Nations New York Conference (NMUN•NY)! We are pleased to introduce you to our committee, the United Nations Educational, Scientific, and Cultural Organization (UNESCO). The topics under discussion are:

1. Artificial Intelligence and the Rule of Law
2. Strengthening Partnerships on Science, Technology, and Innovation for Sustainable Development

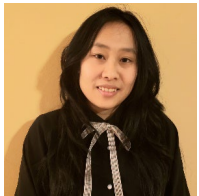
Members of our dais this year include:



Maike Weitzel, Director, holds a Bachelor's degree in European Studies from the University of Magdeburg and a Master's degree in International Relations from TU Dresden.



Jacob Sarasin, Director, is a first-year law student at Columbia Law School where he is studying environmental law. Before starting law school, Jacob worked at a civil litigation law firm in New York City and founded a voter information nonprofit.



Lisa N. Huynh, Assistant Director, holds a Bachelor of Arts in Economics and Political Science with a concentration in International Relations and a Master of Science in Applied Economics.



Tomas Paramo, Assistant Director, is a third-year student at the University of Washington majoring in Global and Regional studies. He is passionate about world history, learning new languages and playing guitar.

This Background Guide serves as an introduction to the topics for this committee. However, it is not intended to replace individual research. We encourage you to explore your Member State's policies in depth and use the Annotated Bibliography and Bibliography to further your knowledge on these topics. In preparation for the Conference, each delegation will submit a Position Paper by 11:59 p.m. (Eastern Time) on 1 March 2023 in accordance with the guidelines in the [Position Paper Guide](#) and the NMUN•NY [Position Papers website](#).

Two resources, available to download from the [NMUN website](#), serve as essential instruments in preparing for the Conference and as a reference during committee sessions:

1. [NMUN Delegate Preparation Guide](#) - explains each step in the delegate process, from pre-Conference research to the committee debate and resolution drafting processes. Please take note of the information on plagiarism, and the prohibition on pre-written working papers and resolutions. Delegates should not start discussion on the topics with other members of their committee until the first committee session.
2. [NMUN Rules of Procedure](#) - include the long and short form of the rules, as well as an explanatory narrative and example script of the flow of procedure.

In addition, please review the mandatory [NMUN Conduct Expectations](#) on the NMUN website. They include the Conference dress code and other expectations of all attendees. We want to emphasize that any instances of sexual harassment or discrimination based on race, gender, sexual orientation, national origin, religion, age, or disability will not be tolerated. If you have any questions concerning your preparation for this committee, please contact the Development & Human Rights Department, Tiffany Dao (Conference A) and Danielle Curtis BL (Conference B), at usg.dhr@nmun.org.

We wish you all the best in your preparations and look forward to seeing you at the Conference!

Maike Weitzel, Director
Lisa N. Huynh, Assistant Director
Conference A

Jacob Sarasin, Director
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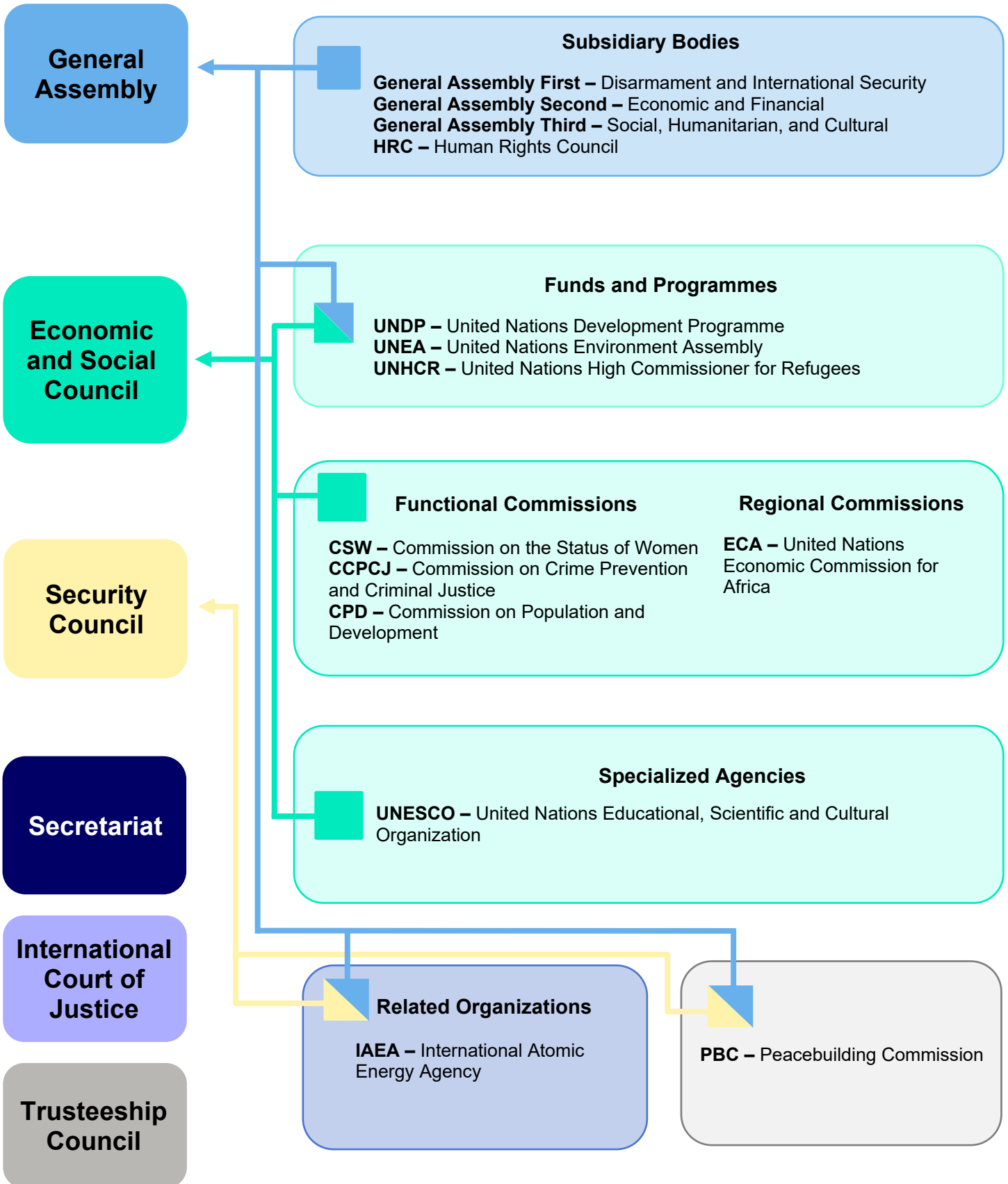


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United Nations System at NMUN•NY

This diagram illustrates the UN system simulated at NMUN•NY. It shows where each committee “sits” within the system to demonstrate the reportage and relationships between entities. Examine the diagram alongside the Committee Overview to gain a clear picture of the committee’s position, purpose, and powers within the UN system.



Committee Overview

Introduction

The United Nations Educational, Scientific and Cultural Organization (UNESCO) is a specialized agency of the United Nations (UN) that coordinates with the UN through the Economic and Social Council (ECOSOC).¹ Although it is financially and structurally independent from the primary organs of the UN, UNESCO works with the UN to pursue common interests, including peace and security and social and economic development.² In accordance with its mandate, UNESCO has coordinated and produced several international standards for the promotion of peace through collaboration in the fields of education, intercultural dialogue, and communication and information.³ Among these are the *Convention against Discrimination in Education* (1960), the *Declaration on Race and Racial Prejudice* (1978), the *ICT Competency Framework for Teachers* (2018), and the *Recommendation on the Ethics of Artificial Intelligence* (2022).⁴ Some recent topics addressed by UNESCO in accordance with the *2030 Agenda for Sustainable Development* (2030 Agenda) (2015) include the development of education systems that foster quality inclusive education and promote lifelong learning opportunities for all, the role of science in addressing global issues, and mainstreaming culture into public policy.⁵

Mandate, Functions, and Powers

UNESCO's mandate is formally defined in Article 1, paragraph 3 of the *Charter of the United Nations* (1945), and article 1 of the *UNESCO Constitution* (1945).⁶ UNESCO is charged with promoting collaboration among Member States in the fields of education, science, and culture in order to develop and maintain peace, the rule of law, and mutual respect.⁷ Additionally, UNESCO is responsible for coordinating and supporting the development of knowledge and culture for "economic stability, political security, and general well-being of the peoples of the world."⁸ Finally, UNESCO plays a major role in coordinating international conventions and setting standards on topics of education, culture, and science such as its recent role in drafting the landmark *Global Convention on the Recognition of Qualifications concerning Higher Education* (2019), the first legally-binding UN treaty on higher education.⁹

Whilst the following list is not exhaustive, the mandate of UNESCO can be summarized as:

- UNESCO **will generally**: hold international conferences to deliberate issues and set standards; provide expert research and consultation to the primary organs of the UN system through ECOSOC; coordinate with other entities and organizations to implement programs in the matters related to education, science, culture, communication, and information.¹⁰

¹ New Zealand Ministry of Foreign Affairs and Trade. *United Nations Handbook 2022-23*. 2022.

² United Nations Conference on International Organization. *Charter of the United Nations*. 1945. art. 63.

³ United Nations Educational, Scientific and Cultural Organization. *Basic Texts: 2016 edition*. 2016.

⁴ United Nations Educational, Scientific and Cultural Organization. *UNESCO (ERI/2010/WS/2)*. 2010. p. 37; United Nations Educational, Scientific and Cultural Organization. *Recommendation on the Ethics of Artificial Intelligence*. 2022.

⁵ United Nations Educational, Scientific and Cultural Organization. *UNESCO and Sustainable Development Goals*. n.d.

⁶ United Nations Conference on International Organization. *Charter of the United Nations*. 1945. art. 1; United Nations Educational, Scientific and Cultural Organization. *Constitution of the United Nations Educational, Scientific and Cultural Organization*. 1945. p. 5.

⁷ *Ibid.* art. V, art. I, para. 1.

⁸ Conference of Allied Ministers of Education. *Conference for the Establishment of UNESCO (ECO/CONF./29)*. 1945. p. 1.

⁹ United Nations Educational, Scientific and Cultural Organization. *Implementation of standard-setting instruments*. 2015; United Nations Educational, Scientific and Cultural Organization. *Global Convention of Higher Education*. n.d.

¹⁰ United Nations Educational, Scientific and Cultural Organization. *UNESCO (ERI/2010/WS/2)*. 2010. p. 32.

- UNESCO **will not generally**: set norms and standards in fields other than education, science and culture; demand action from Member States and other entities on policy development and implementation (rather, UNESCO encourages and helps facilitate partnerships with organizations on education, science and culture); request specific action from Member States and other entities on the promotion of access to education, cultural heritage, and scientific programs (instead fostering and encouraging cooperation to address matters related to those topics).¹¹

Outlined in its *Medium-Term Strategy 2022-2029*, UNESCO further serves as: an international forum for ideas, innovation, and policy advice in education, science, culture, and communication and information; a global center for policy analysis, monitoring, benchmarking, and the development and analysis of data and statistics; a standard-setter and supporting their implementation; and a facilitator and catalyst for international and regional cooperation.¹² UNESCO also plays a significant strategic oversight role with respect to the implementation of Sustainable Development Goal 4 (quality education).¹³

Governance, Structure, and Membership

UNESCO is a legally independent agency with its own rules, membership, organs, and financial resources that was brought into a relationship with the UN in 1945.¹⁴ UNESCO currently has 193 Member States and 11 associate members.¹⁵ Two major bodies, the General Conference and Executive Board, govern the work of UNESCO.¹⁶

The General Conference, consisting of all UNESCO Member States, meets every two years.¹⁷ At its 2021 session, UNESCO reaffirmed its commitment to addressing global issues in accordance with the 2030 Agenda through renewing its *Medium-Term Strategy* for years 2022-2029.¹⁸ The General Conference is primarily responsible for electing the 58 members of the Executive Board, who serve four-year terms, deliberating upon and approving recommendations from the Executive Board, summoning international conferences, considering reports from Member States, and advising UN organizations on matters of education, science, and culture.¹⁹ The General Conference may also establish special and technical committees, create subsidiary organs, and invite observers on the recommendation of the Executive Board.²⁰ Every two years, the Executive Board prepares the biennial agenda for the General Conference, submits policy recommendations to the General Conference, implements decisions adopted by the General Conference, recommends the admission of new Members, nominates the Director-General, and reviews the budget.²¹ Additionally, the Executive Board may advise the primary organs of the UN on issues relevant to its mandate, consult with representatives of intergovernmental organizations (IGOs) and independent experts, and request advisory opinions from the International Court of Justice.²²

¹¹ United Nations Educational, Scientific and Cultural Organization. *UNESCO in brief*. n.d.

¹² United Nations Educational, Scientific and Cultural Organization. *Medium-Term Strategy 2022-2029*. 2022.

¹³ Ibid.

¹⁴ United Nations, General Assembly. *Agreements with Specialized Agencies (A/RES/50(I))*. 1945.

¹⁵ United Nations Educational, Scientific and Cultural Organization. *Member States*. 2021.

¹⁶ New Zealand Ministry of Foreign Affairs and Trade. *United Nations Handbook 2022-23*. 2022.

¹⁷ Ibid.

¹⁸ United Nations Educational, Scientific and Cultural Organization. *General conference: 41st Session - 9-24 November 2021*. 2021.

¹⁹ United Nations Educational, Scientific and Cultural Organization. *Constitution of the United Nations Educational, Scientific and Cultural Organization*. 1945. arts. III-VI.

²⁰ Ibid. arts. III-VI.

²¹ Ibid. 1945. art. V; United Nations Educational, Scientific and Cultural Organization. *Executive Board in Brief*. n.d.

²² United Nations Educational, Scientific and Cultural Organization. *Constitution of the United Nations Educational, Scientific and Cultural Organization*. 1945. art. V.

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United Nations Educational, Scientific and Cultural Organization. *UNESCO moving forward the 2030 Agenda for Sustainable Development*. 2017. Retrieved 5 September 2022 from:

<https://unesdoc.unesco.org/ark:/48223/pf0000247785>

This key document focuses on the role of UNESCO in achieving the 2030 Agenda for Sustainable Development. Delegates will find this source particularly helpful in understanding the type of work that UNESCO does in achieving the 2030 Agenda. Moreover, this document provides comprehensive information on the ways in which UNESCO helps with efforts towards each of the 17 Sustainable Development Goals, and UNESCO's targeted work towards the nine SDGs that align with its mandate. Overall, this source will enable delegates to see how UNESCO uses its mandate to contribute to the current global agenda.

United Nations Educational, Scientific and Cultural Organization. *Medium-Term Strategy 2022-2029*. 2022. Retrieved 4 September 2022 from: <https://unesdoc.unesco.org/ark:/48223/pf0000378083?>

UNESCO's most recent medium-term strategy consists of three parts outlining the organization's mission, strategic objectives, and commitment to strengthening impact and partnerships to fulfill its mandate. In this document, UNESCO reaffirms its commitment to achieving the goals outlined in the 2030 Agenda. Through this strategy, UNESCO identifies and provides concrete paths forward to address global issues related to education, science and culture. This resource is a great resource for delegates to learn more about UNESCO's mandate and functions, as well as the organization's approaches and strategies in all its fields.

United Nations Educational, Scientific and Cultural Organization. *UNESCO snapshots*. 2022. Retrieved 4 September 2022 from: <https://unesdoc.unesco.org/ark:/48223/pf0000381065/PDF/381065eng.pdf.multi>

Published annually, this document provides a general overview of UNESCO's actions on addressing pressing global issues. In this publication, UNESCO demonstrates the ways in which it worked together with Member States and civil society to address issues related to education, science, and culture. Through colorful and simple images, UNESCO provides helpful facts and figures related to the composition, achievements, and current projects of the organization. Delegates will find this resource a good starting point in understanding more about UNESCO's recent priorities and actions.

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United Nations, General Assembly. *Agreements with Specialized Agencies (A/RES/50(I))*. 1945. Retrieved 5 September 2022 from: [https://undocs.org/en/A/RES/50\(I\)](https://undocs.org/en/A/RES/50(I))

1. Artificial Intelligence and the Rule of Law

“If we are to make the most of the possibilities offered by AI to the world, we must ensure that it serves humanity, with respect for human dignity and human rights.”²³

Introduction

Artificial Intelligence (AI) is a new frontier of technology that has the potential for profound and dynamic positive and negative impacts on societies, the environment, ecosystems, and human lives.²⁴ As AI has begun to emerge, the United Nations Educational, Scientific and Cultural Organization (UNESCO) has identified the influential role that it has to play with regards to the rule of law.²⁵ Traditionally, the field of law is slow to adopt new technological innovations.²⁶ However, recent trends in the evolution of digital court systems, a trend expedited as a result of the COVID-19 pandemic, have forced legal practitioners and judicial operators across the globe to quickly integrate emerging technologies into their practice of law.²⁷ As the next significant technology on the horizon, justice systems across the globe have already started experimenting with the implementation of AI in various capacities, ranging from law enforcement to administrative judicial tasks to the adjudication of legal disputes.²⁸ Navigating the challenges and opportunities associated with harnessing the power of AI in the rule of law will require an approach that focuses heavily on the effects that these systems can have on the rights of humans and the implications that computer based systems can have on the judicial ecosystem.²⁹

UNESCO has noted that a sufficient definition for AI must be able to change over time as the scope and function of AI will continue to shift with future technological developments.³⁰ Instead of providing a concrete definition of AI, UNESCO has elected to address the core features of all AI systems.³¹ UNESCO describes AI as systems that have the capacity to process data and information in a way that resembles intelligent behavior, and typically includes aspects of reasoning, learning, perception, prediction, planning, or control.³² The United Nations (UN) generally defines the “rule of law” as the core principle of governance by which all people, institutions, and entities, whether public or private, are accountable to the laws that govern them.³³ The rule of law requires “measures to ensure adherence to the principles of supremacy of law, equality before the law, accountability to the law, fairness in the application of the law, separation of powers, participation in decision making, legal certainty, avoidance of arbitrariness, and procedural and legal transparency.”³⁴ In practice, the rule of law is intended to be the fair, equitable, and transparent process for providing justice.³⁵ While AI has a significant role to play in increasing judicial operational efficiency, regulatory frameworks are required to ensure that these intended principles of the

²³ United Nations Educational, Scientific and Cultural Organization. *UNESCO Courier. Audrey Azoulay: Making the most of artificial intelligence*. 2018.

²⁴ United Nations Educational, Scientific and Cultural Organization. *Recommendation on the Ethics of Artificial Intelligence*. 2022. p. 5.

²⁵ World Commission on the Ethics of Scientific Knowledge and Technology. *Preliminary study on the Ethics of Artificial Intelligence*. 2019.

²⁶ United Nations Office on Drugs and Crime. *Digitalization of justice record management systems in the Indian Ocean Region*. 2022.

²⁷ *Ibid.*

²⁸ United Nations Educational, Scientific and Cultural Organization. *AI and the Rule of Law: Capacity Building for Judicial Systems*. 2021.

²⁹ *Ibid.*

³⁰ United Nations Educational, Scientific and Cultural Organization. *Recommendation on the Ethics of Artificial Intelligence*. 2022. p. 10.

³¹ *Ibid.* p.10.

³² *Ibid.* p. 10.

³³ United Nations, Security Council. *The rule of law and transitional justice in conflict and post-conflict societies: Report of the Secretary-General (S/2004/616)*. 2004. p. 4.

³⁴ *Ibid.* p. 4.

³⁵ United Nations Educational, Scientific and Cultural Organization. *Recommendation on the Ethics of Artificial Intelligence*. 2022. p. 18.

rule of law are maintained.³⁶ The adoption of these frameworks will be essential in addressing the Sustainable Development Goals (SDGs).³⁷

International and Regional Framework

In November 2019, UNESCO embarked on a two-year process of developing the UN's first recommendation for setting standards on the ethics of AI.³⁸ UNESCO's preliminary research commenced by examining the existing work of the World Commission on the Ethics of Scientific Technology (COMEST) studies from 2017 on Robotics Ethics and the Ethical Implications of the Internet of Things.³⁹ This initial research identified several existing topic areas and initiatives that the new recommendation was to be built upon.⁴⁰ Human rights was an example, with the *Geneva Declaration of Principles* adopted at the 2003 World Summit on the Information Society serving as the guiding framework.⁴¹ One of the key outcomes of the *Geneva Declaration of Principles* was the directive that information and communication technologies (ICTs) should be utilized in ways that respect human rights and fundamental freedoms.⁴² Another topic area that UNESCO identified was the essential doctrine of the framework of Internet Universality.⁴³ In understanding Internet Universality, UNESCO relied on the principles of human rights, openness, accessibility, and multi-stakeholder participation, also known as R.O.A.M. principles, as approved by UNESCO's General Conference in 2015.⁴⁴

The result of the two-year research and drafting process was the 2021 *Recommendation on the Ethics of Artificial Intelligence* (2021 Recommendation), which defined the common normative values and principles that will continue to guide the construction of the necessary legal infrastructure to ensure safe and positive development of AI.⁴⁵ The 2021 Recommendation aims to realize the advantages AI brings to society and reduce its risks by highlighting data protection, social scoring and mass surveillance, the continued monitoring and evaluation of AI, and environmental protection as the four core tenants to remain cognizant of in the adoption of international policy for AI.⁴⁶ Additionally, in November 2021 UNESCO adopted the *UNESCO Recommendation on Open Science* which attempts to create metrics for measuring open access to science and data and advocates for reducing private ownership of AI by increasing government investment in the development of AI programs and software.⁴⁷

The rule of law has been one of the primary interests of the UN since its inception in 1945.⁴⁸ Chapter XIV of the *Charter of the United Nations* (1945) addressed the task of protecting the rule of law, and identified peace and security, human rights, and development as its three key pillars of function.⁴⁹ The International Court of Justice is the principal judicial organ of the UN, however, much of the UN's interaction with the rule of law at the national level is through declarations and resolutions from the main organs of the UN on

³⁶ Ibid. p. 18.

³⁷ Ibid. p. 18.

³⁸ United Nations Educational, Scientific and Cultural Organization. *Recommendation on the Ethics of Artificial Intelligence*. 2022.

³⁹ World Commission on the Ethics of Scientific Technology. *Preliminary study on the Ethics of Artificial Intelligence*. 2019. p. 1.

⁴⁰ Ibid. p. 1.

⁴¹ Ibid. p. 4.

⁴² Ibid. p. 4.

⁴³ Ibid. p. 4.

⁴⁴ Ibid. p. 4.

⁴⁵ United Nations Educational, Scientific and Cultural Organization. *Recommendation on the Ethics of Artificial Intelligence*. 2022. p. 10; United Nations, Department of Global Communications. *193 countries adopt first-ever global agreement on the Ethics of Artificial Intelligence*. 2021.

⁴⁶ Ibid.

⁴⁷ United Nations Educational, Scientific and Cultural Organization. *UNESCO Recommendation on Open Science*. 2021. p. 25.

⁴⁸ United Nations Conference on International Organization. *Charter of the United Nations*. 1945. p. 17; United Nations, Department of Global Communications. *The Rule of Law in UN Intergovernmental Work*. n.d.

⁴⁹ Ibid.

relevant aspects of international law, including international human rights law, international humanitarian law, international criminal law, and international refugee law.⁵⁰ The primary overlap between the role of AI and the rule of law resides in their joint capacity to achieve the *2030 Agenda for Sustainable Development* (2030 Agenda) (2015), particularly SDG 16 (peace, justice, and strong institutions).⁵¹ The SDGs serve as an urgent call to action that provides a shared blueprint for peace and prosperity for people and the planet, now and into the future.⁵² General Assembly resolutions 72/242 (2017), and 73/17 (2018) addressing the “Impact of rapid technological change on the achievement of the Sustainable Development Goals”, authorized the Economic and Social Council to explore the capacities by which AI could be used to assist in achieving the SDGs.⁵³ While many avenues have been identified where AI can play a role in the achievement of the SDGs, the role of AI in the relation to the rule of law are addressed primarily by SDG 16 targets 16.3, 16.5, 16.6, and 16.B.⁵⁴

Role of the International System

UNESCO’s mandate focuses on building a culture of peace through international cooperation in education, sciences, and culture.⁵⁵ UNESCO’s focus also lies in eradicating poverty, achieving sustainable development, and establishing open intercultural communication.⁵⁶ It is through these values that UNESCO can facilitate and contribute to the growth of AI and its potential correlation with the rule of law.⁵⁷ In 2014, UNESCO created the Global Judges Initiative – a series of Massive Open Online Courses (MOOCs) – in order to educate and prepare judicial operators for current challenges such as the protection of freedom of expression and public access to information.⁵⁸ In 2018, UNESCO held the Forum on International Intelligence in Africa, where the *Benguerir Declaration* was adopted, addressing the need to focus on the development of AI as a strong tool for the achievement of sustainable development and protection of human rights in Africa.⁵⁹ As part of UNESCO’s Judges Initiative, a comprehensive course on the use of AI and the Rule of Law was launched in March 2022.⁶⁰ This introductory course educates judicial operators on AI’s application and its impact on the rule of law through six different modules: AI Ethics and Governance Issues; AI Use in Justice Systems; Online Courts; AI and Human Rights; Digitalization of Justice Systems; and Algorithmic Bias.⁶¹ With these six modules, over 4000 judicial operators around the world have been prepared and educated on the opportunities and risks for human rights, ethics, and governance through the increase of AI involvement in justice systems.⁶² Other recent actions from UNESCO include the Artificial Intelligence, e-Governance and Access to Information conference in Uzbekistan focused on promoting approaches for universal access to information.⁶³ The conference focused on ensuring the right to information on an equal basis through e-governance services

⁵⁰ United Nations, Department of Global Communications. *United Nations and the Rule of Law*. n.d.; United Nations, Department of Global Communications. *What is the Rule of Law*. n.d.

⁵¹ United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2015. p. 25.

⁵² Ibid.

⁵³ United Nations, General Assembly. *Impact of rapid technological change on the achievement of the Sustainable Development Goals (A/RES/72/242)*. 2017; United Nations, General Assembly. *Impact of rapid technological change on the achievement of the Sustainable Development Goals and targets (A/RES/73/17)*. 2018. p. 2.

⁵⁴ United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2017. p. 25.

⁵⁵ United Nations Educational, Scientific and Cultural Organization. *UNESCO in brief*. n.d.

⁵⁶ Office of the United Nations Secretary-General's Envoy on Youth. *UNESCO: United Nations Educational, Scientific and Cultural Organization*. n.d.

⁵⁷ United Nations Educational, Scientific and Cultural Organization. *UNESCO in brief*. n.d.

⁵⁸ United Nations Educational, Scientific and Cultural Organization. *Artificial Intelligence and the Rule of Law*. n.d.

⁵⁹ United Nations Educational, Scientific and Cultural Organization. *Forum on artificial intelligence in Africa*. 2021.

⁶⁰ United Nations Educational, Scientific and Cultural Organization. *Almost 4000 judicial operators worldwide join UNESCO’s MOOC on AI and the Rule of Law*. 2022; The National Judicial College. *Massive Open Online Course on Upholding the Rule of Law in the Age of Artificial Intelligence*. 2022.

⁶¹ Ibid.

⁶² Ibid.

⁶³ United Nations Educational, Scientific and Cultural Organization. *The role of e-Governance and artificial intelligence in promoting inclusive approaches for Access to Information*. 2019.

for women and persons with disability and the adherence of e-Governance and AI to the rule of law in ensuring the protection of citizen's rights.⁶⁴

Since 2020, the United Nations Development Programme (UNDP) has taken new approaches to ensure accountability and governance to the rule of law through the use of AI by undertaking multiple projects, such as increasing AI capability and providing more accessible information and data through the SURGE Data Hub (SDH).⁶⁵ The SDH is a collection of human-centered data focused on helping governments with governance and policymaking through AI-analysis.⁶⁶

In 2021, the Office of the United Nations High Commissioner for Human Rights (OHCHR) called for an international moratorium on the use of AI due to a failure of due diligence, discriminatory and exploited data, and lack of transparency.⁶⁷ OHCHR has since published a report *The Right to Privacy in the Digital Age* on AI's effects on individuals' right to privacy and other fundamental rights.⁶⁸ In the report, various states are shown to have treated citizens unjustly and have failed to adhere to the rule of law due to AI misuse.⁶⁹ Some examples include not providing social security to citizens due to faulty AI or arresting innocent individuals because of failed facial recognition software.⁷⁰

In October of 2020, the High-level Committee on Programmes in collaboration with UNESCO, the International Telecommunication Union, and the United Nations System Chief Executives Board for Coordination (CEB) created an inter-agency working group on AI (IAWG-AI).⁷¹ IAWG-AI was created to support the capacity development of AI.⁷² According to the United Nations Development Group (UNDG), capacity development is the improvement and strengthening of the ability to manage affairs successfully by a group of people, in this case the success of implementation in relation to the rule of law.⁷³

Regional entities have also taken action in addressing the risks of AI on the rule of law, including the European Commission's High-level expert group on AI (AI HLEG) and the European AI Alliance on policymaking initiatives.⁷⁴ Furthermore, the Organisation for Economic Co-operation and Development has outlined and projected effective uses of AI, such as increasing public and governmental integrity, accountability, efficiency, and decision making in regions like Latin America and the Caribbean.⁷⁵ In order to improve public integrity and accountability, Brazil uses its Malha Fina de Convenios, an algorithm made to detect monetary transfer liability.⁷⁶ Brazil's Court of Accounts of the Union also utilizes AI to ensure accountability within the federal government's procurement processes.⁷⁷ Colombia has implemented AI to detect corruption and adhere to the rule of law in relationships between national contracting parties.⁷⁸ Multiple nations have already individually implemented AI systems into their

⁶⁴ United Nations Educational, Scientific and Cultural Organization. *High level roundtable: Harnessing opportunities of digital governance and artificial intelligence for informed and empowered citizen*. 2019.

⁶⁵ AI for Good. *United Nations Development Programme (UNDP)*. 2022.

⁶⁶ Ibid.

⁶⁷ United Nations, Department of Global Communications. *Urgent action needed over artificial intelligence risks to human rights*. 2021.

⁶⁸ United Nations, Human Rights Council. *The right to privacy in the digital age (A/HRC/48/31)*. 2021.

⁶⁹ United Nations, Department of Global Communications. *Urgent action needed over artificial intelligence risks to human rights*. 2021.

⁷⁰ Ibid.

⁷¹ United Nations System Chief Executives Board for Coordination. *Artificial Intelligence*. n.d.

⁷² United Nations System Chief Executives Board for Coordination. *Inter-Agency Working Group on Artificial Intelligence*. n.d.

⁷³ United Nations Development Group. *Capacity Development*. n.d.

⁷⁴ European Commission. *High-level expert group on artificial intelligence*. 2022.

⁷⁵ Organisation for Economic Co-operation and Development. *The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean*. 2022.

⁷⁶ Ibid.

⁷⁷ Ibid.

⁷⁸ Ibid.

judiciary such as Brazil, India, and China.⁷⁹ The Brazilian National Council of Justice has allowed the 92 courts it oversees to develop their own AI models and has now in partnership with the Institute for Technology and Society in Rio (ITS) developed a collaborative governance structure to integrate all AI usage.⁸⁰ In order to increase the efficiency of India's courts, an AI system named SUPACE, which assists judicial operators, has been implemented.⁸¹ SUPACE maximizes judicial operators' efficiency in working on cases, extracting relevant information and reading case files, amongst other functions.⁸² China has also incorporated digital courts into their judicial systems, where citizens do not have to appear in court.⁸³ Powered by AI, millions of cases are being settled by these courts with no need of human judges.⁸⁴

Ethics of Predictive AI Systems in Justice

Predictive AI systems are algorithms that utilize large repositories of data in an attempt to predict the most likely outcome for a particular situation.⁸⁵ As predictive AI technology has continued to develop, justice systems around the world have taken the opportunity to implement this emerging technology into their operative structures.⁸⁶ In areas of law enforcement, the Innovation Centre of the International Criminal Police Organization (INTERPOL) and the United Nations Interregional Crime and Justice Research Institute have acknowledged the crucial role that predictive AI can play in improving law enforcement efficiency by compiling a list of various relevant law enforcement related AI systems and noting their current progress in development.⁸⁷ Although few of these predictive AI systems are at a stage where they are ready for deployment, one of the primary ways that AI has already seen approval for usage in law enforcement is in the predictive anticipation of criminal activity, specifically by using machine learning.⁸⁸ This application of machine learning involves the use of complex algorithms to analyze discrete patterns in data from past criminal activity to predict the times and places where crime may occur so that adequate law enforcement may be present.⁸⁹

Courts in the United States of America and in the United Kingdom have also used predictive AI programs such as the Correctional Offender Management Profiling for Alternative Sanctions (COMPAS) and the Harm Assessment Risk Tool (HART) respectively.⁹⁰ One of core purposes of these tools is to predict a person's risk potential for recidivism.⁹¹ Recidivism is when a person who has been previously convicted of criminal activity relapses into criminal behavior, generally after a person has received punishment or attempted rehabilitation from their previous criminal activity.⁹² In the COMPAS and HART systems, the predictive AI's measurement for the likelihood of recidivism are both evaluated by a combination of

⁷⁹ Columbia School of International and Public Affairs. *AI-Driven Innovations at the Brazilian Judiciary*. 2020; India AI. *Enhancing the efficiency of India's courts using AI*. 2021; LexisNexis. *Robot justice: China's use of internet courts*. 2022.

⁸⁰ Columbia School of International and Public Affairs. *AI-Driven Innovations at the Brazilian Judiciary*. 2020.

⁸¹ India AI. *Enhancing the efficiency of India's courts using AI*. 2021.

⁸² Ibid.

⁸³ LexisNexis. *Robot justice: China's use of internet courts*. 2022.

⁸⁴ Ibid.

⁸⁵ Fair Trials and European Digital Rights. *Civil Society Calls on the EU to Ban Predictive AI systems in Policing and Criminal Justice in the AI Act*. 2022.

⁸⁶ United Nations Educational, Scientific and Cultural Organization. *AI and the Rule of Law: Capacity Building for Judicial Systems*. 2022.

⁸⁷ United Nations Interregional Crime and Justice Research Institute et al. *Artificial Intelligence and Robotics for Law Enforcement*. 2019. p. 5.

⁸⁸ Ibid. p. 5.

⁸⁹ Ibid. p. 18.

⁹⁰ Brennan et al. Northpointe, Inc. *Connecting the Dots: Supporting Evidence-Based Sentencing Decisions with Risk-Need-Responsivity Principles*. 2015; Oswald et al. *Information & Communications Technology Law. Algorithmic risk assessment policing models: Lessons from the Durham HART model and 'Experimental' proportionality*. 2018.

⁹¹ Ibid.

⁹² National Institute of Justice. *Recidivism*. n.d.

factors including age at first offense and other variables representing prior criminal history like criminal associates, drug involvement, and early indicators of juvenile delinquency problems.⁹³

As noted above, the deployment of these predictive AI systems has the potential to provide significant benefits to the efficiency of justice systems around the world, however, they also raise fundamental ethical concerns that Member States need to be mindful of.⁹⁴ One of the key ways that these concerns manifest in justice systems is with regards to an individual's right to due process.⁹⁵ As highlighted by the United Nations Conference on Trade and Development (UNCTAD) 2012 publication on *Fair and Equitable Treatment*, in the context of international law, due process can be roughly defined as the minimum standards in the administration of justice that guarantees the right to a fair trial before judicial and other governmental agencies without arbitrary and discriminatory conduct.⁹⁶ One of the most significant challenges for AI systems in upholding due process is providing transparency and 'explainability'.⁹⁷ Transparency and explainability can be closely related to the ability for any outside observer to spectate and understand the process by which the inputs to an AI system become outputs, or more generally how the system's decisions are made.⁹⁸ When an AI system fails to be sufficiently transparent and explainable, neither a judicial operator nor a subject of the court can be certain of the ethical legitimacy of the decisions made by the system, and when ethical legitimacy of a decision is in question then so is an individual's right to a fair trial.⁹⁹ AI transparency is just one of many concerns that emphasize the importance of considering the ethical implications that implementing AI systems can have on the justice system and it is imperative to consider how policy action can address these concerns going forward.¹⁰⁰

Artificial Intelligence and its Opportunities for SDG 16

Sustainable development, AI and the rule of law are all addressed under SDG 16 (peace, justice, and strong institutions).¹⁰¹ SDG 16 emphasizes the importance of improving access to justice, ensuring safety and security, and promoting human rights.¹⁰² Most importantly, SDG 16 seeks to "promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels."¹⁰³ AI's incidence on the rule of law and SDG 16 is specifically addressed through targets 16.3 (promoting the rule of law at the national and international levels and ensuring equal access to justice for all), 16.5 (substantially reducing corruption and bribery in all their forms), 16.6 (developing effective, accountable and transparent institutions at all levels), and 16.B (promoting and enforcing non-discriminatory laws and policies for sustainable development).¹⁰⁴ It is estimated that 134 targets out of the 169 targets from the SDGs would be positively impacted with the aid of AI.¹⁰⁵ These account to approximately 79% of targets enhanced and improved through AI.¹⁰⁶ However,

⁹³ Brennan et al. Northpointe, Inc. *Connecting the Dots: Supporting Evidence-Based Sentencing Decisions with Risk-Need-Responsivity Principles*. 2015. p. 15.

⁹⁴ United Nations Educational, Scientific and Cultural Organization. *Recommendation on the Ethics of Artificial Intelligence*. 2021. p. 5.

⁹⁵ Villasenor et al. Michigan State Law Review. *Artificial Intelligence, Due Process, and Criminal Sentencing*. 2020. p. 296.

⁹⁶ United Nations Conference on Trade and Development. *Fair and Equitable Treatment*. 2012. p. 23.

⁹⁷ United Nations Educational, Scientific and Cultural Organization. *Recommendation on the Ethics of Artificial Intelligence*. 2022. p. 22.

⁹⁸ Ibid. p. 22.

⁹⁹ Ibid. p. 22.

¹⁰⁰ Ibid. p. 26.

¹⁰¹ United Nations, Department of Global Communications. *Sustainable Development Goal 16*. n.d.

¹⁰² United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2015.

¹⁰³ Ibid.

¹⁰⁴ Ibid.

¹⁰⁵ Vinuesa et al. Nature Communications. *The role of artificial intelligence in achieving the Sustainable Development Goals*. 2020.

¹⁰⁶ Ibid.

the use of AI may also inhibit 58 targets from adhering to the rule of law due to the potential for increased inequalities and human rights violations.¹⁰⁷

Under target 16.5, the world is failing in the effort of combatting public sector corruption.¹⁰⁸ Based on the Transparency International Annual Report Corruption Perceptions Index (CPI) (2020), more than two-thirds of countries score below 50, where 0 is a high level of corruption and 100 is no corruption.¹⁰⁹ AI can play a critical role in ensuring accountable and transparent institutions by detecting legal violations and corruption through processing and predictive analysis of collected data.¹¹⁰ Furthermore, AI can contribute to target 16.5 by implementing algorithms developed to improve fraud detection and assess possible effects of regulations.¹¹¹

Target 16.6 would be enhanced by the big data generated from data mining, which understands, simplifies and structures information into user-friendly modules to evaluate and understand.¹¹² The availability of this data allows more accountability and can be used to spot inconsistencies in operations such as elections, public money spending, and tax fraud.¹¹³ On the other hand, AI raises ethical concerns as AI-lead policing could affect vulnerable populations through algorithm bias, as noted above.¹¹⁴ Furthermore, an increase in the use of AI can result in large amounts of personal data being open to exploitation, making citizen's information more vulnerable and susceptible.¹¹⁵ AI for transparent institutions raises major complications as algorithms function from previous actions, regulations, and policing could lead to the repetition of unfair judgement and decision making.¹¹⁶

While AI may be a key tool to achieving the SDGs, it may also have unanticipated consequences that will exacerbate inequalities and negatively impact individuals, societies, economies and the rule of law.¹¹⁷ AI implementation will need to be supported by a multi-disciplinary review and a multi-stakeholder approach that would allow the development and use of new AI technologies and tools to have the respect for human rights and human dignity as a priority.¹¹⁸ Policymakers and legal professionals within Member States should be supported in gaining a better understanding and addressing any policy gaps to safeguard transparency, safety, human rights and ethical standards.¹¹⁹ A multi-stakeholder approach, such as the United Nations Technology Facilitation Mechanism (TFM) and the Interagency Task Team on Science, Technology, and Innovation for the SDGs (IATT) and the sharing of information, experiences, and best practices in the development of practical guidance and policy advice would allow the promotion and enforcement of non-discriminatory laws and policies for sustainable development.¹²⁰

¹⁰⁷ Ibid.

¹⁰⁸ Transparency International. *Corruption Perceptions Index*. 2020

¹⁰⁹ Ibid.

¹¹⁰ Joshi. Forbes. *Can AI Be Used As An Anti-Corruption Tool?* 2021.

¹¹¹ Vinuesa et al. Nature Communications. *The role of artificial intelligence in achieving the Sustainable Development Goals*. 2020.

¹¹² Joshi. Forbes. *Can AI Be Used As An Anti-Corruption Tool?* 2021; United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2015.

¹¹³ United Nations, Department of Economic and Social Affairs. *Resource Guide on Artificial Intelligence (AI) Strategies*. 2021.

¹¹⁴ Vinuesa et al. Nature Communications. *The role of artificial intelligence in achieving the Sustainable Development Goals*. 2020.

¹¹⁵ Ibid.

¹¹⁶ Joshi. Forbes. *Can AI Be Used As An Anti-Corruption Tool?* 2021.

¹¹⁷ United Nations, Department of Economic and Social Affairs. *Resource Guide on Artificial Intelligence (AI) Strategies*. 2021.

¹¹⁸ Ibid.

¹¹⁹ Ibid.

¹²⁰ Ibid.

Conclusion

AI has the capacity to facilitate universal access to information, improve judicial systems across the globe, and ensure governments operate under the international rule of law.¹²¹ Many Member States have already implemented AI systems that have proven to provide more efficiency and transparency for their institutions.¹²² The UN have set guidelines and recommendations for the development and application of AI, alongside recommendation for setting standards on the ethics of AI.¹²³ However, it poses many challenges, such as algorithm bias, discrimination, violations of privacy, and security.¹²⁴ Transparency and accountability allowed by the implementation of regulated AI technologies would lead to sustainable development by implementing predictive analysis and improving efficiency in institutions.¹²⁵ With the emergence of AI, a new opportunity arises to increase operational efficiency in justice systems to pursue a more fair, equitable, and transparent rule of law.¹²⁶

Further Research

While further researching this topic, delegates can ask themselves the following questions: How can UNESCO promote and ensure accountability with AI systems and the rule of law? What projects can be undertaken by Member States to improve judicial systems, particularly in developing regions? How can Member States adequately combat the inherent risks associated with AI? How can AI improve judicial systems internationally?

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The National Judicial College. *Massive Open Online Course on Upholding the Rule of Law in the Age of Artificial Intelligence*. 2022. Retrieved 26 June 2022 from: https://www.judges.org/ai_and_law/english

This website is the overview page for one of the MOOCs that UNESCO created to inform judicial operators worldwide about the connection between the rule of law and AI. Based on the UNESCO Judge's initiative UNESCO works to train judicial operators in this field. Delegates can use this page to get an understanding of the practical work that is being done by UNESCO looks like.

United Nations Educational, Scientific and Cultural Organization. *AI and the Rule of Law: Capacity Building for Judicial Systems*. 2022. Retrieved 26 June 2022 from: <https://en.unesco.org/artificial-intelligence/mooc-judges>

This website is UNESCO's primary landing page for updating the public with the most current and up to date activities of UNESCO in addressing AI and the rule of law. This website provides insight into the development of UNESCO's current position on the issue and highlights current initiatives that UNESCO is operating. Delegates should use this

¹²¹ United Nations Educational, Scientific and Cultural Organization. *The role of e-Governance and artificial intelligence in promoting inclusive approaches for Access to Information*. 2019.

¹²² Brennan et al. Northpointe, Inc. *Connecting the Dots: Supporting Evidence-Based Sentencing Decisions with Risk-Need-Responsivity Principles*. 2015; Oswald et al. *Information & Communications Technology Law. Algorithmic risk assessment policing models: lessons from the Durham HART model and 'Experimental' proportionality*. 2018.

¹²³ United Nations Educational, Scientific and Cultural Organization. *Recommendation on the Ethics of Artificial Intelligence*. 2022; United Nations Educational, Scientific and Cultural Organization. *Artificial Intelligence and the Rule of Law*. n.d.

¹²⁴ Vinuesa et al. Nature Communications. *The role of artificial intelligence in achieving the Sustainable Development Goals*. 2020.

¹²⁵ United Nations Interregional Crime and Justice Research Institute et al. *Artificial Intelligence and Robotics for Law Enforcement*. 2019. p. 18.

¹²⁶ United Nations Educational, Scientific and Cultural Organization. *Recommendation on the Ethics of Artificial Intelligence*. 2022. p. 18.

source as a springboard for research for Member State positions and to understand the types of proposals that UNESCO is currently employing to address the topic.

United Nations Educational, Scientific and Cultural Organization. *Recommendation on the Ethics of Artificial Intelligence*. 2022. Retrieved 25 June 2022 from:

<https://unesdoc.unesco.org/ark:/48223/pf0000380455>

The 2021 Recommendation is UNESCO's more recent advisory framework for the treatment of AI. This document is representative of UNESCO's current position on the proper procedure for using AI across various use cases. The ethical considerations laid out in this recommendation echo the ethical considerations that must be made when addressing the implementation of AI into judicial systems. Delegates should use this document to acquaint themselves with UNESCO's conception of the ethical challenges that AI implementation poses.

United Nation, Department of Global Communications. *What is the Rule of Law*. n.d. Retrieved 22 June 2022 from: <https://www.un.org/ruleoflaw/what-is-the-rule-of-law/>

For the United Nations, the rule of law is the accountability of foundation of positive and cooperative relations between states. This article seeks to connect modern subjects, such as the SDGs, to the rule of law. This article can be of great use for delegates to familiarize themselves with recurrent terms and the basics of the rule of law.

United Nations, Department of Global Communications. *193 countries adopt first-ever global agreement on the Ethics of Artificial Intelligence*. 2021. Retrieved 22 June 2022 from:

<https://news.un.org/en/story/2021/11/1106612>

The current issues related to Artificial Intelligence and UNESCO's stance on equality and human rights, among other subjects, are addressed in this article. It can be useful for delegates to familiarize themselves with the UN and UNESCO's stance on this subject as well as past action. Positive contributions of AI to societies according to the UN's stance are also outlined and discussed.

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2. Strengthening Partnerships on Science, Technology, and Innovation for Sustainable Development

*“Today’s global challenges are too great for any organization to tackle alone. For this reason, there is a pressing need for partnerships that bring together international organizations, networks, and cooperation with the public and private sectors. There is an international consensus that partnerships with public and non-public actors are crucial for achieving internationally agreed Sustainable Development Goals.”*¹²⁷

Introduction

The United Nations Educational, Scientific and Cultural Organization (UNESCO) defines partnerships as “voluntary and collaborative relationships between various parties, both public and non-public, in which all participants agree to work together to achieve a common purpose or undertake a specific task and, as mutually agreed, to share risks and responsibilities, resources and benefits.”¹²⁸ Investing in partnerships on science, technology, and innovation (STI) is crucial to foster more inclusive and sustainable development and achieve the Sustainable Development Goals (SDGs).¹²⁹ STI contributes to economic growth and development by increasing productivity and knowledge spillovers between countries, companies, and industries.¹³⁰ The difference in levels of development are mainly rooted in the differences of industrial development.¹³¹ Whilst developing countries often lack the necessary investments in new and innovative technology, developed nations often focus their investments in physical capital instead of investing in innovation, which causes productivity growth to decrease respectively.¹³² The promotion of a “culture of science, capacity building and education in STI are fundamental to achieving sustainable development.”¹³³

Education plays a significant role in eradicating poverty and social change and equalizes chances for development.¹³⁴ Basic education and knowledge of science and technology are crucial to propel innovation; however, this access is unevenly distributed and unavailable at all levels of education in many countries.¹³⁵ Providing technical and vocational training helps to end gender inequalities and to increase opportunities for better employment.¹³⁶ Enhancing digital inclusion, or the use of information and communication technologies (ICTs), is necessary for capacity building and achieving the SDGs.¹³⁷ Being able to communicate and share information, knowledge, experience, and technology is ever more important in an increasingly global world.¹³⁸ Furthering access to education, information, and technology is essential to enhance communication and participation in civil, economic, social, and cultural life and

¹²⁷ United Nations Educational, Scientific and Cultural Organization. *Comprehensive Partnership Strategy (207/EX/11)*. 2019. p. 3.

¹²⁸ Ibid. p. 3; United Nations General Assembly. *Towards global partnerships: a principle-based approach to enhanced cooperation between the United Nations and all relevant partners (A/RES/68/234)*. 2014. p. 4.

¹²⁹ United Nations Educational, Scientific and Cultural Organization. *UNESCO contribution to the Report of the UN Secretary-General on “Science, technology and innovation, and the potential of culture, for promoting sustainable development and achieving the Millennium Development Goals” for the 2013 ECOSOC Annual Ministerial Review*. 2013.

¹³⁰ Ibid.

¹³¹ United Nations Industrial Development Organization. *Science, Technology and Innovation*. 2022.

¹³² Ibid.

¹³³ United Nations Educational, Scientific and Cultural Organization. *UNESCO contribution to the Report of the UN Secretary-General on “Science, technology and innovation, and the potential of culture, for promoting sustainable development and achieving the Millennium Development Goals” for the 2013 ECOSOC Annual Ministerial Review*. 2013.

¹³⁴ United Nations, Academic Impact. *New Partnerships for Digital Education*. n.d.

¹³⁵ Ibid.

¹³⁶ Ibid.

¹³⁷ United Nations, Sustainable Development Goals Fund. *New partnerships for Digital Education: Rising to the challenge of SDG4*. 2017.

¹³⁸ United Nations, Department of Economic and Social Affairs. *Information and communication technologies (ICTs)*. n.d.

ensure respect for these rights.¹³⁹ SDG 17 (partnership for the goals) recognizes the importance of strong international cooperation and partnerships to achieve sustainable development by mobilizing resources, technological development, and capacity building - particularly emphasizing improved access to STI.¹⁴⁰

Developing partnerships on STI will help with bridging the gap among marginalized populations to give them an equal chance to develop their skills and achieve sustainable development.¹⁴¹ Building scientific systems and technology and innovation creates opportunities to reduce inequalities (e.g. economic and gender inequalities) and brings communities to a more knowledge-based society to empower them.¹⁴² Partnerships are necessary to mobilize support and manage practical solutions to drive global innovation and development, which are crucial to achieving sustainable development for all.¹⁴³

International and Regional Framework

Sustainable development was first defined in the Brundlandt Commission's final report in 1987 as the “kind of development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”¹⁴⁴ This definition was later adopted by the United Nations Conference on Environment and Development (Rio Summit) in 1992.¹⁴⁵ Following the 1992 Rio Summit, the *UNESCO Science Report* was launched in 1993 and has been published seven times.¹⁴⁶

The General Assembly adopted the *2030 Agenda for Sustainable Development* (2030 Agenda) in 2015 as its primary sustainable development framework and which created the 17 SDGs.¹⁴⁷ The 2030 Agenda acknowledges that partnerships will be essential in realizing the goals, including via collaborative financing, the enhancement of South-South and North-South technology cooperation, and the operationalization of the science, technology and innovation capacity building mechanism.¹⁴⁸ SDG 17 (partnerships for the goals), in particular, outlines a number of specific targets to improve partnership to achieve the goals.¹⁴⁹ A 2021 UNESCO report concludes that, as two-thirds of the time to achieve the SDGs has elapsed, Member States must be united in their goal to strive for digital and green economies.¹⁵⁰ Digital economy refers to the use of digital computing technologies that facilitate the global flow of goods, services and finance around the world.¹⁵¹

The importance of STI to achieve common global goals was previously recognized by former Secretary-General Ban Ki-moon in his 2013 report *Science, technology and innovation, and the potential of culture, for promoting sustainable development* (E/2013/54).¹⁵² In resolution 76/213 (2022) on “Science,

¹³⁹ World Economic Forum. *Why education is the key to development*. 2015.

¹⁴⁰ United Nations, Department of Global Communications. *Goal 17: Revitalize the global partnership for sustainable development*. n.d.

¹⁴¹ United Nations, Department of Economic and Social Affairs. *Partnership in Action on Science, Technology and Innovation for SDGs Roadmap – draft*. 2022.

¹⁴² Ibid.

¹⁴³ Ibid.

¹⁴⁴ United Nations, General Assembly. *Development and International Economic Co-operation: Environment: Report of the World Commission on Environment and Development (A/42/427)*. 1987. p. 24.

¹⁴⁵ United Nations Conference on Environment and Development. *United Nations Framework Convention on Climate Change*. 1992.

¹⁴⁶ United Nations Educational, Scientific and Cultural Organization. *UNESCO Science Report: the race against time for smarter development*. 2021.

¹⁴⁷ United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2015.

¹⁴⁸ Ibid. p. 26.

¹⁴⁹ United Nations Educational, Scientific and Cultural Organization. *Partnerships*. 2021.

¹⁵⁰ Ibid.

¹⁵¹ United Nations, Economic Commission for Africa. *What is Digital Identity, Digital Trade and Digital Economy for Africa?* n.d.

¹⁵² United Nations Economic and Social Council. *Science, technology, and innovation, and the potential of culture, for promoting sustainable development and achieving the Millennium Development Goals (E/2013/54)*. 2013.

technology and innovation for sustainable development”, the United Nations General Assembly highlighted the importance of STI in order to achieve the SDGs and stresses the need for cooperation with developing nations, especially in order to further education and knowledge on STI.¹⁵³ The resolution further highlights the need for additional support to the African Union’s *Agenda 2063: The Africa We Want* strategy and its 10-year implementation plan through STI partnerships.¹⁵⁴ This regional agenda acts as a strategic framework for socio-economic transformation in Africa within the next 50 years.¹⁵⁵ Additionally, the resolution points out the importance of global partnerships in STI to combat and recover from the global COVID-19 pandemic.¹⁵⁶

Role of the International System

SDG 17 forms the basis for UNESCO’s cooperation with a wide range of governmental and non-governmental partners including entities within the UN system, non-governmental Organizations (NGOs), young persons, governments, cities, companies and internal bodies, which are also known as ‘UNESCO family partners’.¹⁵⁷ As part of its mandate, UNESCO advises Member States on the creation of policies regarding resources and development of STI.¹⁵⁸ Its work focuses strongly on aiding developing nations and the general progress is being evaluated in the *UNESCO Science Report* every five years.¹⁵⁹

In order to encourage information exchange between Member States, UNESCO has created the Global Observatory of Science, Technology and Innovation Policy Instruments (GO-SPIN), where country profiles are being published and Member States can exchange best practices, by accessing a wide range of data.¹⁶⁰ Furthermore, UNESCO has several mechanisms that provide advice on science governance to Member States in various forms.¹⁶¹ This includes parliamentary scientific committees and a biennial World Science Forum, which brings together experts and stakeholders from around the world to discuss the impact of the scientific community on global challenges.¹⁶² The conference is jointly organized with civil society and NGOs.¹⁶³ UNESCO further supports the development of science governance on national levels by promoting the implementation of scientific advisory into government processes.¹⁶⁴

UNESCO also furthers the cooperation between universities and industry with its University-Industry - Partnerships Programme.¹⁶⁵ As part of this program, UNESCO has been promoting the creation of science and technology parks to encourage innovation hubs for the cooperation between science and economy in Member States.¹⁶⁶ UNESCO’s engagement in the promotion of international scientific cooperation dates back to its founding days, when under its auspices the European Organization for Nuclear Research (Conseil européen pour la recherche nucléaire - CERN) was founded.¹⁶⁷ It proved how

¹⁵³ Ibid. p. 9.

¹⁵⁴ Ibid. p. 5.

¹⁵⁵ Ibid. p. 5.

¹⁵⁶ Ibid. p. 8.

¹⁵⁷ United Nations Educational, Scientific and Cultural Organization. *Partnerships*. 2021.

¹⁵⁸ United Nations Educational, Scientific and Cultural Organization. *UNESCO Science Report: the race against time for smarter development*. 2021.

¹⁵⁹ Ibid.

¹⁶⁰ United Nations Educational, Scientific and Cultural Organization. *Global Observatory of Science, Technology and Innovation Policy Instruments (GO-SPIN)*. 2021.

¹⁶¹ World Science Forum. *World Science Forum 2022*. 2022.

¹⁶² Ibid.

¹⁶³ United Nations Educational, Scientific and Cultural Organization. *Scientific research cooperation: Why collaborate in science? Benefits and examples*. 2022.

¹⁶⁴ Ibid.

¹⁶⁵ Ibid.

¹⁶⁶ Ibid.

¹⁶⁷ Ibid.

international scientific cooperation can help solve global challenges.¹⁶⁸ Amongst its greatest achievements is the development of the world wide web in 1989.¹⁶⁹

Within the UN system, it is primarily ECOSOC and its specialized agencies that discuss issues of STI.¹⁷⁰ For example, ECOSOC created the Commission on Science and Technology for Development as a subsidiary body under the auspices of the United Nations Conference on Trade and Development (UNCTAD).¹⁷¹ UNCTAD holds an annual intergovernmental meeting of states, but also cooperates closely with UNESCO, ECOSOC's regional commissions, and other UN agencies.¹⁷² Additionally, ECOSOC recently held the 7th Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals (STI Forum) with the theme of "Science, technology and innovation for building back better from the coronavirus disease (COVID-19) while advancing the full implementation of the *2030 Agenda for Sustainable Development*".¹⁷³ The STI Forum is closely connected to the meeting of the High-Level Political Forum on Sustainable Development (HLPF) which analyzed the progress of SDG 4 (quality education), SDG 5 (gender equality), SDG 14 (life below water), SDG 15 (life on land), and SDG 17 more closely.¹⁷⁴

Regional organizations, such as the European Union (EU) and the African Union (AU), have actively formed partnerships with each other and individual states.¹⁷⁵ As part of a larger set of cooperative projects, the EU and AU have created the AU-EU High-Level Policy Dialogue on Science, Technology and Innovation, which is a platform for STI policy exchange between the two organizations.¹⁷⁶ Created in 2010, the forum defines priority areas in the policy fields of green transition, innovation and technology, public health, and capacities for science and higher education.¹⁷⁷ An example for an individual partnership with a country is the *Agreement for Scientific and Technological Cooperation* (2016) between the EU and Brazil.¹⁷⁸ This agreement is part of the wider strategic partnership between the EU and Brazil and forms a central role in developing research and innovation projects in the key areas of marine research, water, health, greener and safer aviation, space research, sustainable cities, and research infrastructure.¹⁷⁹ The EU-Brazil Joint-Steering Committee meets annually to discuss progress on the Agreement for Scientific and Technological Cooperation and sets priorities for the upcoming year.¹⁸⁰

Advancing Educational Partnerships for Sustainable Development

UNESCO emphasizes the importance of innovative approaches and education programs in responding to the current global challenges.¹⁸¹ UNESCO's education sector advocates for education for sustainable development, which strives to drive personal and societal transformation that is necessary to address environmental, social, and economic issues holistically.¹⁸² Technology is particularly important in improving quality education since it provides more efficiency and effectiveness to educate large

¹⁶⁸ Ibid.

¹⁶⁹ Conseil Européen pour la Recherche Nucléaire. *Key Achievements*. 2022.

¹⁷⁰ United Nations Conference on Trade and Development. *Commission on Science and Technology for Development*. n.d.

¹⁷¹ Ibid.

¹⁷² Ibid.

¹⁷³ United Nations, Department of Economic and Social Affairs. *7th Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals*. 2022.

¹⁷⁴ Ibid.

¹⁷⁵ European Commission. *EU-Africa cooperation in research and innovation*. n.d.

¹⁷⁶ Ibid.

¹⁷⁷ Ibid.

¹⁷⁸ Delegation of the European Union to Brazil. *The European Union and Brazil – Science and Technology*. 2021.

¹⁷⁹ European Commission. *The 10th EU-Brazil Joint Steering Committee Meeting: towards an enhanced partnership in Horizon Europe*. 2021.

¹⁸⁰ Ibid.

¹⁸¹ United Nations Educational, Scientific and Cultural Organization. *Education for sustainable development*. 2022.

¹⁸² Ibid.

populations.¹⁸³ Between 2020 and 2021, approximately 147 million children missed over half of their in-person education, with girls, children from disadvantaged backgrounds, children with disabilities, and minorities being most affected.¹⁸⁴ It is estimated that missing opportunities of education for these children could collectively result in \$17 trillion in missed earnings over their lifetime.¹⁸⁵

Having proper access to education, particularly digital education, will help achieve SDG 4 as it will help standardize the quality and guidelines of education systems between countries through digital mobile classrooms and learning platforms, which can be shared and implemented across countries identically.¹⁸⁶ Unlike other forms of education, digital education specifically refers to the use of digital technology for teaching and learning.¹⁸⁷ Online learning, with a narrower definition than digital education, refers to learning done through the internet.¹⁸⁸ Improving partnerships on STI and digital education is crucial to achieving SDG 4 since it can promote equal opportunities and reduce gender and economic inequalities.¹⁸⁹ Partnerships with organizations, like the SDG Fund and the International Peace Institute, research how public and private actors can find methods to partner and address challenges presented by digital education technologies and inequitable opportunities.¹⁹⁰

The transition to online learning and having internet access is more important than ever, as areas of conflict and the COVID-19 pandemic have often made the traditional classroom environment less feasible.¹⁹¹ Online courses, emerging technologies, and educational software have transformed traditional in-person learning conditions, as nearly 1.6 billion students worldwide were affected by the COVID-19 pandemic.¹⁹² However, the transition to virtual learning platforms exposes some weaknesses in current digital facilities and infrastructure and mobile networks, as people living in rural areas, who lack access to the digital learning and technology, are disproportionately affected.¹⁹³

In response to the number of students affected by the COVID-19 pandemic, UNESCO established the Global Education Coalition, an alliance of 200 private and public partners to maintain learning conditions.¹⁹⁴ The partnership provides technology for students in digital learning platforms, online courses, and educator resources.¹⁹⁵ The platform allows for exchange and collaboration, which protects the right to education in times of disruption.¹⁹⁶ Since its inception, the coalition has helped with educational recovery during disruptions to education, such as the onset of the COVID-19 pandemic, the explosion in Beirut, and the war in Ukraine.¹⁹⁷ When students and caregivers are given proper guidance and materials for home schooling, they are likely to continue learning at home despite school closures and become more prepared when they do return.¹⁹⁸

¹⁸³ International Business Machines. *How Can Technology Improve UN SDG 4 – Quality Education* (Gavel Maculve). 2021.

¹⁸⁴ United Nations, Department of Economic and Social Affairs. *Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*. 2022.

¹⁸⁵ Ibid.

¹⁸⁶ United Nations, Academic Impact. *New Partnerships for Digital Education*. n.d.

¹⁸⁷ Caduceus International Publishing. *Digital Learning, E-Learning, Online Learning: What's the Difference?* 2019.

¹⁸⁸ Ibid.

¹⁸⁹ United Nations Educational, Scientific and Cultural Organization. *Global Education Coalition*. 2021.

¹⁹⁰ United Nations, Sustainable Development Goals Fund. *New partnerships for Digital Education: Rising to the challenge of SDG4*. 2017.

¹⁹¹ United Nations Educational, Scientific and Cultural Organization. *UNESCO's Global Education Coalition responds to Ukrainian call for support*. 2022.

¹⁹² Ibid.

¹⁹³ United Nations Educational, Scientific and Cultural Organization. *Global Education Coalition*. 2021.

¹⁹⁴ Ibid.; United Nations Educational, Scientific and Cultural Organization. *UNESCO's Global Education Coalition responds to Ukrainian call for support*. 2022.

¹⁹⁵ United Nations Educational, Scientific and Cultural Organization. *Global Education Coalition*. 2021.

¹⁹⁶ Ibid.

¹⁹⁷ Ibid.; United Nations Educational, Scientific and Cultural Organization. *UNESCO's Global Education Coalition responds to Ukrainian call for support*. 2022.

¹⁹⁸ United Nations, Transforming Education Summit. *Vanuatu: Tackling the impact of natural disasters by building a resilient education system*. n.d.

Knowledge and skills to promote sustainable development is also key to build global citizenship, appreciate cultural diversity, and promote sustainable lifestyles, human rights, gender equality, and peace.¹⁹⁹ UNESCO participates in the UN Inter-Agency Task Team Workstream 6 (IATT WS6) on Capacity Building in STI for SDGs.²⁰⁰ Formed in 2017, this task team is responsible for designing and delivering training courses to policymakers and other key stakeholders on the most current approaches to STI policy design and enhance their ability to integrate STI as a part of strategies to achieve the SDGs.²⁰¹ As of 2018, together with UNCTAD, UNESCO helped coordinate a series of regional training workshops on STI policies, reaching officials in over 70 Member States.²⁰² In 2021, the UN STI Forum also reconvened to discuss the importance of education and capacity building by using STI to address economic and social challenges and achieve the SDGs.²⁰³

Strengthening Partnerships for Digital Inclusion and Capacity Building to Achieve the SDGs

Partnerships for digital inclusion are important to connect individuals to the internet, as the benefits of being online are not equally shared across all countries or populations.²⁰⁴ More than a third of people worldwide have never used the internet; among this number, 96% of these individuals are from developing countries.²⁰⁵ Least developed countries (LDCs) significantly lack access to technology and struggle to make use of technology to drive innovation and growth, which hinders their growth prospects significantly and heightens inequality.²⁰⁶ An example of partnerships for digital inclusion involves delivering digital skills for people and organizations through local, regional, or national platforms.²⁰⁷ By connecting and empowering communities, digital inclusion will help drive innovation and developing populations.²⁰⁸ Promoting global digital inclusion is necessary for capacity building and achieving the SDGs, as digital technology is unevenly distributed within and across countries, genders, ethnicities, and socio-economic classes.²⁰⁹ Collaborations between the United Nations Development Programme (UNDP) and the World Economic Forum strive to provide 2.9 billion people with access to affordable and essential digital services.²¹⁰

ICTs have become central to economic, political, and social development, as access to and use of new information technologies help fulfill social development goals, especially among individuals living in poverty who have limited access to technology.²¹¹ Strengthening knowledge networks and communication is necessary to spread awareness and share information inclusively to build toward capacity building and achieving the SDGs.²¹² Improving ICTs is necessary to address digital inclusion, as this helps bridge existing inequalities and communication networks between developed and developing

¹⁹⁹ United Nations, Department of Economic and Social Affairs *Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*. 2022.

²⁰⁰ United Nations, Department of Economic and Social Affairs. *UN capacity-building programme on technology facilitation for SDGs*. n.d.

²⁰¹ Ibid.

²⁰² Ibid.

²⁰³ United Nations, Department of Economic and Social Affairs. *UN STI Forum 2021 Side Event on Capacity Building in STI for SDGs*. 2021.

²⁰⁴ United Nations, 5th United Nations Conference on the Least Developed Countries (LDC5). *Connecting the Least Connected: Harnessing Partnerships for Digital Connectivity*. n.d.

²⁰⁵ Ibid.

²⁰⁶ Ibid.

²⁰⁷ One Digital. *Evaluating partnership approaches in digital inclusion*. 2018.

²⁰⁸ United Nations, 5th United Nations Conference on the Least Developed Countries (LDC5). *Connecting the Least Connected: Harnessing Partnerships for Digital Connectivity*. n.d.

²⁰⁹ Ibid.

²¹⁰ United Nations, Development Programme. *Digital Inclusion Navigator: A platform to help bridge digital divide for billions*. 2022.

²¹¹ United Nations, Department of Economic and Social Affairs. *Information and communication technologies (ICTs)*. n.d.

²¹² Ibid.

countries.²¹³ Digital inclusion will promote capacity building by advancing education, training, and development for communities to advance knowledge and skills to adapt to developing.²¹⁴ Differing growth rates of digital technology can even widen development divides and further increase educational inequalities.²¹⁵

North-South, South-South, and triangular regional and international cooperation refer to partnerships between countries or multilateral organizations to share commitments, resources, skills, and expertise, which is central to implementing the 2030 Agenda.²¹⁶ North-South and South-South cooperation refers to partnerships between or amongst developed and developing countries, with a developed or developing country offering support through finances or resources to another developing country.²¹⁷ Triangular cooperation comprises of three actors, with a developed country (or international organization) and two developing countries to exchange technical assistance on specific issues.²¹⁸

Sharing platforms with knowledge networks and data are essential to achieve sustainable development, since it promotes sharing resources and STI knowledge.²¹⁹ An example of a data sharing network is the UNESCO Global Open Science Partnership, which brings together stakeholders worldwide to bridge STI gaps.²²⁰ This partnership encompasses representatives and institutions from all regions, emphasizing the inclusion of local and indigenous populations and their specialized knowledge.²²¹ The international framework works to improve global understanding and challenges of “open science” to make the scientific process inclusive, transparent, and democratic to individuals from all regions.²²² The UNESCO Recommendation on Open Science aims to reduce digital, technological, and knowledge divides that exist between and within countries to advance development.²²³

In 2020, United Nations (UN) Secretary-General António Guterres introduced a roadmap for the international community regarding digital cooperation in a High-level Panel on Digital Cooperation.²²⁴ Digital cooperation strives to discuss digital issues in a “cooperative framework” and encourage action across domains, while building trust among participants and stakeholders.²²⁵ The panel provided recommendations to the international community on optimizing usage of digital technology while mitigating the risks.²²⁶ To advance sustainable development, the roadmap emphasized strengthening digital capacity building and ensuring digital inclusion for all, particularly vulnerable, under-served communities with minimal access to technology.²²⁷ Over 100 Member States and organizations have provided feedback and contributed in discussions on the panel’s proposals, with additional virtual roundtable groups forming to follow up on the recommendations and progress.²²⁸

²¹³ Ibid.

²¹⁴ United Nations, Academic Impact. *Capacity-Building*. n.d.

²¹⁵ United Nations, Conference on Trade and Development. *Target 17.6: Partnership and knowledge sharing*. 2016.

²¹⁶ United Nations, Department of Economic and Social Affairs. *What is ‘South-South cooperation’ and why does it matter?* 2019.

²¹⁷ Ibid.

²¹⁸ United Nations, Conference on Trade and Development. *Target 17.6: Partnership and knowledge sharing*. 2016.

²¹⁹ United Nations, Department of Economic and Social Affairs. *What is ‘South-South cooperation’ and why does it matter?* 2019.

²²⁰ United Nations Educational, Scientific and Cultural Organization. *Open Science*. 2021.

²²¹ Ibid.

²²² Ibid.

²²³ Ibid.

²²⁴ United Nations, Secretary-General’s High-level Panel on Digital Cooperation. *High-level Panel on Digital Cooperation*. 2020.

²²⁵ Ibid.

²²⁶ Ibid.

²²⁷ Ibid.

²²⁸ Ibid.

In 2022, the UN recognized the importance for an additional partnership that would address STI for SDGs.²²⁹ The Partnership in Action on STI for SDGs Roadmaps (PiA) was proposed to mobilize international actors to engage in advancing STI to achieve the SDGs.²³⁰ Its focus would be on transforming political ambitions into policy changes and practices, particularly relating to COVID-19 recovery.²³¹ Drawing from the Technology Facilitation Mechanism (TFM), the initiatives of PiA support developing national STI capabilities for SDGs (including COVID-19 recovery), enhancing international knowledge and technology flows for SDGs, and promoting international STI collaborations for the SDGs.²³²

Conclusion

UNESCO's work towards achieving the 2030 Agenda is rooted in cooperation with other stakeholders.²³³ Partnerships are crucial in achieving the SDGs, as outlined in SDG 17.²³⁴ In particular, furthering access to education and information regarding STI will help reduce gender, social, and economic gaps and drive sustainable development.²³⁵ A particular challenge has risen from the recent COVID-19 pandemic that has limited the access to quality education for millions of children worldwide, especially affecting girls and minority groups.²³⁶ Further improving partnerships on STI in the education sector could help achieve SDG 4 and promote equal access to quality education.²³⁷ This includes promoting digital inclusion and improving ICTs, especially in LDCs.²³⁸ Whilst there are many great examples of how cooperation can benefit the advancement of STI to achievement of sustainable development, there still many challenges to be met before 2030.²³⁹

Further Research

When researching this topic, delegates should consider the following questions: What types of inequalities should be considered when addressing this issue? What are the potential challenges of strengthening partnerships on STI? Which partnerships need to be enhanced and where is a lack of cooperation? What are ways to encourage Member States and institutions to participate or contribute to these partnerships? Why are partnerships essential to addressing the SDGs?

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United Nations Conference on Trade and Development. *Commission on Science and Technology for Development*. n.d. Retrieved 16 June 2022 from: <https://unctad.org/topic/commission-on-science-and-technology-for-development>

This is the website of the Commission on Science and Technology for Development (CSTD). It provides an overview of recent activities and resources on the commission's work. This website is a great resource for delegates to find information on the work of other UN bodies on the topic of STI. As a subsidiary body of ECOSOC, the CSTD

²²⁹ United Nations, Department of Economic and Social Affairs. *Partnership in Action on Science, Technology and Innovation for SDGs Roadmap – draft*. 2022.

²³⁰ Ibid.

²³¹ Ibid.

²³² Ibid.

²³³ United Nations Educational, Scientific and Cultural Organization. *Comprehensive Partnership Strategy (207/EX/11)*. 2019. p. 3.

²³⁴ United Nations, Department of Global Communications. *Goal 17: Revitalize the global partnership for sustainable development*. n.d.

²³⁵ Ibid.

²³⁶ United Nations, Department of Economic and Social Affairs. *Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*. 2022.

²³⁷ United Nations Educational, Scientific and Cultural Organization. *Global Education Coalition*. 2021.

²³⁸ United Nations, Department of Economic and Social Affairs. *Information and communication technologies (ICTs)*. n.d.

²³⁹ United Nations General Assembly. *Science, technology and innovation for sustainable development (A/RES/76/213)*. 2021.

partners with other UN bodies, such as the Commission on the Status of Women, the International Telecommunication Union and Regional Commissions on the matter.

United Nations, Department of Economic and Social Affairs. *Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development*. 2022. Retrieved 15 June 2022 from: <https://sdgs.un.org/goals/goal17>

This resource details the annual progress of SDG 17 and breaks down the necessity of international cooperation by categories and related topics. It provides a general overview on the goals of SDG 17 and highlights statistics on why global partnerships are essential to achieving sustainable development. This document will help delegates to understand the details and current progress of SDG 17 and how it has evolved annually.

United Nations, Economic and Social Council. *Science, technology and innovation for development (E/RES/2021/29)*. 2021. Retrieved 24 June 2022 from: <https://undocs.org/en/E/RES/2021/29>

This resolution outlines ECOSOC's priorities in addressing STI in the context of sustainable development and offers recommendations for national governments and parties to consider. This document also highlights the importance of both STI and ICTs in addressing global challenges and achieving the goals of the 2030 Agenda and discusses the importance of education for innovation and development. This resource is important for delegates who want a better understanding of STI and ICTs and how they are essential to sustainable development.

United Nations Educational, Scientific and Cultural Organization. *UNESCO Science Report: the race against time for smarter development*. 2021. Retrieved 16 June 2022 from: <https://unesdoc.unesco.org/ark:/48223/pf0000377433>

This is the latest UNESCO world science report, which highlights the link between economic transformation and the race to fight climate change. It discusses issues from the lessons learned during the pandemic to the impact refugees have on scientific development. Delegates should read this in preparation for their committee, as it also provides regional and country reports highlighting specific challenges and progress.

United Nations, General Assembly. *Development and International Economic Co-operation: Environment: Report of the World Commission on Environment and Development (A/42/427)*. 1987. Retrieved 16 June 2022 from: <https://undocs.org/en/A/42/427>

This report is the basis for the discussion surrounding sustainable development and has had a fundamental impact on global politics. It makes a strong argument for enhanced multilateral discussions on solutions towards global challenges the world is facing today. Delegates should read this to understand the core principles of sustainable development.

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