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United Nations Educational, Scientific and Cultural Organization Background Guide 2021

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Dear Delegates,

Welcome to the 2021 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). This year's staff is: Directors Kiki Tamis-Noordman (Conference A) and Katie Conti (Conference B), and Assistant Directors Paul Gußmann (Conference A) and Sejal Tiwari (Conference B). Kiki has pursued an LLB in International and European law at The Hague University of Applied Sciences as well as a Teacher's Degree. Katie holds a BA in International Relations, Public Communication, and Geography from Syracuse University and currently works with Meridian International Center in Washington, D.C. Paul is pursuing a BA double degree in International Economics and Development and Applied Africa Studies at the University of Bayreuth, Germany. Sejal holds a Bachelor of Commerce Hons. in International Business from MacEwan University and is currently pursuing her Masters in Globalization and International Development from the University of Ottawa.

The topics under discussion for United Nations Educational, Scientific and Cultural Organization are:

- I. Safeguarding Intangible Cultural Heritage in Post-Conflict Areas
- II. Promoting Open Access to Scientific Information and Research
- III. Harnessing Emerging Technologies for the Achievement of SDG4

UNESCO is a specialized agency of the United Nations tasked with building peace through international collaboration in education, science, and culture. UNESCO has a unique role in strengthening international cooperation through the advancement of science and education, preservation of cultural heritage, and promotion of equal dignity for all. UNESCO's programs ensure that cultural diversity is respected, all people have access to quality education, and scientific advancement is for the betterment and development of all people. In the spirit of UNESCO's work, working in cooperation will be key for delegates to hold front and center throughout all negotiations and discussions.

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) on 1 March 2021 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](#), that serve as essential instruments in preparing for the Conference and as a reference during committee sessions are the:

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 the committee or the Conference itself, please contact the Under-Secretaries-General for the Development Department, Lauren Kiser (Conference A) and Max Lacey (Conference B), at usg.dev@nmun.org.

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

Sincerely,

Conference A

Kiki Tamis-Noordman, *Director*
Paul Gußmann, *Assistant Director*

Conference B

Katie Conti, *Director*
Sejal Tiwari, *Assistant Director*

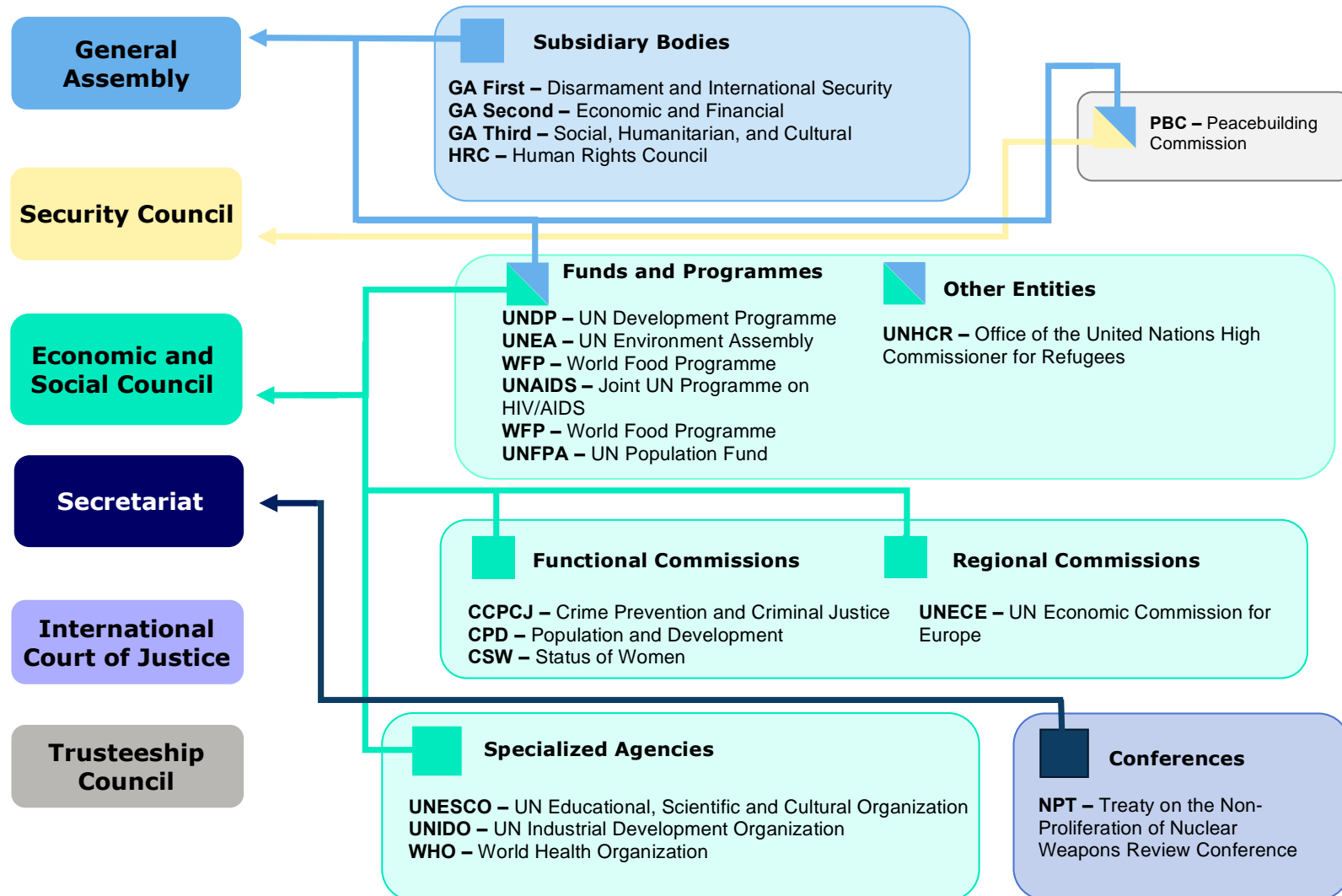


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United Nations System at NMUN•NY

This diagram illustrates the UN system simulated at NMUN•NY and demonstrates 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).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 UNESCO originated in the 1942 Conference of Allied Ministers of Education (CAME), a group of government representatives seeking to restore education systems in the wake of the Second World War; CAME was preceded by the International Committee on Intellectual Cooperation and the International Bureau of Education.³ In November 1945, CAME organized a conference in London to establish an educational and cultural organization.⁴ Representatives from 37 countries agreed to found UNESCO; a formal constitution was signed on 16 November 1945, which came into force on 4 November 1946.⁵

The United Nations Educational, Scientific and Cultural Organization (UNESCO) is a specialized agency that coordinates with the United Nations through the Economic and Social Council.

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, science, and culture.⁶ Among these are the *Convention Concerning the Protection of the World Cultural and Natural Heritage* (1972), the *Declaration on Race and Racial Prejudice* (1978), the *Memory of the World Programme* (1992), and the *Convention for the Safeguarding of Intangible Cultural Heritage* (2003).⁷ Since 2015, UNESCO has significantly contributed to UN reform initiatives and to the adoption of the Sustainable Development Goals (SDGs) with key inputs to several SDGs, such as SDG 4 (quality education) and SDGs relating to natural sciences, social and human sciences, culture, communication and information, and ocean conservation.⁸ Some recent topics addressed by UNESCO in accordance with the *2030 Agenda for Sustainable Development* (2030 Agenda) include safeguarding cultural heritage; promotion of open access to science and information; and the importance of harnessing emerging technologies for education.⁹

UNESCO has been greatly involved during the COVID-19 pandemic, in mandate-related areas such as science and open access thereof, supporting governments in providing digital education and culture.¹⁰ As a part of UNESCO's outbreak response, their mission includes to "fully cooperate to support governments for distance learning open science, knowledge and culture sharing, as fundamental means to stand together and tighten the bonds of our shared humanity".¹¹

¹ New Zealand Ministry of Foreign Affairs and Trade, *United Nations Handbook 2019-20*, 2020.

² *Charter of the United Nations*, 1945, Art. 63.

³ UNESCO, *The Organization's History*, 2017.

⁴ *Ibid.*; CAME, *Conference for the establishment of the United Nations Educational, Scientific and Cultural Organization*, 1945.

⁵ UNESCO, *The Organization's History*, 2017.

⁶ UNESCO, *Basic Texts: 2016 Edition*, 2016.

⁷ UNESCO, *UNESCO at a Glance (ERI/2010/WS/2)*, 2010, p. 37.

⁸ UNESCO, *UNESCO and the UN Reform*, 2017; UNESCO, *UNESCO and the Sustainable Development Goals*, 2018.

⁹ UNESCO, *UNESCO and the Sustainable Development Goals*, 2018; UNESCO, *UNESCO Towards 2030 and Beyond: Major Challenges and Opportunities*, 2019.

¹⁰ UNESCO, *The COVID-19 Outbreak & UNESCO's Mission*, 2020.

¹¹ *Ibid.*

At NMUN•NY 2021, we are simulating the Executive Board of UNESCO in terms of composition and size; however, delegates are not limited to the strict mandate of the Executive Board, as a budgetary and administrative body, during the conference. For the purposes of NMUN•NY 2021, and corresponding with the educational mission of the conference, the committee has the ability to make programmatic and policy decisions on issues within the mandate of UNESCO in line with the overall function of the organization.

Governance, Structure, and Membership

UNESCO is a specialized agency, or an international organization that coordinates their work with the UN through negotiated agreements, under the Economic and Social Council (ECOSOC).¹² 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 1945.¹³ The headquarters of UNESCO is located in Paris, France.¹⁴ UNESCO currently has 193 Member States and 11 associate members, as a direct consequence of the United States and Israel's withdrawal from UNESCO as of January 1, 2019.¹⁵ The newest installed Member States, who were instated during the 40th session of the General Conference in 2019, hold their seat until 2023.¹⁶ Two major bodies, the General Conference and Executive Board, govern the work of UNESCO.¹⁷

The General Conference, which consists of all UNESCO Member States, meets every two years.¹⁸ Every four years, the General Conference appoints a Director-General who is responsible for coordinating the work of the Secretariat.¹⁹ The 39th session of UNESCO's General Conference elected Audrey Azoulay as Director-General of UNESCO, succeeding Irina Bokova.²⁰ She took office on 15 November 2017 for a four-year term.²¹ The General Conference may hold additional meetings as summoned by the Executive Board, or upon request by at least one third of its Member States.²² The General Conference is primarily responsible for electing members of the Executive Board, deliberating upon and approving recommendations from the Executive Board, summoning international conferences, considering reports from Member States, and advising UN organization on matters of education, science, and culture.²³ The General Conference may also establish special and technical committees, create subsidiary organs, and invite observers on the recommendation of the Executive Board.²⁴ UNESCO currently directs the work of several intergovernmental bodies, including the Intergovernmental Committee for Intangible Cultural Heritage and the Committee for the Protection of Cultural Property in the Event of Armed Conflict.²⁵ These sub-organs provide expert research and policy recommendations to the General Conference.²⁶

¹² UN DGC, *What are UN Specialized Agencies, and how Many are There?*; New Zealand Ministry of Foreign Affairs and Trade, *United Nations Handbook 2019-20*, 2019.

¹³ UN CEBC, *Directory of United Nations System Organizations*.

¹⁴ New Zealand Ministry of Foreign Affairs and Trade, *United Nations Handbook 2019-20*, 2020.

¹⁵ UNESCO, *Member States*, 2020.

¹⁶ UNESCO, *Member States*, 2020.

¹⁷ New Zealand Ministry of Foreign Affairs and Trade, *United Nations Handbook 2019-20*, 2020.

¹⁸ *Ibid.*

¹⁹ UNESCO, *Member States*, 2018.

²⁰ UNESCO, *Director-General, Audrey Azoulay*, 2017.

²¹ *Ibid.*

²² UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, arts. III-VI.

²³ *Ibid.*, arts. III-VI; UNESCO, *List of Members of the Executive Board*, 2018.

²⁴ UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, arts. III-VI

²⁵ UNESCO, *Intergovernmental Committees*, 2017.

²⁶ UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, art. IV, paras.

11-14.

The Executive Board consists of 58 UNESCO Member States serving four-year terms.²⁷ Currently on the board of Executives are Member States seated from 2017-2021.²⁸ The UNESCO Constitution affords membership in UNESCO to all UN Member States, though non-Member States may be admitted to UNESCO upon the recommendation of the Executive Board, with a two-thirds majority vote of the General Conference.²⁹ Associate Members, political or territorial entities that do not constitute independent Member States, can be admitted upon recommendation of the General Conference, and are recognized some rights and obligations.³⁰ 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.³¹ Additionally, the Executive Board may advise 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 (ICJ).³²

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).³³ 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.³⁴ 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."³⁵ 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 future Global Convention of Higher Education.³⁶

To fulfill its mandate, UNESCO holds international conferences to deliberate issues and set standards, provide expert research and consultation to the primary organs of the UN system through ECOSOC, and coordinate with other entities to implement programs in the field.³⁷ UNESCO's *Medium-Term Strategy 2014-2021* has identified five specific functions at the national, regional, and international levels: fostering and generating innovation, supporting and monitoring global policy efforts, setting norms and standards, strengthening networks for cooperation and knowledge-sharing, and providing capacity-building expertise for institutions and personnel.³⁸ Additionally, this strategy acts as a support system for Member States to develop systems to promote education, strengthen science, technology and innovation; and to overall achieve sustainable development.³⁹

²⁷ UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, art. V.

²⁸ UNESCO, *Executive Board in Brief*, 2020.

²⁹ UNESCO, *Member States*, 2019; UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, art. II.

³⁰ UNESCO, *Member States*, 2019.

³¹ UNESCO Executive Board, *Executive Board in Brief*, 2018; UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, art. V.

³² UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, art. V; UNESCO, *High-level Political Forum*, 2017.

³³ *Charter of the United Nations*, 1945, Art. 1; UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, p. 5.

³⁴ UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, art. V, art I, para 1.

³⁵ Conference of Allied Ministers of Education, *Conference for the Establishment of UNESCO (ECO/CONF./29)*, 1945, p. 1.

³⁶ UNESCO, *General Introduction to the Standard-setting Instruments of UNESCO*, 2017; UNESCO, *Drafting of the Future Global Convention of Higher Education concludes*, 2017.

³⁷ UNESCO, *UNESCO at a Glance (ERI/2010/WS/2)*, 2010, p. 32.

³⁸ UNESCO, *2014-2021: Medium-Term Strategy (37 C/4)*, 2014, p. 14.

³⁹ *Ibid.*

Discussions are currently taking place on the next medium-term strategy, the *Medium-Term Strategy 2022-2029*, which is likely to be adopted in the fall of 2021.⁴⁰ This Medium-Term Strategy is ongoing for UNESCO, and not only provides an outline for the next 9 years, but also outlines UNESCO's strategy in the final decade towards achieving the *2030 Agenda for Sustainable Development*.⁴¹

Within its mandate, UNESCO also works directly with other UN organs, IGOs, and non-governmental organizations (NGOs) to support peace through the collaborative exchange of knowledge, culture, and sustainable development strategies.⁴² Such partnerships not only allow UNESCO to fulfill its mandate and achieve its objectives but also help to increase cooperation in the fields of education, science, culture, communication, and information.⁴³ Additionally, although UNESCO partners with a variety of other international actors to carry out their mandate, partnership strategies differ for each individual type of partner.⁴⁴ For example, in 2013, the UNESCO Executive Board endorsed the Comprehensive Partnership Strategy, which outlined separate strategies for collaboration with individual categories of partners.⁴⁵ Overall, this policy framework was established on the basis of several criteria, including the purpose of each partnership, strategy for engagement, strategic objectives, future direction of specific types of partnerships, and monitoring and evaluation of a partnership.⁴⁶

UNESCO's relationship with the UN is overall governed by an agreement ratified by the General Assembly on 14 December 1946.⁴⁷ Representatives of the UN are invited to attend meetings of UNESCO's General Conference and Executive Board, as well as special meetings convened by UNESCO; similarly, UNESCO is entitled to send representatives to the meetings of ECOSOC and the General Assembly when agenda matters relate to educational, scientific, or cultural matters.⁴⁸ ECOSOC is the primary mechanism for coordinating operations and programs of specialized agencies; it serves as UNESCO's first point of contact with the UN system.⁴⁹ Additionally, UNESCO relies on the UN System Chief Executives Board for Coordination for guidance and strategic direction through its High-Level Committee for Programmes, High-Level Committee for Management, and the UN Development Group.⁵⁰ UNESCO maintains memorandums of understanding with 16 UN system partners that define roles of cooperation to prevent the duplication of work.⁵¹ UNESCO is empowered, in turn, to initiate studies and reports for consideration by ECOSOC.⁵² UNESCO may also work with ECOSOC to provide assistance to the Security Council as requested "for the maintenance or restoration of international peace and security."⁵³

UNESCO coordinates with civil society through its 199 National Commissions, agencies set up by the governments of UNESCO Member States and Associated Members.⁵⁴ The organization maintains direct partnerships with 370 international NGOs and 20 civil society organizations (CSOs), and formal agreements with 87 IGOs and several institutions in the private sector.⁵⁵ UNESCO must provide ECOSOC information about any formal agreements with UN specialized agencies, IGOs, or NGOs before

⁴⁰ UNESCO, *Preparation of the Draft Medium-Term Strategy for 2022-2029* (40 C/11), 2019.

⁴¹ UNESCO, *UNESCO Towards 2030 and Beyond: Major Challenges and Opportunities*, 2019; UNESCO, *UNESCO moving forward the 2030 Agenda for Sustainable Development*, 2017.

⁴² UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, arts. X-XI.

⁴³ *Ibid.*

⁴⁴ UNESCO, *Comprehensive Partnership Strategy*, 2013.

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*

⁴⁷ UNESCO, *Agreement between the United Nations and UNESCO*, 1946.

⁴⁸ *Ibid.*

⁴⁹ *Charter of the United Nations*, 1945, Art. 63; UNESCO, *Agreement Between the United Nations and UNESCO*, 1946.

⁵⁰ UNSCEB, *What We Do*; UNSCEB, *United Nations Educational, Scientific and Cultural Organization*, 2016.

⁵¹ UNESCO, *Bureau of Strategic Planning, Partnering with UN Agencies*, 2017.

⁵² UNESCO, *Agreement Between the United Nations and UNESCO*, 1946.

⁵³ *Ibid.*

⁵⁴ UNESCO, *National Commissions*, 2018; UNESCO, *Partnerships*, 2018.

⁵⁵ UNESCO, *Comprehensive Partnership Strategy (192 EX/5,INF)*, 2013; UNESCO, *Partnerships*, 2018.

the agreements are enacted.⁵⁶ The organization maintains separate strategic objectives for various categories of partnerships, outlined in its *Comprehensive Partnership Strategy (192 EX/5,INF)* of 6 September 2013.⁵⁷ These partnerships provide critical information and implementation support for UNESCO's various programs and initiatives.⁵⁸ Additionally, these partners help UNESCO form policies, make decisions, and produce research materials by providing resources, operational support, and technical expertise.⁵⁹ Partners in the field, including bilateral government partners, NGOs, and private sector institutions, help mobilize financial and in-kind contributions for program implementation and meetings.⁶⁰

Recent Sessions and Current Priorities

UNESCO is actively engaged with events and activities supporting its programmatic work around the world. ⁶¹ Africa is a global focus, where UNESCO works on developing strategies for a better future, supported by the new African Union Agenda 2063 and the 2030 Agenda for Sustainable Development.⁶² Gender equality is another global focus in which UNESCO works to equip men and women, boys and girls, with knowledge, skills, and values to combat gender inequality.⁶³ UNESCO's most recent priority has been to find a best response to the COVID-19 pandemic, increasing UNESCO's cooperation with governments, specialized offices and international agencies.⁶⁴

The 40th Session of the General Conference was held from 12-27 November 2019.⁶⁵ During their 40th Session, the General Conference elected new members to the Executive Board, adopted the Draft Programme and Budget for 2020-2021, and discussed topics such as providing assistance to educational and cultural institutions in the occupied Arab territories, and safeguarding of the Cultural Heritage of the Old City of Jerusalem.⁶⁶ The preparation of the new Medium-Term Strategy and Programme and Budget for 2022-2025 were also discussed.⁶⁷ Other topics were the UNESCO Strategy for youth and adult literacy (2020-2025), and UNESCO's role in the implementation of SDG 4 on education.⁶⁸

From 29 June to 10 July 2020, UNESCO's Executive Board held their 209th regular session in Paris.⁶⁹ They discussed matters such as youth and adult literacy, and how to achieve SDG 4 target 5 - equality and inclusion in education.⁷⁰ Decisions adopted include a welcoming of efforts and support towards the implementation of SDG 4, and a decision to include the topic of Occupied Palestine on the agenda for their 210th meeting.⁷¹

Aligned with UNESCO's *Medium-Term Strategy 2014-2021*, the approved Programme and Budget outlines strategies, approaches and results for education, culture, natural sciences, social and human

⁵⁶ UNESCO, *Relations with the Organizations of the UN System*, 2017; *Charter of the United Nations*, Art. 63; UNESCO, *Partnerships*, 2018.

⁵⁷ UNESCO, *Comprehensive Partnership Strategy (192 EX/5,INF)*, 2013; UNESCO, *Partnerships*, 2018.

⁵⁸ UNESCO, *Comprehensive Partnership Strategy (192 EX/5,INF)*, 2013, p. 3; UNESCO, *Partnerships*, 2018.

⁵⁹ UNESCO, *Comprehensive Partnership Strategy (192 EX/5,INF)*, 2013, pp. 3-4; UNESCO, *Partnerships*, 2018.

⁶⁰ Ibid.

⁶¹ UNESCO, *UNESCO*, 2020

⁶² UNESCO, *Priority Africa*, 2020.

⁶³ UNESCO, *Priority Gender Equality*, 2020.

⁶⁴ UNESCO, *Decisions Adopted By The Executive Board During Its 209th Session*, 2020, pp. 50-51.

⁶⁵ UNESCO, *Agenda of the 40th session of the General Conference*, 2019.

⁶⁶ Ibid.; UNESCO, *Approved Programme and Budget 2020-2021: Second Biennium of the 2018-2021 Quadrennium (39 C/5)*, 2019.

⁶⁷ UNESCO, *Preparation of the Draft Medium-Term Strategy for 2022-2029 and the Draft Programme and Budget*, 2019.

⁶⁸ UNESCO, *Records of the General Conference, 40th Session, Paris, 12 November-27 November 2019, volume 1: Resolutions*, 2019.

⁶⁹ UNESCO, *Revised Provisional Agenda and Timetable of Work (209 EX/1)*, 2020.

⁷⁰ Ibid.

⁷¹ UNESCO, *Decisions Adopted by The Executive Board During Its 209th Session*, 2020.

sciences, and communication and information.⁷² Specifically, the *Medium-Term Strategy 2014-2021* focuses on the work of UNESCO in providing equal access to quality education; the development of science, technology and innovation; the promotion of cultural heritage and cultural diversity.⁷³ The Preparation of the Draft Programme and Budget for 2022-2025 will align with the new Medium-Term Strategy 2022-2029.⁷⁴ Between 12 and 14 July 2019 and on 7 October 2019, the Secretariat organized a series of dialogues between the Permanent Delegates to UNESCO, in preparation of the new Medium-Term Strategy.⁷⁵ The opportunities and challenges UNESCO faces as well as the possible direction for the new Medium-Term Strategy were discussed.⁷⁶ The dialogues focused on achieving the 2030 Agenda for Sustainable Development, especially enhancing support for Member States in their work towards achieving those SDGs related to UNESCO's field of competence.⁷⁷ Discussions leaned towards taking a human-rights based approach to the Medium-Term Strategy, taking into account principles of equality and leaving no one behind.⁷⁸

The Executive Board took the opportunity in their 209th session to evaluate the impact of the COVID-19 outbreak on UNESCO's programme and activities.⁷⁹ They reiterated the importance of strong efforts to cooperate for a best possible response to COVID-19 pandemic, specifically in the areas of scientific data and sharing thereof, and digital educational opportunities.⁸⁰ The Executive Board held their 6th special session on 8-9 June 2020, in Paris, specifically focused on the COVID-19 pandemic and the effects on UNESCO and their programme of work.⁸¹ In the midst of the COVID-19 pandemic, UNESCO's mission remains valid.⁸² To keep working towards this mission amid the COVID-19 pandemic, UNESCO cooperates with governments to help create digital education and culture, facilitate and coordinate research and science, including promotion of open access to scientific data and research.⁸³

One of the main actions that UNESCO has taken to raise awareness of the COVID-19 pandemic's impact on the world of science, education and culture is their Next Normal campaign, which centers around a short movie.⁸⁴ This movie shows that in a post-pandemic era, the desire to return to "normal" is ever present, yet UNESCO provides factual information to show that perhaps the normal we had before the pandemic is not one we should wish to return to; hoping to inspire change, and create a new normal.⁸⁵

Conclusion

UNESCO play a key role in the protection of cultures as well as the promotion of education and improved learning practices through the inclusion of new technologies to better enhance cultural protection and education.⁸⁶ Efforts and cooperation are increasing in the midst of the COVID-19 pandemic, to try and find the best response to this pandemic.⁸⁷ It remains UNESCO's main mission to carry out their mandate, to find ways to support education, culture and science, in spite of COVID-19 and the consequences

⁷² UNESCO, *Approved Programme and Budget 2019-2021: Second Biennium of the 2018-2021 Quadrennium* (40 C/5), 2019.

⁷³ Ibid.

⁷⁴ UNESCO, *Preparation of the Draft Medium-Term Strategy for 2022-2029 and the Draft Programme and Budget*, 2019.

⁷⁵ UNESCO, *UNESCO Towards 2030 and Beyond: Major Challenges and Opportunities*, 2019.

⁷⁶ Ibid.

⁷⁷ Ibid.

⁷⁸ Ibid.

⁷⁹ UNESCO, *Decisions Adopted By The Executive Board During Its 209th Session*, 2020, pp. 50-51.

⁸⁰ Ibid., pp. 50-51.

⁸¹ UNESCO, *Provisional Agenda for the Sixth Special Session of the Executive Board (6X/EX/1)*, 2020.

⁸² UNESCO, *UNESCO's "Next Normal" Campaign*, 2020.

⁸³ UNESCO, *The COVID-19 Outbreak & UNESCO's Mission*, 2020.

⁸⁴ UNESCO, *UNESCO's "Next Normal" Campaign*, 2020.

⁸⁵ Ibid.

⁸⁶ UNESCO, *UNESCO*, 2018.

⁸⁷ UNESCO, *The COVID-19 Outbreak & UNESCO's Mission*, 2020.

thereof.⁸⁸ This is shown through UNESCO's digital focus on multiple initiatives, through digital education and culture, and the "Next Normal" campaign.⁸⁹ Together with other UN entities and partners from the public and private sector, UNESCO continues to work toward achieving the goals outlined in the 2030 Agenda, with particular focus on SDG 1 (no poverty); SDG 4 (quality education); SDG 10 (reduced inequalities); and SDG 17 (partnerships for the goals).⁹⁰

Annotated Bibliography

United Nations Educational, Scientific and Cultural Organization. (2014). *2014-2021: Medium-Term Strategy (37 C/4)*. Retrieved 25 August 2020 from:

<http://unesdoc.unesco.org/images/0022/002278/227860e.pdf>

This resource complements the approved program and budget document highlighted above. It provides a comprehensive overview of the Executive Board and Secretariat's joint vision for UNESCO from 2014-2021, as approved by the 37th General Conference. The document provides unique insights into the changing international development landscape as well as the principles guiding UNESCO's work for the near future. It highlights UNESCO's overarching objectives and global priorities. Most significantly, the document defines UNESCO's nine strategic objectives for 2014-2021. Delegates should look into this document to ensure that their proposals support these strategic objectives. Finally, the document provides guidance for partnerships and collaborative efforts within the UN system and beyond.

United Nations Educational, Scientific and Cultural Organization. (2017). *UNESCO Moving Forward the 2030 Agenda for Sustainable Development*. Retrieved 24 August 2020 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 takes 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 (SDGs). Additionally, delegates will find that the document specifically highlights that UNESCO directly to nine SDGs. Overall, this source allows delegates to see how UNESCO contributes to the objectives outlined in a global agenda.

United Nations Educational, Scientific and Cultural Organization. (2019). *Approved Programme and Budget 2020-2021: Second Biennium of the 2018-2021 Quadrennium (39 C/5)*. Retrieved 18 July 2020 from:

<https://unesdoc.unesco.org/ark:/48223/pf0000373473>

This document was presented at the 40th Session of the General Conference, representing the second half of implementation of the Medium-Term Strategy for 2014-2021. Consisting of five parts, with parts two and five being the most helpful, this document provides a general overview of UNESCO's budget and work for the years 2018-2021. Parts two and four of this document will prove most useful, as they outline the specific programmes of work for UNESCO, and their budget, respectively. Additionally, this document provides delegates with a general overview of UNESCO's work. The 2018-2021 programme and budget of work can also help delegates further understand how UNESCO functions at a basic level.

⁸⁸ UNESCO, *Decisions Adopted By The Executive Board During Its 209th Session*, 2020, pp. 50-51.

⁸⁹ UNESCO, *The COVID-19 Outbreak & UNESCO's Mission*, 2020; UNESCO, *UNESCO's "Next Normal" Campaign*, 2020.

⁹⁰ UNESCO, *UNESCO and the Sustainable Development Goals*, 2018; UNESCO, *UNESCO moving forward the 2030 Agenda for Sustainable Development*, 2017.

United Nations Educational, Scientific and Cultural Organization. (2019). *UNESCO Towards 2030 and Beyond: Major Challenges and Opportunities (40 C/INF.18)*. Retrieved 24 August from: https://unesdoc.unesco.org/ark:/48223/pf0000371398_eng

This document not only provides an outlook on different discussions about the 2030 Agenda for Sustainable Development and UNESCO's working towards reaching that Agenda, it also provides insights into the direction that UNESCO will take in the new Medium-Term Strategy 2022-2029. In the road towards 2030 and the new Medium-Term Strategy, it sets global priorities as Africa and Gender Equality, but also prioritizes areas such as Small Island Developing States and Young People, reiterating the importance of moving quickly; using a human rights based approach, focusing on achieving the Sustainable Development Goals.

United Nations Educational, Scientific and Cultural Organization. (2020). *Decisions Adopted By The Executive Board During Its 209th Session (209 EX/Decisions)*. Retrieved 20 August 2020 from: <https://unesdoc.unesco.org/ark:/48223/pf0000373889>

At the fundamental level, this document includes all decisions adopted at the 209th regular session of the Executive Board. This document provides a good overview of all these decisions, which include decisions such as to strengthen efforts in Africa, as it is a global priority for UNESCO, an evaluation of actions towards reaching SDG 4 and implementation of previous decisions, such as resolution 40/C Resolution 67 on educational and cultural institutions in occupied Arab territories. This overview also includes an evaluation of the effects of COVID-19 on UNESCO's programme of work and activities, which is very limited according to the decision. This resource will be one of the most helpful for delegates, as it provides numerous examples of decisions adopted by the Executive Board. Additionally, the decisions included in this document provide examples of the language delegates can use when writing draft resolutions at the conference.

[United Nations Educational, Scientific and Cultural Organization. \(2020\). *The COVID-19 Outbreak & UNESCO's Mission*. Retrieved 20 August 2020 from: https://en.unesco.org/covid19](https://en.unesco.org/covid19)

Currently, COVID-19 is a topic that tethers to every facet of our community. This page provides an overview of UNESCO's mission amid this pandemic, as well as pointing towards priorities and recent activities. The "Next Normal" campaign can be found through this page, as well as information on discussions and cooperation to create digital education and culture. This page offers a good starting point in the research towards UNESCO and the impact of COVID-19 thereon, which will likely affect any future discussion and action.

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I. Safeguarding Intangible Cultural Heritage in Post-Conflict Areas

“Cultural matters are integral parts of the lives we lead. If development can be seen as enhancement of our living standards, then efforts geared to development can hardly ignore the world of culture.”⁹¹

Introduction

For every generation in human history, there have always been elements of society, such as a collection of objects, a monument, or a song, that were regarded as important to preserve for future generations.⁹² These preserved elements of society are the cultural heritage that represents the way of life for its people.⁹³ The preservation of cultural heritage is constantly evolving and plays an impactful role in peacebuilding; however, many cultural expressions and elements are at risk in times of conflict.⁹⁴ In recent years, cultural heritage has increasingly been the target of systematic and deliberate attacks by extremist groups.⁹⁵ Due to the strong connection between culture and the identity of a population, the intentional destruction can cause significant obstacles in post-conflict peacebuilding and reconciliation.⁹⁶ For targeted safeguarding, cultural heritage is separated into two distinct categories: tangible cultural heritage and intangible cultural heritage (ICH).⁹⁷ ICH are shared cultural experiences and memories that have evolved and passed from one generation to another.⁹⁸ They are different from tangible cultural heritage, such as artifacts and monuments.⁹⁹ The COVID-19 pandemic has resulted in unprecedented destruction of cultural heritage.¹⁰⁰ The pandemic has affected the practice of ICH as most traditions, rituals and gatherings have been postponed or cancelled.¹⁰¹ However, according to an ongoing survey by UNESCO, ICH has been seen as “providing a source of resilience, solidarity and inspiration for many communities during these difficult times.”¹⁰²

Adopted by the United Nations Educational, Scientific and Cultural Organization (UNESCO) General Conference in 2003, the *Convention for the Safeguarding of the Intangible Cultural Heritage* defined ICH as the “practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities and groups recognize as part of their cultural heritage.”¹⁰³ There are five main ‘domains’ of ICH including oral traditions and expressions, performing arts, social practices/rituals, knowledge regarding nature and universe, and traditional craftsmanship that make up a cultural identity.¹⁰⁴ According to UNESCO, “safeguarding” is the measured aim of “ensuring the viability of the intangible cultural heritage” through the following forms: identification, documentation, research, preservation, protection, promotion, enhancement, transmission, and revitalization of ICH.¹⁰⁵ Additionally, post-conflict zones are identified as countries and territories where open-warfare is seized and is transitioning from periods of armed conflict to relative peace.¹⁰⁶ The safeguarding of ICH in post-conflict areas is important in the pursuit of the *2030 Agenda for Sustainable Development* (2030 Agenda) (2015), including the goals of ensuring safe and sustainable cities,

⁹¹ Amartya Sen, *Culture & Development*, 2001, p. 1.

⁹² UNESCO, *What is Intangible Cultural Heritage?*, 2011, p. 3.

⁹³ Ibid.

⁹⁴ Ibid., p. 6.

⁹⁵ UNESCO, *The Role of Culture for Resilience, Peace and Security: a New International Agenda Promoted by UNESCO*, 2017.

⁹⁶ Ibid.

⁹⁷ UNESCO, *What is Intangible Cultural Heritage?*, 2011, p. 3.

⁹⁸ Ibid., p. 2.

⁹⁹ Ibid., p. 3.

¹⁰⁰ UNESCO, *Living Heritage and The Covid-19 Pandemic – Snapshot of the UNESCO online survey*, 2020.

¹⁰¹ UNESCO, *Living heritage experiences in the context of the COVID-19 pandemic*, 2020.

¹⁰² Ibid.

¹⁰³ UNESCO, *Convention for the Safeguarding of Intangible Cultural Heritage*, 2003, p. 2.

¹⁰⁴ UNESCO, *Intangible Heritage domains in the 2003 Convention*.

¹⁰⁵ UNESCO, *Convention for the Safeguarding of Intangible Cultural Heritage*, 2003, p. 3.

¹⁰⁶ *Warsaw Recommendation on Recovery and Reconstruction of Cultural Heritage*, UNESCO, 2018.

economic growth, reduced inequalities, environmental protection, promotion of gender equality, and fostering peaceful and inclusive societies.¹⁰⁷

International and Regional Framework

In 1954, UNESCO adopted its first international treaty directly addressing the maintenance of cultural heritage, *the Convention for the Protection of Cultural Property in the Event of Armed Conflict*, which focused exclusively on the protection of tangible cultural heritage in response to armed conflict.¹⁰⁸ In 1966, the General Conference of UNESCO adopted the *Declaration on the Principles of the International Cultural Co-operation*, which definitively proclaimed that ensuring international cooperation policy in the field of culture for all people was a primary directive of UNESCO.¹⁰⁹ Mandated by the Declaration of 1966, UNESCO adopted the *Convention Concerning the Protection of the World Cultural and Natural Heritage* in 1972 to strengthen the identification and recording of tangible cultural heritage by establishing the World Heritage Committee, World Heritage Fund, and World Heritage List.¹¹⁰ The ratification of the 1972 convention was based on principles considered the 5 ‘Cs’: Credibility, Conservation, Capacity-building, Communication and Communities.¹¹¹ At the 1982 World Conference on Cultural Policies, UNESCO Member States approved the *Mexico City Declaration on Cultural Policies* in Mexico City, which finally gave significant attention to the preservation of ICH and redefined cultural heritage to include elements of ICH.¹¹² This Conference was one of the first times that the term “intangible heritage” was officially used by the United Nations (UN).¹¹³ In 1991 the UN General Assembly adopted resolution 46/158, which requested the establishment of a temporary independent world commission responsible for creating a report on the state of “Culture and Development” and providing proposals concerning the urgent and long term obstacles for global heritage.¹¹⁴

The culmination of prior UNESCO frameworks on safeguarding ICH can be seen in the 2003 *Convention for the Safeguarding of Intangible Cultural Heritage* (2003 Convention), which established an international framework to ensure that Member States took necessary measures to safeguard the intangible cultural heritage present in their territory.¹¹⁵ While post-conflict safeguarding of ICH was not directly referenced, the 2003 Convention established identification and documentation reporting measures for ICH in the creation of the Representative List of the Intangible Cultural Heritage of Humanity and the List of Intangible Cultural Heritage in Need of Urgent Safeguarding, both of which helped build ICH resilience pre-conflict.¹¹⁶ Additionally, the 2003 Convention established the Intangible Cultural Heritage Fund, which is UNESCO’s primary method for funding projects to safeguard ICH.¹¹⁷ At the core, the 2003 Convention serves four key functions which are to safeguard ICH; to ensure equal respect for the ICH of all concerned communities, groups, and individuals; raising awareness at all levels of the importance of ICH and ensuring its mutual appreciation; and providing methods to foster international co-operation and assistance in safeguarding ICH.¹¹⁸

Additionally, the 2005 *Convention on the Protection and Promotion of the Diversity of Cultural Expressions* recognized the “uniqueness and plurality of the identities and cultural expressions of the

¹⁰⁷ UNESCO Courier, *Agenda 2030: Challenges for us all*, 2030, p. 12.

¹⁰⁸ UNESCO, *Convention for the Protection of Cultural Property in the Event of Armed Conflict*, 1954, p. 5.

¹⁰⁹ UNESCO, *Declaration of Principles of International Cultural Co-operation*, 1966, p. 1.

¹¹⁰ UNESCO, *Convention Concerning the Protection of the World Cultural and Natural Heritage*, 1972, p. 1.

¹¹¹ UNESCO, *The World Heritage Convention*, 1972.

¹¹² UNESCO, *World Conference on Cultural Policies*, 1982, p. 43.

¹¹³ UNESCO, *1982-2000: from Mondiacult to Our Creative Diversity*, 2011.

¹¹⁴ UN General Assembly, *Resolutions Adopted on the Reports of the Second Committee (A/RES/46/158)*, 1991, p. 123.

¹¹⁵ UNESCO, *Convention for the Safeguarding of Intangible Cultural Heritage*, 2003, p. 5.

¹¹⁶ UNESCO, *Browse the Lists of Intangible Cultural Heritage and the Register of Good Safeguarding Practices*, 2019; UNESCO, *Convention for the Safeguarding of the Intangible Cultural Heritage*, 2003, p. 7.

¹¹⁷ UNESCO, *Convention for the Safeguarding of Intangible Cultural Heritage*, 2003, p. 9.

¹¹⁸ *Ibid.*, p. 2.

peoples and societies making up humanity”.¹¹⁹ In particular, inclusion of indigenous people in world cultural diversity was provisioned in article 42 of the *UN Declaration on the rights of indigenous peoples* (UNDRIP) in 2007 to create a “relationship between cultural diversity and human rights”.¹²⁰ Since the ratification of the 2003 Convention, much of the work regarding the safeguarding of ICH in post-conflict areas done by regional and intergovernmental organizations has been coordinated, managed, and assisted through structures built by the Convention, such as the List of Intangible Cultural Heritage in Need of Urgent Safeguarding.¹²¹ In particular, the *Warsaw Recommendation on Recovery and Reconstruction of Cultural Heritage* in 2018 was the product of an international conference that developed universal guidelines on safeguarding cultural properties and associated intangible practices in response to armed conflict.¹²² This recommendation furthered the 2003 Convention by addressing the growing impact of armed conflict on cultural heritage.¹²³ Such efforts directly promote the achievement of SDG 4 (quality education), SDG 5 (gender equality), SDG 11 (sustainable cities), SDG 16 (peace, justice and strong institutions) and SDG 17 (global partnerships).¹²⁴ Specifically SDG 11.4 aims to “strengthen efforts to protect and safeguard the world’s cultural and natural heritage”.¹²⁵ In addition to these efforts of international organizations, regional frameworks such as the *Shenzhen Declaration on Museums and Collections* (2018) and the *Ngorongoro Declaration on Safeguarding African World Heritage as a Driver of Sustainable Development* (2016) provide an impactful role on the safeguarding of ICH in post-conflict areas.¹²⁶

Role of the International System

UNESCO’s first programs in the field of cultural heritage came as a response to the social and political situation that the world faced following the decolonization period in the wake of World War II.¹²⁷ UNESCO now leads a network of over 170 intergovernmental organizations (IGOs) and non-governmental organizations (NGOs) in the mission of safeguarding ICH in post-conflict areas.¹²⁸ Since 2003, UNESCO has participated in seventeen projects worldwide, which are targeted at safeguarding ICH in post-conflict areas, providing approximately \$1 million worth of aid to Member States.¹²⁹ Through partnerships with various Member States, NGOs, and the private sector, UNESCO contributes to five active projects covering Ukraine, Iraq, Colombia, and Niger.¹³⁰ These projects provide assistance in the documentation and inventorying of ICH, the completion of needs assessments to improve pre-existing safeguarding strategies, and the building of resilient peace environments to sustain ICH protection.¹³¹ Additionally, the Intergovernmental Committee for the Safeguarding of Intangible Cultural Heritage (Intergovernmental Committee) is a UN body working within UNESCO, whose core function is to promote the objectives of the 2003 Convention by examining requests submitted by Member States for inscription on the State heritage list, reviewing project proposals, and administering funds for international assistance.¹³² In 2009,

¹¹⁹ UNESCO, *Convention on the Protection and Promotion of the Diversity of Cultural Expressions*, 2005.

¹²⁰ UNESCO, *UNESCO Policy on Engaging with Indigenous Peoples*, 2018.

¹²¹ Ibid.

¹²² WHC, *Recommendations for World Heritage Recovery and Reconstruction Developed in Warsaw*, 2018.

¹²³ *Warsaw Recommendation on Recovery and Reconstruction of Cultural Heritage*, UNESCO, 2018.

¹²⁴ UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015, p. 26.

¹²⁵ UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015, p. 22.

¹²⁶ Open Repository on Cultural Property, *Shenzhen Declaration on Museums and Collections*, 2016; World Heritage Convention, *Safeguarding African World Heritage as a Driver for Sustainable Development*, 2016; UNESCO, *1946-1981: First Steps*, 2011.

¹²⁷ Intergovernmental Conference on the Protection of Cultural Property in the Event of Armed Conflict, *Convention for the Protection of Cultural Property in the Event of Armed Conflict*, 1954.

¹²⁸ UNESCO, *Non-Government Organizations Accredited to Provide Advisory Services to the Committee*, 2019.

¹²⁹ UNESCO, *Projects for the Safeguarding of Intangible Cultural Heritage*, 2019.

¹³⁰ Ibid.

¹³¹ Ibid.

¹³² UNESCO, *Functions of the Intergovernmental Committee for the Safeguarding of Intangible Cultural Heritage*, 2019.

the Intergovernmental Committee launched the Register of Good Safeguarding Practices for ICH.¹³³ This platform is used for sharing innovative initiatives in addition to the 2003 convention.¹³⁴ Furthermore, the role of women in using ICH in post-conflict social rehabilitation and peacebuilding efforts can be traced back to UNESCO's 2001 synthesis report on the subject.¹³⁵ In 2014, UNESCO's first publication on *Gender Equality, Heritage and Creativity* emphasized the important role of the "leadership of women in rebuilding peace."¹³⁶ In August 2020, UNESCO launched an Indigenous Peoples Bulletin to showcase recent digital initiatives in partnership with local indigenous knowledge keepers and NGOs to address specific vulnerabilities in documentation of indigenous culture in post-conflict areas during COVID-19.¹³⁷

Aside from the efforts of UNESCO, other UN bodies and IGOs play a role in the safeguarding of ICH.¹³⁸ For instance, the UN Office for Disaster Risk Reduction (UNDRR) works with its partner network to publish documents directed at the safeguarding of ICH in times of crisis.¹³⁹ One example is the UNDRR's PreventionWeb, a collaborative knowledge-sharing platform that provides important information on the management of cultural heritage and indigenous knowledge in disaster situations.¹⁴⁰ Similarly, UNESCO initiated engagement with the United Nations Permanent Forum on Indigenous Issues (UNPFII) on "The Convention for the Safeguarding of the Intangible Cultural Heritage: Opportunities for Indigenous Peoples" in 2019 to showcase their commitment to upholding the UNDRIP.¹⁴¹ The same year was dedicated as the International Year of Indigenous Languages for "Peace, Innovation and Development".¹⁴² Other intergovernmental organizations such as the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) provide workshops worldwide to ensure that ICH is preserved through training, information, research, and advocacy.¹⁴³ These intergovernmental organizations play a vital role in addressing safeguarding of ICH in post-conflict areas by raising awareness and supporting ICH conservation and restoration.¹⁴⁴ UNESCO also partners with regional IGOs to safeguard ICH in post-conflict areas, which include the International Research Centre for Intangible Cultural Heritage in the Asia-Pacific Region, and Regional Centre for the Safeguarding of Intangible Cultural Heritage in various regions including Africa, Latin America, South-Eastern Europe.¹⁴⁵

NGOs, experts, and centers of research also play a vital role in safeguarding ICH by preserving communities who are bearers of ICH and through involving civil society in the implementation of the 2003 Convention in post-conflict areas.¹⁴⁶ Article 9 of the 2003 Convention ensures that accredited NGOs have the ability to effectively assist UNESCO in the safeguarding of ICH in post-conflict areas in an advisory capacity to the Intergovernmental Committee.¹⁴⁷ For example, the ICH NGO Forum is a platform that represents the collective expertise of its member NGOs to address challenges in safeguarding ICH.¹⁴⁸ Other examples of NGO participation include the Aigine Cultural Research Center in Kyrgyzstan that works on promoting the inclusion of elements of traditional knowledge into formal education, contributes to the safeguarding of ICH by exposing the "positive potential" of traditional culture in conflict prevention,

¹³³ UNESCO, *Criteria and timetable for selection of Register of Best Safeguarding Practices*, 2009.

¹³⁴ Ibid.

¹³⁵ UNESCO, *Synthesis Report Activities in the Domain of Women and Intangible Heritage: International editorial meeting and future activities in the domain*, 2001, p.10.

¹³⁶ UNESCO, *Gender Equality, Heritage and Creativity*, 2014, p.3.

¹³⁷ UNESCO, *Indigenous Peoples and the COVID-19 pandemic*, 2020.

¹³⁸ UNESCO, *Non-Government Organizations Accredited to Provide Advisory Services to the Committee*, 2019.

¹³⁹ ICCROM, *First Aid to Cultural Heritage in Times of Crisis-Handbook*, 2018.

¹⁴⁰ UNDRR, *About PreventionWeb: Our Services*, 2019; UNDRR, *Themes & Issues*, 2019.

¹⁴¹ UNESCO, *Presentation of the 2003 Convention at UN Permanent Forum on Indigenous Issues*, 2019.

¹⁴² UNESCO, *2019 - International Year of Indigenous Language*, 2019.

¹⁴³ ICCROM, *What is ICCROM*, 2019.

¹⁴⁴ Ibid.

¹⁴⁵ IRCI, *About IRCI: Organisation*, 2019; Regional Centre Sofia, *About Regional Centre Sofia*, 2019.

¹⁴⁶ UNESCO, *Non-Governmental Organizations, Centres of Expertise and Research Institutes*, 2019; UNESCO, *Operational Directives for the Implementation of the Convention for the Safeguarding of the Intangible Cultural Heritage*, 2019.

¹⁴⁷ UNESCO, *Convention for the Safeguarding of Intangible Cultural Heritage*, 2003, p. 5.

¹⁴⁸ ICH NGO Forum, *ICH NGO Forum Code of Conduct*, 2019, p. 2.

and empowers social groups who have become vulnerable due to conflict by building greater resilience through ICH.¹⁴⁹

Examples of intersectoral partnerships include a 2018 initiative between the International Information and Networking Centre for Intangible Cultural Heritage in the Asia-Pacific Region and Google Arts and Culture through a digital exhibition of Asian ICH.¹⁵⁰ Such digital solutions may become the foundation for sustaining practice of ICH during COVID-19 and post-conflict societies. In March 2020, UNESCO launched a blog entitled, “In Living Memory: Making the Most of Documentary Heritage in COVID-19 Decision-making”.¹⁵¹ This collection aims to shape national policy responses to ICH production during COVID-19, harness new digital technology to assist in post-conflict rebuilding, and promote partnership between different stakeholders for inclusive decision-making for safeguarding ICH.¹⁵²

Post-Conflict Documentation and Inventory

In post conflict areas, the destruction of ICH is just as prevalent as the destruction of tangible cultural heritage; however, because ICH is less visible than its tangible counterpart is, it is addressed less frequently, which leads to more devastating and long-lasting impacts or irreconcilable damages.¹⁵³ In the past decade, a significant portion of armed conflicts were internal and of a cultural, spiritual, or ethnic nature, many of which resulted in destructive acts of war, such as cultural cleansing, which aimed at eradicating certain cultures or populations.¹⁵⁴ Cultural cleansing targets more than elements of tangible culture; it targets elements such as the dignity, the identity, and the very existence of a population.¹⁵⁵ In response to the fragile and vulnerable nature of ICH and the difficulty of revitalizing heritage lost in conflict, and to mitigate the impacts of potential future conflict situations, UNESCO placed a heavy emphasis on the post-conflict documentation and inventory of ICH, as well the use of its documentation to raise awareness in local communities of the valuable cultural impacts that ICH provides.¹⁵⁶

For the international community, documentation and inventorying is one of the best methods of building resilience and safeguarding ICH because it raises awareness about intangible cultural heritage and its importance for individual and collective identities without stagnating or inhibiting the growth of that culture.¹⁵⁷ For example, a 2016-2018 project led by UNESCO on the documentation and inventory of intangible cultural heritage in the Republic of the Sudan aimed to create a new inventory of ICH in the Kordufan and Blue Nile regions.¹⁵⁸ This project developed a national strategy that included training workshops, technical knowledge, fieldwork, and data collection.¹⁵⁹ The goal of the project was to build the capacity of inventory and coordination teams, researchers in ICH and related fields, ICH NGOs, and heritage professionals, and to raise awareness in local communities of the importance of their heritage by encouraging them to participate in its documentation and inventorying.¹⁶⁰

During the COVID-19 pandemic, fieldwork and data collection for documentation has proven difficult in both post-conflict and peaceful societies. In the face of social distancing measures, restrictions in

¹⁴⁹ Aigine Cultural Research Center, *Reset Building Anthropology in Eurasia, 2007-2010*, 2014.

¹⁵⁰ ICHCAP, *Coloring ICH: Intangible Cultural Heritage in South Asia*, 2018.

¹⁵¹ UNESCO, *UNESCO launches a new blog “In Living Memory: Making the Most of Documentary Heritage in COVID-19 Decision-making”*, 2020.

¹⁵² Ibid.

¹⁵³ ICHCAP, *ICH Courier Volume 33: Village Guardian Rituals and Communities*, 2017, p. 5.

¹⁵⁴ Ibid., p. 6.

¹⁵⁵ Ibid., p. 6.

¹⁵⁶ UNESCO, *Documentation and Inventory of Intangible Cultural Heritage in the Republic of the Sudan (a Pilot Project in Kordufan and Blue Nile Regions)*, 2019; UNESCO, *Inventory of the Intangible Cultural Heritage Present in Côte d'Ivoire in View of its Urgent Safeguarding*, 2018.

¹⁵⁷ UNESCO, *Identifying and Inventorying Intangible Cultural Heritage*, 2005. p. 14.

¹⁵⁸ UNESCO, *Request for International Assistance from the Intangible Cultural Heritage Fund*, 2015, p. 2.

¹⁵⁹ UNESCO, *Documentation and Inventory of Intangible Cultural Heritage in the Republic of the Sudan (a Pilot Project in Kordufan and Blue Nile Regions)*, 2019.

¹⁶⁰ Ibid.

international travel, and the absence of experts on the ground, UNESCO needed to pivot inventorying and documentation mechanisms in post-conflict societies.¹⁶¹ Although there may be elements of ICH that can be produced and disseminated digitally, certain aspects do require social interaction.¹⁶² This has made the process of preservation and documentation of ICH more complex than before the pandemic.¹⁶³ For example, states including Colombia are using technology for “recording and virtual diffusion of events, festivals, meetings, spaces, etc. of the cultural manifestations of living heritage” to ensure survivability of ICH during such crises.¹⁶⁴ UNESCO released a statement “Turning the threat of COVID-19 into an opportunity for greater support to documentary heritage” to highlight the importance of documentation during the pandemic for historical context to future generations, thereby, underlining the gravity of the situation.¹⁶⁵ Although documentation and inventorying are effective methods of safeguarding ICH, there are aspects of this process that can be improved upon.¹⁶⁶ This could include enhancing the use of modern technology, updating mechanisms for nominating elements of ICH that have gone through transformation because of the pandemic, and ensuring equal participation of communities in remote/online documentation.¹⁶⁷

Promoting Human Rights and the Role of Women in Post-Conflict Social Rehabilitation

In recent years, ICH has taken on new roles in post-conflict areas by serving as the basis for the construction of peace environments.¹⁶⁸ Rather than ICH being solely perceived as a resource to be protected, it is instead being used as an asset that will help integrate social rehabilitation into post-conflict areas.¹⁶⁹ For example, a current UNESCO project that further exemplifies the variety of roles that ICH can play in post-conflict social rehabilitation is the 2019 Intangible Cultural Heritage as a Basis for Resilience, Reconciliation and Construction of Peace Environments in Colombia's Post-agreements.¹⁷⁰ This project used ICH as a means to reintroduce ex-combatants into post-conflict society.¹⁷¹ By identifying shared elements of ICH that generated feelings of empathy between ex-combatants and civilians, an environment of reconciliation was fostered.¹⁷² ICH education was promoted through civilian workshops that focused the community's roots in ICH as collective memories.¹⁷³ In such projects, UNESCO draws parallels between ICH safeguarding and taking a human rights-based approach.¹⁷⁴ In a similar context, the Human Rights Council adopted resolution 33/20 in 2016 on culture rights as a source for other human rights including freedom of expression, thought, conscience and religion.¹⁷⁵

Within the human rights-based approach, the role of women in inter-generational transmission of ICH has been deemed irreplicable, particularly in the transmission of ICH and in making peacebuilding gender sensitized.¹⁷⁶ However, women are at increased risk of exclusion, subordination and violence in post-

¹⁶¹ ICHCAP, *Intangible Cultural Heritage Information in Critical Times: Questions on Production and Dissemination*, 2020.

¹⁶² Ibid.

¹⁶³ Ibid.

¹⁶⁴ UNESCO, *The need to rethink and reinvent the structural spaces for the manifestation of intangible cultural heritage in the face of the coronavirus pandemic*, 2020.

¹⁶⁵ UNESCO, *Turning the threat of COVID-19 into an opportunity for greater support to documentary heritage*, 2020.

¹⁶⁶ UNESCO, *Documentation and Inventory of Intangible Cultural Heritage in the Republic of the Sudan (a Pilot Project in Kordufan and Blue Nile Regions)*, 2019.

¹⁶⁷ UNESCO, *Living heritage experiences in the context of the COVID-19 pandemic*, 2020.

¹⁶⁸ *Colombia Bets on Intangible Cultural Heritage for Peacebuilding*, UNESCO, 2018.

¹⁶⁹ UNESCO, *Projects for the Safeguarding of Intangible Cultural Heritage*, 2019.

¹⁷⁰ UNESCO, *Intangible Cultural Heritage as a Basis for Resilience, Reconciliation and Construction of Peace Environments in Colombia's Post-Agreements: Project Narrative Report*, 2019.

¹⁷¹ Ibid.

¹⁷² Ibid.

¹⁷³ Ibid.

¹⁷⁴ Ibid.

¹⁷⁵ UN HRC, *Cultural rights and the protection of cultural heritage (A/HRC/RES/33/20)*, 2016.

¹⁷⁶ UNESCO, *Gender Equality, Heritage and Creativity*, 2014, p. 49; UNESCO, *Synthesis Report Activities in the Domain of Women and Intangible Heritage: International editorial meeting and future activities in the domain*, 2001.

conflict situations.¹⁷⁷ Gender in culture plays an important role towards inequality, poverty, illiteracy, reproductive health, physical safety, access to education, and opportunity to shape the future generation.¹⁷⁸ Given that, UNESCO highlights the importance of only safeguarding ICH elements that coincide with the guidelines for gender within the the *Universal Declaration of Human Rights* (1948) and *Convention on the Elimination of All Forms of Discrimination Against Women* (1979).¹⁷⁹ For example, the transmission of traditions such as female genital mutilation (FGM), early marriage, inheritance laws and other discriminatory practices are not promoted forms of ICH.¹⁸⁰ This is particularly important when rebuilding cultural identity of post-conflict communities to promote peace and equality.¹⁸¹

Conclusion

The international community has achieved many milestones at both the international and regional levels for safeguarding ICH in post-conflict societies.¹⁸² The efforts of the international community to effectively implement the 2003 Convention, along with the targeted efforts of NGOs, IGOs, and regional governments, play instrumental roles in achieving SDGs that are oriented towards the safeguarding of ICH.¹⁸³ Furthermore, it is important to identify the profound impact of documentation and inventorying play in safeguarding ICH, as well as the unique role of women in intergenerational ICH transmission.¹⁸⁴ In the context of COVID-19, ICH safeguarding, practice, and transmission have evolved digitally. During an emergency (natural and/or conflict), UNESCO emphasizes on amplifying indigenous voices, promoting equal participation of women in ICH transmission, and developing new tools for post-conflict societies to document their culture.¹⁸⁵ It is the duty of the international community to ensure that ICH is not at risk of extinction in post-conflict areas and can be used as a medium in recovery efforts.¹⁸⁶

Further Research

Despite the progress that has been made to this point, there is still significant room for delegates to propose unique solutions that build upon the work UNESCO has done over the past decade. Delegates should be sure to understand the distinctions between tangible and intangible cultural heritage, as well as understand the way that their methods for safeguarding differ. Delegates should diligently consider how best to leverage the responsibilities of international and domestic organizations to preserve cultural diversity of indigenous people and women. Further questions for delegates to consider in their preparation: How can new technologies be used to improve ICH documentation methods for safeguarding and lessons being learned during the pandemic? What additional ways can ICH be utilized to foster sustainable development in post-conflict and post-pandemic society? How can Member States and Civil Society actors drive international cooperation to include women and indigenous people in ICH-led peacebuilding efforts? How can ICH be introduced in formal education for post-conflict societies to ensure sustainable transmission? Additionally, how can UNESCO continue to enhance the international efforts of safeguarding of ICH, at the local, regional, and international levels?

Annotated Bibliography

¹⁷⁷ UNESCO, *Gender Perspectives on Cultural Heritage and Museums*, 2007, p. 13.

¹⁷⁸ *Ibid.*, p. 30.

¹⁷⁹ UNESCO, *Final Report Expert meeting 'Gender and Intangible Heritage'*, 2003.

¹⁸⁰ UNESCO, *Gender Equality, Heritage and Creativity*, 2014, p. 15.

¹⁸¹ UNESCO, *Intangible Cultural Heritage and Gender*, 2009.

¹⁸² UNESCO, *Tenth Anniversary 2003-2013: Share your activities*, 2013.

¹⁸³ ICHCAP, *Volume 27: Can ICH Safeguarding Contribute to the New 2030 SDGs? A Case Study from West Bengal, India*, 2016, p. 9.

¹⁸⁴ UNESCO, *Identifying and Inventorying Intangible Cultural Heritage*, 2005, p. 14; , *Colombia Bets on Intangible Cultural Heritage for Peacebuilding*, UNESCO, 2018.

¹⁸⁵ UNESCO, *Living Heritage Experiences in the Context of the COVID-19 Pandemic*, 2020.

¹⁸⁶ UNESCO, *Convention for the Safeguarding of Intangible Cultural Heritage*, 2003, p. 2.

United Nations Educational, Scientific and Cultural Organization. (2001). *Synthesis Report Activities in the Domain of Women and Intangible Heritage: International editorial meeting and future activities in the domain*. Retrieved 20 September 2020 from: <https://ich.unesco.org/doc/src/00160-EN.pdf>

This UNESCO document outlines regional program feasibility studies and international best practices in the field of understanding the role and promotion of women in safeguarding intangible cultural heritage (ICH). This document encourages the documentation of knowledge and practices specific to women in regard to human freedom and dignity; reassessing the contribution of women in ICH transmission; sensitize research and development of programs and policies to be more inclusive to women in different cultural contexts

United Nations Educational, Scientific and Cultural Organization. (2003). *Convention for the Safeguarding of Intangible Cultural Heritage*. Retrieved 20 September 2020 from:

<https://unesdoc.unesco.org/ark:/48223/pf0000132540/PDF/132540eng.pdf.multi>

This UNESCO document is the culmination of over fifty years work on the topic of safeguarding ICH and it is the essential framework for all international programs and mechanisms that deal with this issue. Delegates should familiarize themselves with the core principles of the Convention and understand the unique roles that the ICH documentation lists play. This is an incredibly useful document as it is the backbone of all UN policy regarding ICH after 2006. Delegates should be familiar with the entirety of this convention as it will serve as the foundation for all their research.

United Nations Educational, Scientific and Cultural Organization. (2011). *1946-1981: First Steps*. Retrieved 20 September 2020 from: <https://ich.unesco.org/en/1946-1981-00308>

The following UNESCO resource provides an overview of the history of ICH safeguarding and provides a timeline from its original introduction to UNESCO to the Convention for the Safeguarding of Intangible Cultural Heritage. This is a resource available on the UNESCO website and it reliably describes the process of ratifying the 2003 Convention from UNESCO's perspective. This is a great resource for delegates to understand the history of ICH safeguarding, and it will help distinguish tangible and intangible cultural heritage.

United Nations Educational, Scientific and Cultural Organization. (2011). *What is Intangible Cultural Heritage?*. Retrieved 20 September 2020 from: <https://ich.unesco.org/doc/src/01851-EN.pdf>

This document from UNESCO serves as the perfect introduction to the topic of ICH. This document promotes awareness of ICH and provides a detailed overview of the challenges it faces regarding safeguarding. This document is useful to understand UNESCO's understanding and definition of ICH, as well as the methods being used to disperse information regarding ICH. Delegates who may be not familiar with ICH can use this document as a tool to help them understand the topic in a broad and general capacity.

United Nations Educational, Scientific and Cultural Organization. (2019). *Browse the Lists of Intangible Cultural Heritage and the Register of Good Safeguarding Practices*. Retrieved 20 September 2020 from: <https://ich.unesco.org/en/lists>

The lists in this UNESCO resource are the product of the Convention for the Safeguarding of Intangible Cultural Heritage and they provide a comprehensive list of currently defined artifacts of ICH as well as the best practices for their safeguarding. The goal of this unbiased source is to provide a list that provides details about the currently documented artifacts of ICH. Delegates can use this resource to find concrete examples of ICH and can use it to find elements of ICH that are relevant to the countries they are representing.

United Nations Educational, Scientific and Cultural Organization. (2019). *Projects for the Safeguarding of Intangible Cultural Heritage*. Retrieved 20 September 2020 from: <https://ich.unesco.org/en/project>

The UNESCO projects database is an extensive compilation of all UNESCO projects that target the safeguarding of ICH. When filtered for specifically post-conflict projects, it provides a complete list of all documented UNESCO projects that have dealt with the issue of safeguarding ICH in post-conflict areas. This is a reliable resource as it is produced directly from UNESCO and is useful for understanding the scope of issues that UNESCO has addressed in the field of post-conflict safeguarding. This database helps illuminate the difference between post-conflict area safeguarding, safeguarding in disaster areas, and safeguarding in non-conflict areas. It will be useful for delegates as it will allow them to easily look up what their respective country has done to preserve ICH.

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II. Promoting Open Access to Scientific Information and Research

“Equality in access to science is not only a social and ethical requirement for human development, but also a necessity for realizing the full potential of scientific communities worldwide and for orienting scientific progress towards meeting the needs of humankind.”¹⁸⁷

Introduction

One of the United Nations Educational, Scientific and Cultural Organization’s (UNESCO) main goals is to build inclusive knowledge societies through the utilization of technology to make scientific knowledge more accessible, including through Open Access (OA).¹⁸⁸ Inclusive knowledge societies allow people to “create, access, utilize and share information and knowledge” to ensure that individuals and communities can achieve their full potential and improve their quality of life.¹⁸⁹

Generally, OA is defined as freely accessible information that everyone can read and utilize for the future development of scientific knowledge without any costs of doing so and with proper credit to the original author.¹⁹⁰ OA allows students, researchers, and the general public access to more information and research that, in turn, leads to greater innovation and the reduction of economic and social inequalities.¹⁹¹ As of 2020, over 15,000 journals containing more than 5 million scholarly research articles from 133 Member States were listed on the Directory of Open Access Journals.¹⁹² It is estimated that around 50% of the scholarly research is freely available online under some type of OA structure.¹⁹³

In the COVID-19 pandemic, questions are raised on how OA to scientific research and data for the public, policymakers, and researchers can lead to medical findings, effective policy measures, and increases in societies’ understanding of COVID-19.¹⁹⁴ While COVID-19 potentially advances OA policies, many barriers to ensure that all scientific research is openly accessible remain.¹⁹⁵ OA shifts the responsibility of publishing from publishers to authors who have to undertake efforts to deposit their scientific findings in OA repositories, publish in OA journals, and secure funds to cover financial costs of making their work openly accessible.¹⁹⁶ The lack of a peer-review process for certain OA journals raises quality concerns.¹⁹⁷ Additionally, questions on how OA journals can operate without a traditional subscription-based model to access content raises financial feasibility concerns.¹⁹⁸ UNESCO has been discussing many of these concerns with publishers, authors, and institutions.¹⁹⁹ In addition, UNESCO has focused on standard setting and capacity building with Member States and institutions to help them develop their OA policies and to ensure that scientific information is readily available.²⁰⁰ At least 10 of the Sustainable Development Goals (SDGs) set out in the *2030 Agenda for Sustainable Development* (2015) require frequent scientific

¹⁸⁷ UNESCO General Conference, *Declaration on Science and the use of Scientific Knowledge and the Science Agenda -Framework for Action* (30 C/15), 1999, p. 13.

¹⁸⁸ UNESCO General Conference, *Revised Draft Strategy on UNESCO’s Contribution to the Promotion of Open Access to Scientific Information and Research* (36 C/62), 2011, p. 2.

¹⁸⁹ UNESCO, *Building Inclusive Knowledge Societies: a Review of UNESCO’s Action in Implementing the WSIS Outcomes*, 2015, p. 13.

¹⁹⁰ UNESCO General Conference, *Revised Draft Strategy on UNESCO’s Contribution to the Promotion of Open Access to Scientific Information and Research* (36 C/62), 2011, p. 2.

¹⁹¹ UNESCO, *Policy Guidelines for the Development and Promotion of Open Access*, 2012, p. 3.

¹⁹² Directory of Open Access Journals, *DOAJ (Directory of Open Access Journals)*, 2020.

¹⁹³ Piwowar, et al., *The State of OA: a Large-scale Analysis of the Prevalence and Impact of Open Access Articles*, 2018, p. 1.

¹⁹⁴ UNESCO, *UNESCO mobilizes 122 countries to promote open science and reinforced cooperation in the face of COVID-19*, 2020.

¹⁹⁵ UNESCO, *Concepts of Openness and Open Access*, 2015.

¹⁹⁶ *Ibid.*, p. 60.

¹⁹⁷ *Ibid.*, p. 60.

¹⁹⁸ *Ibid.*, p. 61.

¹⁹⁹ *Ibid.*, p. 61.

²⁰⁰ UNESCO General Conference, *Revised Draft Strategy on UNESCO’s Contribution to the Promotion of Open Access to Scientific Information and Research* (36 C/62), 2011.

input for which OA is critical, to accelerate scientific findings and ensure that policymakers and the public have access to them.²⁰¹

International and Regional Framework

Article 27 of the *Universal Declaration on Human Rights* (1947) provides a historical underpinning to the notion of free access to scientific information.²⁰² It outlines an enshrined right to “freely participate in the cultural life of the community (...) and share in scientific advancement and its benefits.”²⁰³ However, it also recognizes a right to the “protection of...material interests” related to the authorship of such information.²⁰⁴ Both rights were echoed in Article 15 of the *International Covenant on Economic, Social and Cultural Rights* (1966), which also called upon Member States to undertake steps necessary for the “diffusion of science and culture.”²⁰⁵ The *UNESCO Constitution* (1945) specifically highlights its objective to assist in the dissemination of knowledge, as well as the “exchange of publications and (...) scientific interest” and initiate methods to enable people’s access to “published materials.”²⁰⁶

The 1974 UNESCO *Recommendation on the Status of Scientific Researchers* outlines the role that science and scientific research can play in society as a whole.²⁰⁷ The resolution formally recognizes that open communication and sharing of scientific data, including results, hypotheses, and opinions, enhance scientific cooperation and thus lie at the core of the scientific process.²⁰⁸ This understanding was given further clarity in UNESCO’s *Declaration on Science and the Use of Scientific Knowledge* (1999), which formally called for the adoption of the principles of full and open access to scientific knowledge, albeit again with a recognition that intellectual property rights must be respected.²⁰⁹ In the lead-up to the first World Summit on the Information Society (WSIS) in 2003, UNESCO defined the broader context for its OA activities in the Building Inclusive Knowledge Societies initiative.²¹⁰ It describes access to information as fundamental for acquiring knowledge, empowering individuals and societies, and social and economic progress.²¹¹ WSIS adopted the *Geneva Declaration of Principles and Geneva Plan of Action* (2003) which define a “common vision” for a modern information society, wherein advances in technology and the removal of access barriers can allow for unparalleled access to information for all, including via the sharing of scientific research.²¹²

An understanding of how OA may be practically operationalized was primarily developed through a series of statements from private academic groups or conferences, most notably the *Budapest Open Access Initiative* (2002), the *Bethesda Statement on Open Access Publishing* (2003), and the *Berlin Declaration on Open Access to Knowledge in the Science and Humanities* (2003).²¹³ Based on these inputs, UNESCO defines OA to be the free access of scholarly peer-reviewed research to the public to read, use, copy, distribute, and make use of the data and research in future work with proper credit to the original author.²¹⁴

²⁰¹ UNESCO, *Open Access to Scientific Information*, 2017.

²⁰² UN General Assembly, *Universal Declaration of Human Rights (A/RES/217 A (III))*, 1948.

²⁰³ Ibid.

²⁰⁴ Ibid.; Amnesty International UK, *What is the Universal Declaration of Human Rights?*, 2017.

²⁰⁵ UN General Assembly, *International Covenant on Economic, Social and Cultural Rights (A/RES/220 (XXI))*, 1966.

²⁰⁶ UNESCO, *UNESCO Constitution*, 1945.

²⁰⁷ UNESCO, *Recommendation on the Status of Scientific Researchers*, 1974.

²⁰⁸ Ibid.

²⁰⁹ UNESCO General Conference, *Declaration on Science and the use of Scientific Knowledge and the Science Agenda -Framework for Action* (30 C/15), 1999.

²¹⁰ UNESCO, *Towards inclusive knowledge societies: a review of UNESCO’s action in implementing the WSIS outcomes*, (2010), p.11.

²¹¹ Ibid., p.11.

²¹² WSIS, *Declaration of Principles*, 2003, p. 2.

²¹³ Suber, *Open Access Overview*, 2015.

²¹⁴ UNESCO General Conference, *Revised Draft Strategy on UNESCO’s Contribution to the Promotion of Open Access to Scientific Information and Research* (36 C/62), 2011, p. 6.

As a means to promote OA, UNESCO has formalized its operational strategy on OA, including the *Strategy on UNESCO's Contribution to the Promotion of Open Access to Scientific Information and Research* (2011), which formally outlines the three "core areas" of its work on the topic.²¹⁵ Building on its 1974 predecessor, UNESCO has also adopted an updated *Recommendation on Science and Scientific Researchers* (2017), which calls upon Member States, but also individual institutions and scientists, to promote open access to scientific research.²¹⁶ These incremental developments have led UNESCO to recognize the lack of a universally accepted set of overarching norms and requirements of open science.²¹⁷ According to UNESCO "[t]he idea behind Open Science is to allow scientific information, data and outputs to be more widely accessible (Open Access) and more reliably harnessed (Open Data) with the active engagement of all the stakeholders (Open to Society)."²¹⁸

In a broader context, the international community has recognized the importance of OA to scientific information for the achievement of the SDGs.²¹⁹ For example, the positive effect of access to information on development is recognized through SDG 16 (peace, justice, and strong institutions), target 16.10, which calls upon Member States to enact constitutional or systemic guarantees for public access to information.²²⁰ Moreover, SDG 3 (good health and well-being) requires Member States to promote access to findings from medical journals that can inform policy and strategic decisions on the part of governments.²²¹

Role of the International System

As the United Nations (UN) specialized agency for science, UNESCO maintains a unique responsibility in advocating for the accessibility and diffusion of scientific research.²²² UNESCO has categorized its work on OA into three "core areas": the provision of policy advice to decision-makers, capacity building support for organizations, and serving as a clearing-house on OA codes of practice and resources.²²³

In its capacity of providing policy advice, flagship publications such as UNESCO's *Policy Guidelines for the Development and Promotion of Open Access* (2012), and UNESCO's report on *Concepts of Openness and Open Access* (2015), allow national policy-makers to better understand the opportunities and challenges of OA adoption and outline routes to OA publication for researchers.²²⁴ Similarly, UNESCO's Global Open Access Portal (GOAP) is an online tool that provides an overview of the current global status of OA adoption, and best practices.²²⁵ However, the portal has not been updated since 2016.²²⁶ Nevertheless, national examples of OA policies include the United States National Institutes of Health and National Science Foundation, the European Commission and the European Research Council, and Research Councils UK, who require that work produced by them or using their grant funding

²¹⁵ UNESCO General Conference, *Revised Draft Strategy on UNESCO's Contribution to the Promotion of Open Access to Scientific Information and Research* (36 C/62), 2011.

²¹⁶ UNESCO, *Recommendation on Science and Scientific Researchers*, 2017.

²¹⁷ UNESCO Executive Board, *Preliminary Study of the Technical, Financial and Legal Aspects on the Desirability of a UNESCO Recommendation on Open Science* (206 EX/9), 2019, p. 3.

²¹⁸ UNESCO, *Open Science*, 2019.

²¹⁹ UNESCO, *Open Access to Facilitate Research and Information on COVID-19*, 2020.

²²⁰ UN DESA, *Goal 16 – Targets and Indicators*.

²²¹ Mamtora & Pandey, *Identifying the Role of Open Access Information in Attaining the UN SDGs: Perspectives from the Asia-Oceania Region*, 2018, p. 6.

²²² UNESCO Executive Board, *Preliminary Study of the Technical, Financial and Legal Aspects on the Desirability of a UNESCO Recommendation on Open Science* (206 EX/9), 2019, p. 3.

²²³ UNESCO General Conference, *Revised Draft Strategy on UNESCO's Contribution to the Promotion of Open Access to Scientific Information and Research* (36 C/62), 2011, pp. 7-9.

²²⁴ UNESCO, *Policy Guidelines for the Development and Promotion of Open Access*, 2012.

²²⁵ UNESCO, *Global Open Access Portal*, 2017.

²²⁶ *Ibid.*

is openly accessible.²²⁷ Internally, UNESCO has also mandated that all of its research publications must conform to OA standards.²²⁸

In addition to its role in advising national governments, UNESCO developed partnerships with individual universities, publishers, libraries, and specialized non-governmental organizations to strengthen collaboration and build shared capacity.²²⁹ For this purpose, UNESCO co-initiated the Open Scholarship Initiative (OSI) in 2015, which consists of 250 institutions, 27 countries, and 18 stakeholder groups, as of 2020.²³⁰ The OSI supports the establishment of OA repositories and the development of OA policies, practices, and technologies.²³¹ Resulting from a series of conferences and discussion forums, the OSI developed its Plan A in 2020.²³² Plan A offers concrete action plans to be adopted by policymakers in the upcoming five years for the promotion of open research, and serves as orientation for UNESCO's Recommendation on Open Science.²³³

Given the multi-sectoral nature of the topic, networks such as the WSIS Forum allow UNESCO to collaborate with other UN stakeholders involved with the 'information society', including the International Telecommunication Union (ITU), the United Nations Development Programme (UNDP), and the World Health Organization (WHO), alongside partners from the private sector.²³⁴ The 2020 WSIS Forum highlighted the potential of OA as an effective tool against the COVID-19 pandemic.²³⁵ During WSIS' session in 2019, coordinators of six international publication platforms formed the Global Alliance of Open Access Scholarly Communication Platform (GLOALL), designed to "democratize scientific knowledge" through technology transfer, and shared methodologies and advocacy.²³⁶ The collaborative approach to promote OA allows for greater awareness-raising through the pooling of resources.²³⁷ An example of such is the International Day for Universal Access to Information adopted by the UNESCO General Conference in 2015 through resolution 38C/57 and endorsed by UN General Assembly resolution 74/5 in 2019.²³⁸

Currently, UNESCO is in the process of drafting a universal recommendation on Open Science for consideration by the 41st General Conference (2021).²³⁹ This standard-setting document discusses the impact of Open Science, and thus Open Access, on scientific practices and society, particularly in developing countries, and its contribution to achieving the SDGs.²⁴⁰ Furthermore, it would introduce monitoring mechanisms on the implementation of the Recommendation by Member States and UNESCO.²⁴¹ UNESCO recognizes the legal protection of scientific information to be a precondition for sharing such information.²⁴² To ensure the protection of intellectual property in Open Science, the Recommendation aims to address disparities between Member States in the legal protection of scientific

²²⁷ Piwowar, et al., *The State of OA: a Large-scale Analysis of the Prevalence and Impact of Open Access Articles*, 2018, p. 1; Research Councils UK, *RCUK Policy on Open Access and Supporting Guidelines*, 2013, p. 1.

²²⁸ UNESCO, *Open Access Policy*, 2013.

²²⁹ UNESCO General Conference, *Revised Draft Strategy on UNESCO's Contribution to the Promotion of Open Access to Scientific Information and Research (36 C/62)*, 2011, pp. 7-9.

²³⁰ Open Scholarship Initiative, *OSI Participants, Alumni & Observers*.

²³¹ UNESCO Executive Board, *Preliminary Study of the Technical, Financial and Legal Aspects on the Desirability of a UNESCO Recommendation on Open Science (206 EX/9)*, 2019, p. 3.

²³² Open Scholarship Initiative's Plan A, *Open science roadmap recommendations to UNESCO*, 2020.

²³³ *Ibid.*

²³⁴ UN ITU, *WSIS Forum 2020*.

²³⁵ WSIS, *WSIS Forum 2020: High-Level Track Outcomes and Executive Brief*, 2020, p. 101.

²³⁶ UNESCO, *Launch of the Global Alliance of Open Access Scholarly Communication Platforms to Democratize Knowledge*, 2019.

²³⁷ UNESCO, *International Day for Universal Access to Information*.

²³⁸ *Ibid.*

²³⁹ UNESCO General Conference, *Preliminary Study of the Technical, Financial and Legal Aspects of the Desirability of a UNESCO Recommendation on Open Science (40 C/63)*, 2019.

²⁴⁰ *Ibid.*, p. 6.

²⁴¹ *Ibid.*, p. 6.

²⁴² UNESCO General Conference, *Preliminary Study of the Technical, Financial and Legal Aspects of the Desirability of a UNESCO Recommendation on Open Science (40 C/63)*, 2019, p. 10

findings.²⁴³ Lastly, it will address the academic global divide, meaning that developed countries produce and profit more from scientific findings than developing countries.²⁴⁴ Although UNESCO provides clear information on what the Recommendation on Open Science should entail, concrete solutions on how to address them still need to be identified.²⁴⁵

Capacity Building

One of UNESCO's main functions in promoting open access to science and research is through capacity building.²⁴⁶ The UN defines capacity building as developing and strengthening skills, processes, and resources that organizations need.²⁴⁷ UNESCO's capacity building activities include working with organizations, including governments, academic institutions, and publishers to strengthen and develop their OA policies, develop training curriculums to train people on OA, and support OA repositories.²⁴⁸

As a prerequisite for capacity building and to ensure a common understanding of OA, UNESCO addresses in its report *Concepts of Openness and Open Access* (2015) the existing subtypes and understandings of OA.²⁴⁹ Four different understandings of OA exist: Green OA, Gold OA, Libre OA, and Gratis OA.²⁵⁰ Whereas Green OA and Gold OA are mostly focused on the mode of publication, Gratis and Free OA are more oriented towards extension of rights to users of certain publication.²⁵¹

Green OA describes that the researcher deposits the article in a repository.²⁵² A repository is an online archive for scholarly articles and data which is freely accessible to the public.²⁵³ By depositing the article in a repository, the researcher may still publish it in a subscription journal, but ensures that the article is openly accessible.²⁵⁴ However, often a retention period exists, in which the article is exclusively available in subscription journals.²⁵⁵ In a subscription model, the consumer pays to read and reuse the findings of the research.²⁵⁶ Due to the retention period, Green OA published information is time-delayed as the researcher may only deposit the article in an online repository after the period has expired.²⁵⁷

Gold OA describes that the researcher publishes directly in OA journals or subscription journals through a payment by the author.²⁵⁸ To ensure the financial feasibility of OA journals and to cover for costs of maintaining the digital infrastructure and ensuring a peer-review process, OA journals levy "article processing charges" (APC) which are paid by the researchers.²⁵⁹ However, authors and researchers often challenge this approach, citing concerns over the fairness of being obliged to pay to get their valuable research disseminated.²⁶⁰ Furthermore, especially researchers from developing countries with smaller budgets find it difficult to pay the APCs, leading to unequal publishing access.²⁶¹

²⁴³ Ibid., p. 10.

²⁴⁴ Ibid., p. 16.

²⁴⁵ Ibid.

²⁴⁶ UNESCO General Conference, *Revised Draft Strategy on UNESCO's Contribution to the Promotion of Open Access to Scientific Information and Research* (36 C/62), 2011.

²⁴⁷ UN Academic Impact, *Capacity Building*.

²⁴⁸ UNESCO, *UNESCO Open Access Strategy*, 2011.

²⁴⁹ UNESCO, *Policy Guidelines for the Development and Promotion of Open Access*, 2012, p. 16; UNESCO, *Concepts of Openness and Open Access*, 2015.

²⁵⁰ UNESCO, *Concepts of Openness and Open Access*, 2015, p. 9.

²⁵¹ Ibid.

²⁵² Ibid.

²⁵³ Suber, *Open Access*, 2012.

²⁵⁴ UNESCO, *Concepts of Openness and Open Access*, 2015, p. 9.

²⁵⁵ Ibid.

²⁵⁶ Foxall & Nailor, *Sustainability in Open Access Publishing: The Ecancer case Study*, 2016, p. 113.

²⁵⁷ UNESCO, *Concepts of Openness and Open Access*, 2015, p. 9.

²⁵⁸ Piwowar, et al., *The State of OA: a Large-scale Analysis of the Prevalence and Impact of Open Access Articles*, 2018, p. 1.

²⁵⁹ Ibid.

²⁶⁰ UNESCO, *Concepts of Openness and Open Access*, 2015, p. 62.

²⁶¹ UNESCO, *Joint COAR-UNESCO Statement on Open Access, 09 May 2016*, 2016.

Libre OA describes that the public and researchers may read and reuse the article for any legal purposes, including for commercial means, with proper credit given to the original author.²⁶² Scientists may use scientific discoveries for their own research, which accelerates scientific findings.²⁶³ Additionally, the public has greater access to scientific information, which promotes social and economic progress, through increased transparency and decreased spread of misinformation.²⁶⁴ Gratis OA describes that the public and researchers may only read, but not re-use the data and information for commercial purposes.²⁶⁵ While it limits the accelerating effect of OA on scientific findings, it allows for greater protection of intellectual property.²⁶⁶ Without intellectual property rights, there are no financial incentives for innovation, as businesses could copy innovative solutions of competitors, without carrying the costs of achieving these innovations.²⁶⁷ The struggle of libre versus gratis OA shows the need to ensure the intellectual property rights of researchers, while simultaneously realizing the benefits of OA for scientific and societal progress.²⁶⁸

To support repositories as a means to bolster Green OA, UNESCO, amongst others, initiated The Directory of Open Access Scholarly Resources (ROAD).²⁶⁹ ROAD aims at providing a single access point to OA content globally.²⁷⁰ It compiles repositories to allow for greater access to scientific articles to promote scientific collaboration.²⁷¹ Its interface was updated in 2020 to provide adequate tools to search for articles on specific topics.²⁷² The repositories on which directories like ROAD rely can have several challenges that make searching for articles difficult, including failures with the servers that host them.²⁷³ Therefore, adequate infrastructure to make OA articles easily accessible through intuitive searches and reliable servers is important to improving access.²⁷⁴ Furthermore, articles might not have undergone a peer-review process and repositories are not available for certain disciplines, especially in the field of social sciences.²⁷⁵ To increase the availability of repositories, UNESCO encourages Member States to conform to the Open Archives Initiative, which is a protocol on how to properly index the information of scholarly articles so that they can be easily found using search engines.²⁷⁶

UNESCO supports national and regional governments, as well as specific organizations, to enhance their understanding of OA and to develop OA policies that align with international standards.²⁷⁷ This may be through the development of policy dialogue mechanisms, the diffusion of OA research, the provision of technical advice, and the development of advocacy campaigns or initiatives.²⁷⁸ Moreover, capacity building is needed in other areas, such as increasing the proportion of the population that has access to the internet, known as internet penetration.²⁷⁹ OA relies heavily on online distribution, however the global

²⁶² UNESCO, *Policy Guidelines for the Development and Promotion of Open Access*, 2012, p. 16.

²⁶³ *Ibid.*, p. 11.

²⁶⁴ *Ibid.*, p. 3.

²⁶⁵ *Ibid.*, p. 17.

²⁶⁶ *Ibid.*, p. 12.

²⁶⁷ European Commission, *Intellectual Property – Positive aspects of IP rights*, p. 1.

²⁶⁸ UNESCO General Conference, *Declaration on Science and the use of Scientific Knowledge and the Science Agenda -Framework for Action* (30 C/15), 1999.

²⁶⁹ UNESCO, *UNESCO join hands with ISSN to create ROAD to enhance access to Open Access Scholarly Resources*.

²⁷⁰ International Standard Serial Number International Centre, *ROAD, the Directory of Open Access Scholarly Resources*.

²⁷¹ *Ibid.*

²⁷² Directory of Open Access Scholarly Resources, *ROAD*, 2020.

²⁷³ European Commission, *Open Access – Opportunities and Challenges – A Handbook*, 2008, p. 58.

²⁷⁴ *Ibid.*

²⁷⁵ Open Access.nl, *Pros and cons*.

²⁷⁶ UNESCO, *Policy Guidelines for the Development and Promotion of Open Access*, 2012, p. 15.

²⁷⁷ UNESCO General Conference, *Revised Draft Strategy on UNESCO's Contribution to the Promotion of Open Access to Scientific Information and Research* (36 C/62), 2011, pp. 7-9.

²⁷⁸ Internet Society, *Internet Access and Education: Key considerations for policy makers*, 2017.

²⁷⁹ *Ibid.*; IGI-Global, *What is Internet Penetration*, 2020.

internet penetration is only 54%.²⁸⁰ Improving access to the internet is an important capacity building target for UNESCO to implement OA globally.²⁸¹

COVID-19 Response

The UN response to COVID-19 consist of a strategic response plan, describing measures to contain SARS-CoV-2, and a socio-economic response plan, presenting measures to mitigate the effects of the COVID-19 pandemic.²⁸² UNESCO's response to COVID-19 in relation to OA and the promotion thereof, has been focused on Open Education Resources by informing the public on distance learning solutions and OA national learning platforms.²⁸³ By doing so, it addresses the issue of school closings which, at times, affected 90% of the total enrolled learners.²⁸⁴

However, most of UNESCO's COVID-19 response related to the promotion of OA is aimed at greater scientific cooperation, sharing of effective SARS-CoV-2 containing policy measures, and provision of COVID-19 information to the public.²⁸⁵ OA allows for fast access to scientific research, which accelerates medical findings and thus allows for evidence-based and effective policy and treatment measures.²⁸⁶ To promote OA, many institutional and private stakeholders of intellectual property joined the Open COVID Pledge, a commitment to share scientific knowledge on the COVID-19 pandemic and the SARS-CoV-2 virus.²⁸⁷ However, less than a third of articles on COVID-19 are openly accessible.²⁸⁸ Additionally, with many publishers of subscription journals only granting OA to their articles on COVID-19 temporarily, the access to important scientific findings is about to expire.²⁸⁹ According to the Organisation for Economic Co-operation and Development (OECD), this calls for long-term solutions for issues with the financial feasibility of OA to allow for interdisciplinary research and a full understanding of the COVID-19 pandemic.²⁹⁰ In a meeting on COVID-19, UNESCO called on Member States to adopt Open Science principles in their national research programs.²⁹¹ Moreover, 122 Member States reiterated their call for a Recommendation on Open Science.²⁹² The outcome of the meeting highlights that the COVID-19 pandemic has emphasized the importance of OA, showing its necessity for sharing knowledge and multi-disciplinarity.²⁹³ Lastly, the Global Science Portal by the International Science Council provides information on scientific communities' emerging responses to COVID-19.²⁹⁴ It shows that OA principles are already an integral part of the global response to the COVID-19 pandemic.²⁹⁵

Furthermore, UNESCO co-initiated the COVID-19 Universal Research Gateway (CURE), which serves as a best practice for providing access to journals, datasets, and repositories regarding the COVID-19 pandemic to facilitate knowledge exchange.²⁹⁶ The datasets accessible via CURE are primarily used in a

²⁸⁰ ITU, *Measuring Digital Development – Facts and Figures*, 2019.

²⁸¹ UNESCO, *Open Access to Scientific Information and Research*.

²⁸² WHO, *COVID-19 WHO appeal*, 2020.

²⁸³ UNESCO, *Fighting COVID-19 through digital innovation and transformation*.

²⁸⁴ UNESCO, *Education: From disruption to recovery*.

²⁸⁵ UNESCO, *Open Access to Facilitate Research and Information on COVID-19*, 2020.

²⁸⁶ International Federation of Library Associations and Institutions, *Access and Opportunities for All – How libraries contribute to the United Nations 2030 Agenda*.

²⁸⁷ Open COVID Pledge, *Open COVID Pledge*.

²⁸⁸ Organisation for Economic Co-Operation and Development, *Why Open Science is critical to combatting COVID-19*, 2020.

²⁸⁹ *Ibid.*

²⁹⁰ *Ibid.*

²⁹¹ UNESCO, *UNESCO mobilizes 122 countries to promote open science and reinforced cooperation in the face of COVID-19*, 2020.

²⁹² *Ibid.*

²⁹³ *Ibid.*

²⁹⁴ International Science Council, *COVID-19 Global Science Portal*.

²⁹⁵ *Ibid.*

²⁹⁶ Covid-19 Universal Resource Gateway, *COVID-19 Indian Scenario*.

libre manner, while the access to articles is gratis-based.²⁹⁷ This means that the datasets, but not the entire article or its conclusions, may be re-used by researchers or platforms providing up-to-date information on the spread of the SARS-CoV-2 virus, such as the John Hopkins University COVID-19 Dashboard or the WHO Coronavirus Disease Dashboard.²⁹⁸ UNESCO provides, with its Corona Virus Media Watch, a similar platform on which it lists COVID-19 case numbers, mortalities, and recoveries.²⁹⁹ In addition, and contrary to the others, it also provides COVID-19 related news reports from Member States.³⁰⁰ This enables the public to inform themselves about the COVID-19 pandemic in other Member States and allows for greater comparability of Member States' COVID-19 responses.³⁰¹ However, at times, the platform is not accessible, indicating a lack of adequate digital infrastructure.³⁰² Moreover, the journals listed on CURE are also accessible via WHO's Global Research Database, which provides OA to over 80,000 scholarly articles on COVID-19 related issues.³⁰³ In contrast to CURE, WHO's Global Research Database provides a search toolbar to find articles on specific issues related to COVID-19 more intuitively.³⁰⁴ To prevent the doubling of content and inefficient use of resources, further coordination between initiatives is needed.³⁰⁵

Conclusion

OA accelerates scientific findings and innovation by promoting the sharing of knowledge, enabling fast access to scientific information, and allowing for greater interdisciplinary research.³⁰⁶ The UN, Member States, the private sector, and other institutional stakeholders have realized this and promote OA solutions needed to overcome the COVID-19 pandemic and to prevent further disruption to the SDG progress.³⁰⁷ The response to the COVID-19 pandemic offers best practices on providing OA to relevant information on COVID-19 and on allowing for the pooling of COVID-19 related research.³⁰⁸ This has temporarily pushed OA policies, e.g. through the temporary open access to COVID-19 related articles in subscription journals.³⁰⁹ Simultaneously, the response also highlights the challenges that remain for adopting OA policies.³¹⁰ Intellectual property needs to be legally protected in Open Science in a manner it still allows for the sharing of scientific findings to promote scientific progress.³¹¹ Individuals must have access to the internet to benefit from UNESCO's push for digital learning solutions to counter school closings.³¹² UNESCO's role in providing OA policy advice, supporting OA capacity building, and serving as a standard-setter is important for overcoming the challenges of adopting OA policies and promoting OA to scientific research and information.³¹³

²⁹⁷ Covid-19 Universal Resource Gateway, *COVID-19 Indian Scenario*; Oxford Academic, *Standard publication reuse rights*; Science, *Reprints and Permissions*.

²⁹⁸ Johns Hopkins Coronavirus Resource Center, *COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University*; UNESCO, *Corona Virus Media Watch launched by UNESCO's International Research Centre on Artificial Intelligence in Slovenia*, 2020.

²⁹⁹ UNESCO, *Corona Virus Media Watch launched by UNESCO's International Research Centre on Artificial Intelligence in Slovenia*, 2020.

³⁰⁰ Coronavirus Watch, *Worldwide media, advanced visualizations and more*.

³⁰¹ Ibid.

³⁰² Ibid.

³⁰³ WHO, *Global Research on Coronavirus Disease (COVID-19)*.

³⁰⁴ WHO, *COVID-19 Global literature on coronavirus disease*.

³⁰⁵ Organisation for Economic Co-Operation and Development, *Why Open Science is critical to combatting COVID-19*, 2020.

³⁰⁶ UNESCO, *Policy Guidelines for the Development and Promotion of Open Access*, 2012, p. 11.

³⁰⁷ UN DESA, *The Sustainable Development Goals Report 2020*, 2020.

³⁰⁸ Covid-19 Universal Resource Gateway, *COVID-19 Indian Scenario*.

³⁰⁹ International Science Council, *COVID-19 Global Science Portal*.

³¹⁰ Internet Society, *Internet Access and Education: Key considerations for policy makers*, 2017; UNESCO, *Global Open Access Portal*, 2017.

³¹¹ UNESCO General Conference, *Declaration on Science and the use of Scientific Knowledge and the Science Agenda -Framework for Action (30 C/15)*, 1999.

³¹² Internet Society, *Internet Access and Education: Key considerations for policy makers*, 2017.

³¹³ UNESCO General Conference, *Revised Draft Strategy on UNESCO's Contribution to the Promotion of Open Access to Scientific Information and Research (36 C/62)*, 2011.

Further Research

In their own research on Promoting Open Access to Scientific Information and Research, delegates should consider the following: What are potentially other barriers to adopting OA policies not discussed in this guide? What other challenges towards OA need to be overcome in the face of COVID-19? How can UNESCO facilitate discussion and work to finding actionable solutions to the barriers discussed above and other challenges facing full OA adoption? What is UNESCO's role in promoting OA in the COVID-19 pandemic? How can UNESCO fulfill its role as a standard-setter for OA to encourage equitable access to scientific information? What partnerships or collaborations within the UN System and International Community would be beneficial to achieving UNESCO's goals on promoting OA?

Annotated Bibliography

Foxall K., & A. Nailor. (2016). *Sustainability in Open Access Publishing: The Ecancer Case Study*. Learned Publishing. Retrieved 16 August 2020 from: <https://onlinelibrary.wiley.com/doi/epdf/10.1002/leap.1023>

This study provides delegates with a detailed overview on the state of Open Access publishing and the various business models used for OA journals. It is important for delegates to understand the specifics of the different OA journals and repositories, and the general state of the industry in order to propose actionable policy options. Without a deep understanding on the specifics of OA proposals and modes of OA publications, it will be difficult to propose solutions that are suitable for various Member States' needs.

Organisation for Economic Co-Operation and Development. (2020). *Why Open Science is critical to combatting COVID-19*. Retrieved 16 August 2020 from: <http://www.oecd.org/coronavirus/policy-responses/why-open-science-is-critical-to-combatting-covid-19-cd6ab2f9/>

This report explains why Open Science is important in the response to the COVID-19 pandemic and what initiatives have been undertaken by the international community to promote Open Science in the earlier response phases. Additionally, the report describes challenges for the implementation of Open Science in the face of COVID-19 and provides solutions to overcome them. However, as the report is published by the OECD, the challenges and measures proposed are not custom-made for UNESCO. Therefore, it is up to the delegates to critically reflect upon the report and to contemplate how UNESCO could contribute to overcoming the mentioned barriers.

United Nations Educational, Scientific and Cultural Organization. (n.d.). *Open Access to Scientific Information and Research*. Retrieved 16 August 2020 from: http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/images/GOAP/3544.11_CI_E_Open%20Access%20brochure.indd.pdf

The Open Access Brochure provides a complete overview of the work that UNESCO is undertaking on Open Access to scientific information and research. Delegates should know the actions that UNESCO are currently undertaking in order to propose new actions and determine areas where the work of the committee can be strengthened. This will allow delegates to propose solutions that are not duplicative of existing work and to propose new and creative actionable policy options for the committee.

United Nations Educational, Scientific and Cultural Organization. (2012). *Policy Guidelines for the Development and Promotion of Open Access*. Retrieved 16 August 2020 from: <https://en.unesco.org/open-access/sites/open-access/files/215863e.pdf>

Delegates should have a complete understanding of the Policy Guidelines on Open Access that UNESCO has adopted previously in order to propose new solutions to Open Access that is within the scope and mandate of the Committee. The Policy Guidelines for Open Access outline how the promotion and development of OA is in line with UNESCO's mission and the importance of OA to achieving UNESCO's mission and mandate. Understanding how OA is critical to meeting UNESCO's overall objectives and

the work that UNESCO is currently undertaking on OA will enable Delegates to propose solutions to the challenges of adopting OA that meet UNESCO's objectives and the objectives of Sustainable Development.

United Nations Educational, Scientific and Cultural Organization. (2015). *Concepts of Openness and Open Access*. Retrieved 16 August 2020 from: <https://unesdoc.unesco.org/ark:/48223/pf0000232207>

This report is one of the various modules developed by UNESCO to educate and raise awareness on the importance of OA to scientific researchers. Delegates should familiarize themselves with the training materials that the Committee has produced in order to understand the priorities of UNESCO in regards to OA. In addition, Delegates should know the resources already available to the public to avoid duplicating efforts. This resource is not only important to understand the work the UNESCO has already done but provides a comprehensive overview of OA and the various challenges associated with adopting OA policies. This will enable delegates to understand the needs for further action to propose solutions that meet these challenges.

United Nations Educational, Scientific and Cultural Organization. (2020). *Open Access to facilitate research and information on COVID-19*. Retrieved 16 August 2020 from:

<https://en.unesco.org/covid19/communicationinformationresponse/opensolutions>

This article provides information on UNESCO's OA policy measures and initiatives in response to COVID-19 and elaborates on how OA can contribute to overcoming COVID-19 related challenges. Furthermore, it lists COVID-related initiatives from within the UN and other international organizations, think tanks, and countries such as the Covid-19 Universal Resource Gateway and the WHO database on global research on coronavirus disease. To be aware of regional and local initiatives in the field of Open Access to COVID-19 related data, delegates can use this source as a starting point in their research.

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III. Harnessing Emerging Technologies for the Achievement of SDG 4

“As the world faces unsustainable levels of inequality, we need education – the great equalizer – more than ever. We must take bold steps now, to create inclusive, resilient, quality education systems fit for the future.”³¹⁴

Introduction

At the 70th Session of the United Nations (UN) General Assembly in September 2015, Member States adopted resolution 70/1 “Transforming Our World: The 2030 Agenda for Sustainable Development,” creating the 17 Sustainable Development Goals (SDGs).³¹⁵ While SDG 4 focuses solely on education, education related targets are featured across seven of the 17 goals.³¹⁶ The purpose of SDG 4 is to “ensure inclusive and equitable quality education and promoting lifelong learning opportunities for all.”³¹⁷

While there is no universally agreed upon definition of ‘emerging technologies’ by the UN, the Secretary-General’s *Strategy on New Technologies*, which was adopted in 2018, states that artificial intelligence (AI), biotechnology, material sciences, and robotics have the potential to enhance the lives of many.³¹⁸ The five attributes that emerging technologies have in common include: “radical novelty, fast growth, coherence, prominent impact, and uncertainty and ambiguity.”³¹⁹ AI is generally understood as a reproduction of human intelligence or behavior demonstrated by machines.³²⁰ In practice, these are controlled by a computer program (software).³²¹ Due to this difference it is difficult to create a working definition of AI but a number of technologies are understood to be included.³²²

As the world has come to terms with educational disruptions stemming from the COVID-19 pandemic, many education systems have endeavored to utilize emerging technologies to facilitate “distance learning,” or alternative methods for schooling remotely on a synchronous (live, simultaneous instruction) or asynchronous (not live, lessons viewable at a later time) basis.³²³ For those without consistent access to technological means for continuing their education, the disruption has exacerbated already-high levels of educational disparity, school dropout rates, and overall learning retention challenges due to gender-based and wealth-based factors.³²⁴ However, the concept of Universal Design for Learning (UDL), as defined by the United Nations Educational, Scientific and Cultural Organization (UNESCO), could be applied to the design of products, programs, and education services to ensure more online and remote learning solutions are “usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.”³²⁵ Additionally, open educational resources (OER) are educational resources that are openly available for use by teachers and students alike.³²⁶ Coupled with the growing ownership of mobile devices globally, OER offer teachers and students a more flexible approach to learning by enabling anytime, anywhere learning as well as bridging formal and informal learning.³²⁷

³¹⁴ UN DGC, *Launch of the Policy Brief: Education During COVID-19 and Beyond*, Speech by UN Secretary-General Antonio Guterres, 2020.

³¹⁵ UNESCO UIS, *Quick Guide to Educational Indicators for SDG4*, 2018, p. 7.

³¹⁶ *Ibid.*

³¹⁷ *Ibid.*, p. 8.

³¹⁸ UN Secretariat, *UN Secretary-General’s Strategy on New Technologies*, 2018.

³¹⁹ Rotolo et al, *What is an Emerging Technology?*, 2015.

³²⁰ UN OICT, *Emerging Technologies Whitepaper Series: Artificial Intelligence*, 2018.

³²¹ *Ibid.*

³²² *Ibid.*

³²³ SIS, *Online Education: Synchronous vs Asynchronous*, 2020; UN DESA - SDG, *Policy Brief: Education During COVID-19 and Beyond*, 2020.

³²⁴ UN DESA - SDG, *Policy Brief: Education During COVID-19 and Beyond*, 2020.

³²⁵ UNESCO, *UNESCO ICT Competency Framework for Teachers*, 2018.

³²⁶ *Ibid.*

³²⁷ *Ibid.*

International and Regional Framework

The *Universal Declaration of Human Rights* (UDHR) was adopted by the UN General Assembly on 10 December 1948.³²⁸ Article 26 of the UDHR states that every person has a right to education and that technological education should be available to all.³²⁹ Building upon the UDHR, UNESCO's 1960 *Convention against Discrimination in Education* laid the foundation for the right to education based on principles of freedom and non-discrimination of any kind.³³⁰ This treaty established the necessities for the creation of legal and policy frameworks that ensure not only access to quality education but also make the same opportunities accessible to all students regardless of their age.³³¹

With the adoption of the Millennium Goals and then the SDGs, the international community formally reaffirmed the importance of "ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all," specifically through SDG 4.³³² In addition, target 4.4 measures technical and vocational skills of youth and adults, and the age of people with skills in information and communications technology (ICT).³³³ To advance progress towards SDG 4, the global education community adopted the *Education 2030 Framework for Action* in November 2015.³³⁴ Education 2030 is UNESCO's overarching framework for education and provides a roadmap that outlines implementation strategies on issues ranging from teachers and finance, to monitoring indicators and coordination mechanisms.³³⁵

The *Qingdao Declaration* of 2015 provides Member States with policy recommendations on the implementation of ICT in educational settings.³³⁶ The importance of ICT in education, and specifically for teacher training, was asserted at the 2015 World Education Forum, which declared that "ICT must be harnessed to strengthen education systems, knowledge dissemination, information access, quality and effective learning, and more effective service provision."³³⁷ The *Qingdao Declaration* elaborates on the importance of the professional development of teachers and builds upon the *Qingdao Statement*, which strengthens the role of UNESCO in the implementation of ICT in education by creating an International Network on ICT for Education 2030 (INIE 2030).³³⁸ UNESCO also adopted its Recommendation on Open Educational Resources (OER) in November 2019, a first-of-its kind document that sets international standards for inclusive, equitable, and sustainable OER resource and policy development.³³⁹

Building on the foundational principles of the *Qingdao Declaration*, UNESCO adopted the first international consensus on how best to harness the developing technologies of AI in the educational sector.³⁴⁰ The *Beijing Consensus on Artificial Intelligence (AI) and Education* (2019) acknowledges the potential that AI has in significantly improving data assessment for learning assessment, the ability for education to be tailored to individual needs, and how it may impact education management.³⁴¹ The Beijing Consensus calls for the Director-General of UNESCO to establish an 'AI for Education' platform and to expand its cooperation with relevant partners in the field.³⁴²

³²⁸ UN General Assembly, *Universal Declaration of Human Rights (A/RES/217 A (III))*, 1948.

³²⁹ Ibid.

³³⁰ UNESCO, *Convention Against Discrimination in Education*, 1960.

³³¹ Ibid.

³³² UNESCO UIS, *Quick Guide to Educational Indicators for SDG4*, 2018, p. 7.

³³³ Ibid., p. 30.

³³⁴ Ibid., p. 7.

³³⁵ UNESCO Executive Board, *SDG 4: Education 2030 (205 EX/6 (2018))*, 2018.

³³⁶ UNESCO, *Leveraging Information and Communication Technologies to Achieve the Post-2015 Education Goal*, 2017.

³³⁷ UNESCO, *Education 2030: Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4*, 2016, p. 32.

³³⁸ UNESCO, *2017 Qingdao Statement*, 2017.

³³⁹ UNESCO, *Recommendation on Open Educational Resources (OER)*, 2019.

³⁴⁰ *First Ever Consensus on Artificial Intelligence and Education Published by UNESCO*, UNESCO, 2019.

³⁴¹ UNESCO, *Beijing Consensus on Artificial Intelligence and Education*, 2019.

³⁴² Ibid., pp. 10-11.

Role of the International System

The 2015 *Incheon Declaration* directs UNESCO to lead and coordinate actions towards achieving SDG 4.³⁴³ It states specifically that UNESCO should utilize ICT to increase literacy and to support numeracy programs.³⁴⁴ UNESCO aims to fulfill its mandated role at global and regional levels through: (1) the coordination of global and regional partnerships; (2) policy research and capacity development, and (3) monitoring, review and reporting.³⁴⁵ At the global level, UNESCO convenes the SDG-Education 2030 Steering Committee, which is the main multi-stakeholder coordination and consultation mechanism for the achievement of SDG 4.³⁴⁶ UNESCO has also been actively supporting Member States at the country-level, which includes targeted interventions such as the Capacity Development for Education (CapED) Programme.³⁴⁷

UNESCO has led the development of OER since the 2002 UNESCO Forum on the Impact of Open Courseware for Higher Education in Developing Countries.³⁴⁸ The 1st World OER Congress, in 2012, resulted in the adoption of the *Paris OER Declaration*.³⁴⁹ This declaration encourages governments to openly license educational materials that are publicly funded.³⁵⁰ The second congress took place in Ljubljana, Slovenia in 2017.³⁵¹ Both conferences came to the conclusion that in order for OER to support the achievement of SDG 4, it needs to be integrated into educational policies and curriculums from early childhood to post-secondary, higher education, as well as lifelong learning.³⁵² Building on this expertise and acting in response to the worldwide outbreak of COVID-19, UNESCO launched the Global Education Coalition. This public-private partnership brings together international organizations, civil society actors, and private sector partners to coordinate equitable solutions for internet and connectivity concerns and scale up best practices and national resources for distance learning.³⁵³

The High-Level Political Forum on Sustainable Development (HLPF) reviewed SDG 4 for the first time in 2019, led in part by UNESCO.³⁵⁴ The UNESCO Institute for Statistics (UIS) and the Global Education Monitoring Report, hosted a side event and launched a companion report titled *Meeting commitments: Are countries on track to achieve SDG 4?*, which measured ICT implementation in education and global levels of youth and adults with ICT skills, among other aspects of SDG targets.³⁵⁵

UNESCO developed the ICT Competency Framework for Teachers (ICT CFT) as a tool to guide ongoing formal and informal technical support for educators.³⁵⁶ The ICT CFT is intended to be adapted to national and institutional goals by providing an up-to-date framework for policy development and capacity building.³⁵⁷ In this context, it is essential that teachers have the competencies to integrate ICT in their professional practice to ensure the equity and quality of learning.³⁵⁸

³⁴³ UNESCO, *Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4*, 2016.

³⁴⁴ *Ibid.*, p. 48.

³⁴⁵ UNESCO Executive Board, *SDG 4: Education 2030 (205 EX/6)*, 2018.

³⁴⁶ UNESCO, *Beyond Commitments 2019: How Countries Implement SDG 4*, 2019, p. 3.

³⁴⁷ *Ibid.*

³⁴⁸ UNESCO & Commonwealth of Learning, *Open Educational Resources: Policy, Costs and Transformation*, 2016.

³⁴⁹ World Open Educational Resources Congress, *Paris OER Declaration*, 2012.

³⁵⁰ *Ibid.*

³⁵¹ World Open Educational Resources Congress, *2017 Ljubljana Action Plan*, 2017.

³⁵² *Ibid.*

³⁵³ UNESCO rallies international organizations, civil society and private sector partners in a broad Coalition to ensure #LearningNeverStops, UNESCO, 2020.

³⁵⁴ UNESCO, *Beyond Commitments 2019: How Countries Implement SDG 4*, 2019, p. 4.

³⁵⁵ *Ibid.*

³⁵⁶ UNESCO, *UNESCO ICT Competency Framework for Teachers*, 2018, p. 8.

³⁵⁷ *Ibid.*

³⁵⁸ *Ibid.*

UNESCO is also responsible for convening a variety of conferences and discussion platforms that allow for the exchange of best practices in relation to how ICT can impact education.³⁵⁹ INIE 2030 convenes governmental agencies responsible for ICT in education, non-state agencies, regional and global partner organizations, and academic experts, including UNESCO Chairs.³⁶⁰ It is intended to implement projects that leverage ICT to achieve Education 2030 by coordinating the following: the development and monitoring of national ICT in education policies and master plans, promoting scalable future e-School models, and fostering digital innovations for Education 2030.³⁶¹ Conferences such as the International Conference on Artificial Intelligence and Education also serve as fora for partners to discuss strategies for overcoming challenges around the integration of AI in education and ways policies may be adopted to incorporate AI use in educational curricula.³⁶²

Several regional bodies, such as the European Union (EU) and African Union (AU), have made considerable strides towards achieving SDG 4.³⁶³ The EU published its *Digital Education Action Plan (2018-2020)* that aims to establish consistent use of and access to digitally-integrated education tools, develop digital competencies and skills among youth and teachers, and incorporate data analysis and foresight into education system strategic planning.³⁶⁴ As the 2018 Action Plan will be implemented by November 2020, ongoing public consultation procedures are underway to gather public input for the next phase of the Digital Education Action Plan based on experiences during the COVID-19 pandemic and prospective integrations for digital tools in educational contexts moving forward.³⁶⁵ The AU also set forth the *Science, Technology, and Innovation Strategy for Africa 2024 (STIA)*, which includes the key goals of infrastructure development (including ICT for education), improved technical competencies (expanding tech education access at secondary and tertiary levels throughout the continent), scaling up innovation and entrepreneurship, and providing an enabling environment that prizes a culture of research and innovation with legal and regulatory systems that actively promote equal access to tech resources.³⁶⁶

Harnessing Technology for Education

The UN estimates that COVID-19 related closures of schools and centers for learning disrupted 94% of the global student population, and up to 99% in low income countries.³⁶⁷ This “largest education disruption in history” has had a significant impact on many different kinds of learners at institutions including primary and secondary schools, technical and vocational education and training (TVET) institutions, universities, and skills development establishments.³⁶⁸ By necessitating cancellation of in-person programming, the pandemic has had a disproportionate impact for those who are more likely to lack economic resources to purchase technology necessary for remote learning, such as learners in low-income countries, refugee camps, persons with disabilities, girls, and forcibly displaced persons.³⁶⁹ Alongside this, these groups are also among the most likely to have inconsistent electricity or internet infrastructure as well as poor digital skills to keep up with an online learning environment.³⁷⁰

Despite the challenges of the COVID-19 pandemic, improved access to low or no-cost digital resources has become more readily available in recent years.³⁷¹ Cheaper mobile devices are becoming more readily

³⁵⁹ UNESCO, *ICT in Education*.

³⁶⁰ UNESCO, *2017 Qingdao Statement*, 2017.

³⁶¹ *Ibid.*

³⁶² UNESCO, *ICT in Education*.

³⁶³ European Commission, *Digital Education Action Plan*, 2018; African Union, *Science, Technology, & Innovation Strategy for Africa – 2024*, 2014.

³⁶⁴ European Commission, *Digital Education Action Plan*, 2018.

³⁶⁵ European Commission, *Digital Education Action Plan*, 2018.

³⁶⁶ African Union, *Science, Technology, & Innovation Strategy for Africa - 2024*, 2014.

³⁶⁷ UNESCO, *Guidance on Open Educational Practices During School Closures*, 2020.

³⁶⁸ UN DESA - SDG, *Policy Brief: Education During COVID-19 and Beyond*, 2020.

³⁶⁹ *Ibid.*

³⁷⁰ *Ibid.*

³⁷¹ UNESCO & Commonwealth of Learning, *Open Educational Resources: Policy, Costs and Transformation*, 2016, p. 2.

available throughout the world and enable access to educational materials in areas with poorly developed infrastructure in both rural and urban contexts.³⁷² To respond to social distancing restrictions, many education institutions have turned to digital learning.³⁷³ This will build future capacity for adapting learning methods that can be more flexible to intersectional needs of learners who have families, work full-time jobs, and other circumstances that would prohibit traditional classroom attendance.³⁷⁴ To finance digital education, countries such as Senegal have turned to public-private partnerships facilitated by UNESCO's Global Education Coalition to improve access to technology and adapt teacher training approaches to consider education methods for students in low bandwidth situations.³⁷⁵

Increased internet connectivity can lead to increased access to OER libraries of cost-free resources. The license-free nature of OER materials also allows educators to adapt and repurpose the content of existing educational resources, meaning educators can localize the material to make educational resources relevant to a student or institution's context and culture.³⁷⁶ Several obstacles inhibit the growth of OER, such as the collaboration of copyright holders and the opposition of publishers.³⁷⁷ Furthermore, whilst OER has been cited as being able to reduce costs for teachers or institutions, the debate over initial funding of the ICT infrastructure required does remain an obstacle.³⁷⁸ Funding for the infrastructure required to host OER may be allocated by national governments or shared across a consortium of educational institutions that then distribute them more widely.³⁷⁹

The role of Artificial Intelligence in achieving SDG4

In education, new teaching and learning solutions that utilize AI are now being tested in different contexts.³⁸⁰ Machine Learning is one of the most promising and active fields in artificial intelligence.³⁸¹ The idea behind machine learning is to engineer a machine to be able to learn by itself rather than describing to the machine how to perform a task.³⁸² Currently, we have passed the stage in which we can process the amount of data collected from computer systems or from monitoring human activity manually.³⁸³ Since data is increasing exponentially, it is very unlikely for humans to process this data and draw conclusions from it without the help of machine learning.³⁸⁴ These technologies can be used to ensure equitable and inclusive access to education.³⁸⁵ Implementation of AI technology can provide marginalized people and communities access to appropriate learning opportunities.³⁸⁶

The opportunities in which AI could revolutionize the way we learn is found in situations where learners are not physically in the same location.³⁸⁷ Computer-supported collaborative learning provides students choices insofar as when and where they want to study, for example online discussion groups.³⁸⁸ Based on AI techniques such as machine learning and shallow text processing, AI systems can be used to monitor online discussion groups.³⁸⁹ This provides teachers with information about learner's discussions

³⁷² Ibid.

³⁷³ UN DESA - SDG, *Policy Brief: Education During COVID-19 and Beyond*, 2020.

³⁷⁴ Ibid.

³⁷⁵ UNESCO, *Learning from a Distance in Senegal*, 2020.

³⁷⁶ UNESCO & Commonwealth of Learning, *Open Educational Resources: Policy, Costs and Transformation*, 2016.

³⁷⁷ Ibid.

³⁷⁸ Ibid., pp. 4-5.

³⁷⁹ UNESCO & Commonwealth of Learning, *Open Educational Resources: Policy, Costs and Transformation*, 2016.

³⁸⁰ UNESCO, *Artificial Intelligence in Education: Challenges and Opportunities for Sustainable Development*, 2019.

³⁸¹ Ibid.

³⁸² UN OICT, *Emerging Technologies Whitepaper Series: Machine Learning*, 2018.

³⁸³ Ibid.

³⁸⁴ Ibid.

³⁸⁵ UNESCO, *Artificial Intelligence in Education: Challenges and Opportunities for Sustainable Development*, 2019.

³⁸⁶ Ibid.

³⁸⁷ Ibid.

³⁸⁸ Ibid.

³⁸⁹ Ibid.

and support for guiding students engagement and learning.³⁹⁰ By providing teachers a way to access and process the information gathered in the course of teaching these online classes, the educational quality will increase, since teachers are able to better understand the student's needs.³⁹¹ AI can also provide people with disabilities or refugees appropriate learning opportunities through the use of online technologies.³⁹² However, since AI requires large amounts of data to function, transparency in data collection, use, and dissemination will have to be discussed.³⁹³ Therefore, developing reliable and inclusive data systems are important, yet many countries struggle in basic but critical educational data.³⁹⁴

Conclusion

The rapid development of emerging technologies, including low-cost mobile access, the distribution of digital materials and the development of AI present the opportunity to circumvent existing barriers to education, including cost, physical location, and localization.³⁹⁵ With this growing momentum, UNESCO is well positioned to influence how effectively and quickly ICT and other emerging technologies are utilized to benefit educational systems in both developing and more developed countries.³⁹⁶ The COVID-19 pandemic has brought the global digital divide to the forefront of international education and efforts to achieve SDG 4, particularly for learners in vulnerable contexts.³⁹⁷ While many mobile learning devices themselves are becoming more readily available, they remain financially-challenging to obtain in many developing world contexts.³⁹⁸ Continuous internet access is still limited for many people, and digital skills for both learners and teachers remain limited.³⁹⁹ While obstacles around infrastructure costs and coordinated policymaking remain, developing technologies may be able to significantly contribute to the achievement of SDG 4.⁴⁰⁰

Further Research

In their further research, delegates could explore the following questions: What are challenges in the field of sustainability and scale of emerging technologies? Are emerging technologies economically feasible? If so, how can programs be funded? Does the infrastructure to implement educational programs based on emerging technologies exist? How do national governments or educational ministries ensure that technology is integrated into curriculums in a coordinated and effective manner?

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United Nations Educational, Scientific and Cultural Organization. (2015). *Leveraging Information and Communication Technologies to Achieve the Post-2015 Education Goal*. Retrieved 20 September 2020 from: <https://unesdoc.unesco.org/ark:/48223/pf0000243076?posInSet=1&queryId=d224da90-1c3e-4e1a-ac4f-963a5828b8ba>

The Qingdao Declaration is a key document that deals with ICT implementation in the classroom. It was passed by UNESCO and provides Member States with recommendations on the implementation of ICT. This report provides an executive

³⁹⁰ Ibid.

³⁹¹ Ibid.

³⁹² Ibid., p. 12.

³⁹³ Ibid., p. 32.

³⁹⁴ UNESCO, *Artificial Intelligence in Education: Challenges and Opportunities for Sustainable Development*, 2019, p. 32.

³⁹⁵ UNESCO UIS, *SDG 4 Data Digest: Data to Nurture Learning*, 2018.

³⁹⁶ UNESCO Executive Board, *Exploring the Potential of Artificial Intelligence to Accelerate the Progress Towards SDG 4 -Education 2030 (206 EX/44 Rev.)*, 2019.

³⁹⁷ UN DESA - SDG, *Policy Brief: Education During COVID-19 and Beyond*, 2020.

³⁹⁸ Ibid.

³⁹⁹ UNESCO & Commonwealth of Learning, *Open Educational Resources: Policy, Costs and Transformation*, 2016; UN DESA - SDG, *Policy Brief: Education During COVID-19 and Beyond*, 2020.

⁴⁰⁰ UNESCO, *ICT in Education*.

summary of the Qingdao Declaration and The International Conference on ICT and Post-2015 Education. Delegates should familiarize themselves with the Qingdao Declaration and its objectives since it serves as a cornerstone document.

United Nations Educational, Scientific and Cultural Organization. (2016). *Education 2030: Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4*. Retrieved 20 September 2020 from: <https://unesdoc.unesco.org/ark:/48223/pf0000245656>

Education 2030 is UNESCO's overarching educational framework to achieve SDG 4 and all of its educational objectives. Before delegates discuss the implementation of any technologies, they need to familiarize themselves with the indicators and targets of SDG 4 and the broader Education 2030 framework. Indicator 4.4.1 is especially important since it measures the proportion of youth/adults with information and communications technology (ICT) skills. During their research delegates can find out about their countries ICT penetration rate by looking at this indicator.

United Nations Educational, Scientific and Cultural Organization. (2018). *SDG 4 Data Digest: Data to Nurture Learning*. Retrieved 20 September 2020 from: <https://unesdoc.unesco.org/ark:/48223/pf0000366287?posInSet=1&queryId=820f5ad3-7b67-40d4-acac-f99cea9ec0e7>

This document is an overview on how countries report data whilst also providing examples on how data can be used to promote learning. As previously mentioned, AI needs vast amounts of data to operate efficiently. Delegates can use this report to get an understanding on how UNESCO and the UN processes data. Since methods of acquiring data are becoming more and more refined, delegates should also know the challenges of handling large quantities of data as well as their ethical implications.

United Nations Educational, Scientific and Cultural Organization. (2018). *UNESCO ICT Competency Framework for Teachers*. Retrieved 20 September 2020 from: <https://unesdoc.unesco.org/ark:/48223/pf0000265721?posInSet=1&queryId=ea369286-932f-45bd-9478-74c843262114>

Having qualified teachers is paramount to the success of SDG 4. This document aides delegates in understanding ICT in education as well as the role of: Curriculum, pedagogy, application of digital skills, organization and administration as well as teacher professional learning. It is also a good starting point to learn about OER and other emerging technologies that teachers can use to better educate their students.

United Nations Educational, Scientific and Cultural Organization. (2019). *Beijing Consensus on Artificial Intelligence and Education*. Retrieved 20 September 2020 from: <https://unesdoc.unesco.org/ark:/48223/pf0000368303?posInSet=1&queryId=3cf28f46-b3d7-459f-84be-34dcd3c594a1>

This is a key document about the role of AI in Education. Since AI will be playing an important role in the future, delegates should familiarize themselves with the topic. The Consensus affirms that the deployment of AI technologies in education should be purposed to enhance human capacities and to protect human rights for effective human-machine collaboration in life, learning and work, and for sustainable development. It also states that the systematic integration of AI in education has the potential to address some of the biggest challenges in education today, innovate teaching and learning practices, and ultimately accelerate the progress towards SDG 4.

United Nations Educational, Scientific and Cultural Organization. (2020). *Global Education Coalition*. Retrieved 20 August 2020 from: <https://en.unesco.org/covid19/educationresponse/globalcoalition>

UNESCO founded the Global Education Coalition as an agile multi-stakeholder coordination mechanism to support the global shift to distance learning during the COVID-19 pandemic and increase global capacity to deliver remote learning in equitable and universal ways. Delegates will find helpful information and case studies of programs, partnerships, and strategies created due to this collaboration between UNESCO, private

partners, civil society actors, and governments to support learners, teachers, and the entire global education ecosystem during the COVID-19 pandemic.

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