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## United Nations Educational, Scientific and Cultural Organization Background Guide 2020

Written by: Tiffany Dao and Lauren Kiser, Directors  
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# NATIONAL MODEL UNITED NATIONS



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Dear Delegates,

Welcome to the 2020 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 Tiffany Dao (Conference A) and Lauren Kiser (Conference B), and Assistant Directors Jacob Sarasin (Conference A) and Patrick Patterson (Conference B). Tiffany graduated in 2017 with a degree in Law, Societies and Justice. She is currently working as a legal assistant at a law firm in Seattle, Washington, and plans to pursue a MA in Legal Studies next Fall. Lauren has a double degree in International Relations and International Economics and an MA in Global Finance, Trade and Economic Integration specializing in environmental issues. She works as a Government Affairs and Outreach Associate for a utility-scale renewable energy company. Jacob has a BA in Psychology and works for a litigation law firm in New York City. He is currently studying for law school and expects to enroll in a Juris Doctorate program in the fall of 2021. Patrick has a degree in Political Science with a focus on International Relations and is currently an officer in the German army. He is working on a second degree in State - and Social Sciences with a focus on International Law and Politics.

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 Sustainable Development Goal (SDG) 4

UNESCO is a specialized agency of the United Nations (UN) tasked with building peace through international collaboration in education, science, and culture. UNESCO has an important role in strengthening international cooperation through the advancement of science and education, preservation of cultural heritage, and promotion of equal dignity of 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 addressing these issues, UNESCO may initiate studies, summon international conferences, coordinate international conventions, make recommendations to Member States, and provide expert research and consultation to the UN system through ECOSOC.

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 2020 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, Omar Torres-Vasquez (Conference A) and Maxwell Lacey (Conference B), at [usg.development@nmun.org](mailto:usg.development@nmun.org).

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

Sincerely,

**Conference A**

Tiffany Dao, *Director*  
Jacob Sarasin, *Assistant Director*

**Conference B**

Lauren Kiser, *Director*  
Patrick Patterson, *Assistant Director*



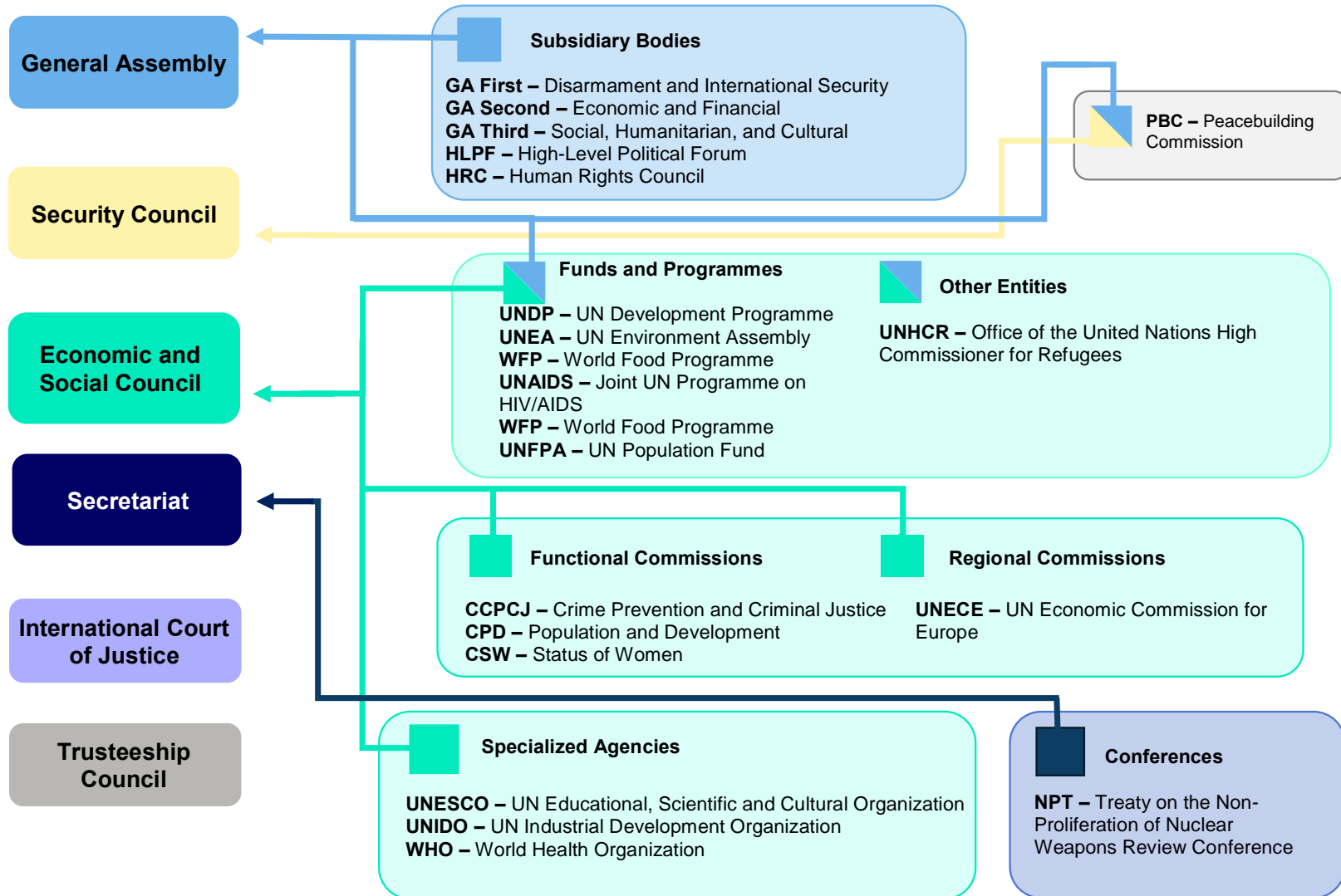


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## United Nations System at NMUN•NY

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).<sup>1</sup> 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.<sup>2</sup> 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.<sup>3</sup> In November 1945, CAME organized a conference in London to establish an educational and cultural organization.<sup>4</sup> Representatives from 37 countries agreed to found UNESCO; a formal constitution was signed on 16 November 1945 and came into force on 4 November 1946.<sup>5</sup>

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.<sup>6</sup> Chief 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).<sup>7</sup> 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.<sup>8</sup> Some recent topics addressed by UNESCO in accordance with the *2030 Agenda for Sustainable Development* (2030 Agenda) include safeguarding cultural heritage; promotion open access to science and information; and the importance of harnessing emerging technologies for education.

At NMUN•NY 2020, 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 2020, 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.<sup>9</sup> More specifically, UNESCO is a legally independent agency with its own rules, membership, organs, and financial resources that was

<sup>1</sup> New Zealand Ministry of Foreign Affairs and Trade, *United Nations Handbook 2018-19*, 2018, p. 328.

<sup>2</sup> UNESCO, *Relations with the organizations of the UN System*, 2012; *Charter of the United Nations*, 1945, Art. 63.

<sup>3</sup> UNESCO, *The Organization's History*, 2017.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> UNESCO, *Basic Texts: 2016 Edition*, 2016.

<sup>7</sup> UNESCO, *UNESCO at a glance (ERI/2010/WS/2)*, 2010, p. 37.

<sup>8</sup> UNESCO, *UNESCO and the UN Reform*, 2017; UNESCO, *UNESCO and the Sustainable Development Goals*, 2018.

<sup>9</sup> UN DGC, *What are UN specialized agencies, and how many are there?*; New Zealand Ministry of Foreign Affairs and Trade, *United Nations Handbook 2018-19*, 2018, p. 328.

brought into a relationship with the UN in 1945.<sup>10</sup> The headquarters of UNESCO is located in Paris, France.<sup>11</sup> The current Director-General is Audrey Azoulay, whose term began in 2017 and will end in 2021.<sup>12</sup> Currently, UNESCO consists of 195 Member States and 11 Associate Members, with Anguilla, Aruba, and the British Virgin Islands being the most recently admitted.<sup>13</sup> Two major bodies, the General Conference and Executive Board, govern the work of UNESCO.<sup>14</sup>

The General Conference, which consists of all UNESCO Member States, meets every two years.<sup>15</sup> Every four years, the General Conference appoints a Director-General who is responsible for coordinating the work of the Secretariat.<sup>16</sup> 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.<sup>17</sup> 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.<sup>18</sup> The General Conference may also establish special and technical committees, create subsidiary organs, and invite observers on the recommendation of the Executive Board.<sup>19</sup> UNESCO currently directs the work of several intergovernmental bodies, including the Intergovernmental Committee for Intangible Cultural Heritage, the Committee for the Protection of Cultural Property in the Event of Armed Conflict, and the Intergovernmental Committee for the Protection and Promotion of the Diversity of Cultural Expressions.<sup>20</sup> These sub-organs provide expert research and policy recommendations to the General Conference.<sup>21</sup>

The Executive Board consists of 58 UNESCO Member States serving four-year terms.<sup>22</sup> 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.<sup>23</sup> 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.<sup>24</sup> Every two years, the Executive Board also 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.<sup>25</sup> 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).<sup>26</sup>

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<sup>10</sup> UN CEBC, *Directory of United Nations System Organizations*.

<sup>11</sup> New Zealand Ministry of Foreign Affairs and Trade, *United Nations Handbook 2018-19*, 2018, p. 328.

<sup>12</sup> UNESCO, *Director-General, Audrey Azoulay*, 2019.

<sup>13</sup> UNESCO, *Member States*, 2018.

<sup>14</sup> New Zealand Ministry of Foreign Affairs and Trade, *United Nations Handbook 2018-19*, 2018, p. 328.

<sup>15</sup> *Ibid.*

<sup>16</sup> UNESCO, *Member States*, 2018.

<sup>17</sup> UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, arts. III-VI.

<sup>18</sup> *Ibid.*; UNESCO, *List of Members of the Executive Board*, 2018.

<sup>19</sup> UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, arts. III-VI

<sup>20</sup> UNESCO, *Intergovernmental Committees*, 2017.

<sup>21</sup> UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, art. IV, paras. 11-14.

<sup>22</sup> UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, art. V.

<sup>23</sup> UNESCO, *Member States*, 2019; UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, art. II.

<sup>24</sup> UNESCO, *Member States*, 2019.

<sup>25</sup> UNESCO Executive Board, *Executive Board in Brief*, 2018; UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, art. V.

<sup>26</sup> UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, art. V; UNESCO, *High-level Political Forum*, 2017.

### ***Mandate, Functions, and Powers***

The mandate for UNESCO is formally defined in Article 1, paragraph 3 of the *Charter of the United Nations* (1945), and Article 1 of the *UNESCO Constitution* (1945).<sup>27</sup> UNESCO is charged with promoting collaboration among Member States in the fields of education, science, and culture in order to develop and maintain peace, rule of law, and mutual respect.<sup>28</sup> 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.”<sup>29</sup> 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.<sup>30</sup>

To fulfill its mandate, UNESCO holds international conferences to deliberate issues and set standards, provides expert research and consultation to the primary organs of the UN system through the Economic and Social Council (ECOSOC), and coordinates with other entities to implement programs in the field.<sup>31</sup> 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.<sup>32</sup> 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.<sup>33</sup>

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.<sup>34</sup> 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.<sup>35</sup> 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.<sup>36</sup> For example, in 2013, the UNESCO Executive Board endorsed the Comprehensive Partnership Strategy, which outlined separate strategies for collaboration with individual categories of partners.<sup>37</sup> Overall, this policy framework was established on this 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.<sup>38</sup>

UNESCO’s relationship with the UN is overall governed by an agreement ratified by the General Assembly on 14 December 1946.<sup>39</sup> 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 GA

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<sup>27</sup> *Charter of the United Nations*, 1945, Art. 1; UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, p. 5.

<sup>28</sup> UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, art. V, art I, para 1.

<sup>29</sup> Conference of Allied Ministers of Education, *Conference for the establishment of UNESCO (ECO/CONF./29)*, 1945, p. 1.

<sup>30</sup> UNESCO, *General introduction to the standard-setting instruments of UNESCO*, 2017; UNESCO, *Drafting of the future Global Convention of Higher Education concludes*, 2017.

<sup>31</sup> UNESCO, *UNESCO at a glance (ERI/2010/WS/2)*, 2010, p. 32.

<sup>32</sup> UNESCO, *2014-2021: Medium-Term Strategy (37 C/4)*, 2014, p. 14.

<sup>33</sup> *Ibid.*

<sup>34</sup> UNESCO, *Constitution of the United Nations Educational, Scientific and Cultural Organization*, 1945, arts. X-XI.

<sup>35</sup> *Ibid.*, arts. X-XI.

<sup>36</sup> UNESCO, *Comprehensive Partnership Strategy*, 2013.

<sup>37</sup> *Ibid.*

<sup>38</sup> *Ibid.*

<sup>39</sup> UNESCO, *Agreement between the United Nations and UNESCO*, 1946.

when agenda matters relate to educational, scientific, or cultural matters.<sup>40</sup> ECOSOC is the primary mechanism for coordinating the operations and programs of specialized agencies; thus it serves as UNESCO's first point of contact with the UN system.<sup>41</sup> 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.<sup>42</sup> UNESCO maintains memorandums of understanding with 16 UN system partners that underline roles of cooperation to prevent the duplication of work.<sup>43</sup> UNESCO is empowered, in turn, to initiate studies and reports for consideration by ECOSOC.<sup>44</sup> 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."<sup>45</sup> Finally, UNESCO may furnish information to and request legal advisory opinions from the ICJ.<sup>46</sup> UNESCO further coordinates with civil society through its 199 National Commissions, agencies set up by the governments of UNESCO Member States and Associated Members.<sup>47</sup> The organization maintains direct partnerships with 370 international NGOs and 20 civil society organizations, which UNESCO maintains formal agreements with 87 IGOs and several institutions in the private sector.<sup>48</sup> UNESCO must provide ECOSOC information about any formal agreements with UN specialized agencies, IGOs, or NGOs before the agreements are enacted.<sup>49</sup> 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.<sup>50</sup> These partnerships provide critical information and implementation support for UNESCO's various programs and initiatives.<sup>51</sup> Additionally, these partners help UNESCO form policies, make decisions, and produce research materials by providing resources, operational support, and technical expertise.<sup>52</sup> Partners in the field, including bilateral government partners, NGOs, and private sector institutions, help mobilize financial and in-kind contributions resources from UNESCO for program implementation and meetings.<sup>53</sup>

### **Recent Sessions and Current Priorities**

UNESCO is actively engaged with events and activities supporting its programmatic work around the world, with 2019 as a focus year for education improvements, indigenous languages, and climate change actions.<sup>54</sup> Key activities include the implementation of UNESCO's program of work and budget for 2018-2021, adopted during the 39th session of the General Conference.<sup>55</sup> 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 sciences, and communication and information.<sup>56</sup> Specifically, the *Medium-Term Strategy 2014-2021* focuses on the work of UNESCO in

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<sup>40</sup> Ibid.

<sup>41</sup> *Charter of the United Nations*, 1945, Art. 63; UNESCO, *Agreement between the United Nations and UNESCO*, 1946.

<sup>42</sup> UNSCEB, *What We Do*; UNSCEB, *United Nations Educational, Scientific and Cultural Organization*, 2016.

<sup>43</sup> UNESCO, *Bureau of Strategic Planning, Partnering with UN Agencies*, 2017.

<sup>44</sup> UNESCO, *Agreement between the United Nations and UNESCO*, 1946.

<sup>45</sup> Ibid.

<sup>46</sup> Ibid.

<sup>47</sup> UNESCO, *National Commissions*, 2018; UNESCO, *Partnerships*, 2018.

<sup>48</sup> UNESCO, *Comprehensive Partnership Strategy (192 EX/5,INF)*, 2013; UNESCO, *Partnerships*, 2018.

<sup>49</sup> UNESCO, *Relations with the organizations of the UN System*, 2017; *Charter of the United Nations*, Art. 63; UNESCO, *Partnerships*, 2018.

<sup>50</sup> UNESCO, *Comprehensive Partnership Strategy (192 EX/5,INF)*, 2013; UNESCO, *Partnerships*, 2018.

<sup>51</sup> Ibid.

<sup>52</sup> Ibid.

<sup>53</sup> Ibid.

<sup>54</sup> UNESCO, *Dates of the 205th Session and Provisional List of Matters to be Examined by the Executive Board at its 205th Session*, 2018.

<sup>55</sup> UNESCO, *Draft Resolutions: First biennium 2018-2019 (39 C/5)*, 2017; UNESCO, *Preliminary Proposals by the Director-General Concerning the Draft Programme and Budget for 2018-2021 (39 C/5)*, 2016; UNESCO, *Preparation of the Draft Programme and Budget for 2018-2021 (39 C/5)*, 2015.

<sup>56</sup> UNESCO, *Approved programme and budget 2018-2019: first biennium of the 2018-2021 quadrennium (39 C/5)*, 2018.



providing equal access to quality education; the development of science, technology and innovation; the promotion of cultural heritage and cultural diversity.<sup>57</sup> Overall, the program also focuses on the UNESCO's contribution to the implementation of international frameworks, such as the 2030 Agenda and the Paris Agreement on Climate Change.<sup>58</sup>

At its 206<sup>th</sup> session on 9 October and 23 October 2019, UNESCO's Executive Board discussed a wide range of matters, such as Education for Sustainable Development beyond 2019; Mid-term Review of the UNESCO Operational Strategy on Youth 2014-2021; and the Memory of the World Programme.<sup>59</sup> Further, the Executive Board adopted decisions on various issues, including the preservation and protection of cultural heritage in conflict areas, and the safety of journalists and the issue of impunity.<sup>60</sup> Additionally, the Executive Board also determined the organization of the work of the 40<sup>th</sup> session of the General Conference in November 2019.<sup>61</sup>

On 21 May 2019, UNESCO partnered with the General Assembly to convene a high-level thematic debate on the topic of "Culture and Sustainable Development."<sup>62</sup> In accordance with General Assembly resolution 72/229, the high-level event aimed to highlight the connection between culture, climate change and environmental challenges; demonstrate the role culture plays in promoting decent work, social resilience, poverty reduction and other aspects of the 2030 Agenda; and illustrate how culture contributes to development.<sup>63</sup> Additionally, the international conference, "*Preservation of Tangible and Intangible Cultural Heritage: Topical Issues and Strategies to Resolve Them*," took place 26 August 2019 in Uzbekistan.<sup>64</sup> With over 900 participants from around the world, a wide range of topics were discussed, such as the safeguarding of both tangible and intangible heritage; cultural heritage and urban planning; and the role of intangible cultural heritage for sustainable development.<sup>65</sup>

From 16 to 18 May 2019, an international conference co-organized by UNESCO took place on the intersection between artificial intelligence (AI) and education.<sup>66</sup> This conference overall focused on the important role emerging technologies play in achieving SDG 4 (quality education).<sup>67</sup> Participants of this conference, which included over 500 international representatives from more than 120 Member States, in particular acknowledged the potential of AI to overcome challenges to achieving SDG 4, as well as the risks of using AI for education.<sup>68</sup> In addition to this conference, UNESCO published the *Beijing Consensus on Artificial Intelligence and Education* on 25 June 2019, which offers guidance and recommendations on effective ways to harnessing AI technologies for the achievement of SDG 4.<sup>69</sup>

## Conclusion

UNESCO continues to 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

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<sup>57</sup> Ibid.

<sup>58</sup> Ibid.

<sup>59</sup> UNESCO, *Revised agenda and timetable of work (of the 206th session of the Executive Board)*, 2019, pp. 6-8.

<sup>60</sup> UNESCO, *Decisions adopted by the Executive Board at its 206th session*, 2019.

<sup>61</sup> UNESCO, *Organization of the Work of the Session*, 2019.

<sup>62</sup> UN General Assembly, *High-level Event on Culture on Sustainable Development*, 2019.

<sup>63</sup> Ibid.

<sup>64</sup> UNESCO, *UNESCO Director-General to focus on heritage and culture during first official visit to Uzbekistan on 26 and 27 August*, 2019.

<sup>65</sup> ICHCAP, *Uzbekistan Hosts International Conference "Preservation of Tangible and Intangible Cultural Heritage: Topical Issues and Strategies to Resolve Them": ICHCAP and UNESCO Strengthen Cooperation for Safeguarding Silkroad ICH* 2019.

<sup>66</sup> UNESCO, *Beijing Consensus on Artificial Intelligence and Education: Outcome Document of the International Conference on Artificial Intelligence and Education*, 2019.

<sup>67</sup> Ibid.

<sup>68</sup> UNESCO, *International Conference on Artificial Intelligence and Education: Concept Note*, 2019, pp. 1-3.

<sup>69</sup> UNESCO, *Beijing Consensus on Artificial Intelligence and Education*, 2019.

protection and education.<sup>70</sup> By creating and maintaining partnerships, UNESCO is able to better mainstream initiatives such as the 2030 Agenda into its work.<sup>71</sup> Information sharing and collaboration between actors and agencies remain key in this effort.<sup>72</sup> 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).<sup>73</sup>

## Annotated Bibliography

United Nations Educational, Scientific and Cultural Organization. (2014). *2014-2021: Medium-Term Strategy (37 C/4)*. Retrieved 12 August 2018 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 18 July 2019 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 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. (2018). *Approved programme and budget 2018-2019: first biennium of the 2018-2021 quadrennium (39 C/5)*. Retrieved 21 September 2019 from: <https://unesdoc.unesco.org/ark:/48223/pf0000261648>

*This document was presented at the 39<sup>th</sup> Session of the General Conference in order to be approved. The programme and budget for 2018-2021 represents the second half of implementation of the Medium-Term Strategy for 2014-2021 Consisting of five parts, with part two being the most helpful, this document provides a general overview of UNESCO's budget and work for the years 2018-2021. Delegates will find part two of this document the most helpful, as it outlines the budget for each specific programme of work, including education, culture, and communication and information. 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.*

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<sup>70</sup> UNESCO, UNESCO, 2018.

<sup>71</sup> UNESCO, UNESCO and the Sustainable Development Goals, 2018.

<sup>72</sup> UNESCO, UNESCO Moving Forward the 2030 Agenda for Sustainable Development, 2017.

<sup>73</sup> Ibid.

United Nations Educational, Scientific and Cultural Organization. (2019). *Decisions adopted by the Executive Board at its 206<sup>th</sup> session*. Retrieved 20 August 2019 from: <https://unesdoc.unesco.org/ark:/48223/pf0000367821>

*At a fundamental level, this document includes information on the decisions adopted at the 206<sup>th</sup> session of the Executive Board. This document provides a good overview of matters and items discussed by the board, which include preparation for the 40<sup>th</sup> session of the General Conference; mid-term reviews on the implementation of strategies created by UNESCO; programming and budgeting; and reviews of the implementation of standard-setting instruments. 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. (2019). *Organization of the Work of the Session*. Retrieved 21 September 2019 from: <https://unesdoc.unesco.org/ark:/48223/pf0000368223/PDF/368223eng.pdf.multi>

*Written at the conclusion of the 206<sup>th</sup> session of the Executive Board, this document outlines the organization of the 40<sup>th</sup> session of the General Conference. Additionally, this resource is a good foundational document for Delegates to understand the way in which UNESCO meetings work. Specifically, this document includes information on voting rights of Member States; general policy debate; and plans for future strategies to be led and carried out by UNESCO. Overall, this document will help Delegates understand the work that will be undertaken by UNESCO at the 40<sup>th</sup> session of the General Conference.*

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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.”<sup>74</sup>*

### **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.<sup>75</sup> These preserved elements of society are the cultural heritage that represents the way of life for its people, and this cultural heritage requires active effort from the international community in order to ensure that it is safeguarded.<sup>76</sup> The preservation of cultural heritage is a constantly evolving and changing discipline that plays an impactful role in peacebuilding; however, many of these cultural expressions and manifestations of cultural heritage are at risk in times of conflict.<sup>77</sup> For example, in recent years, cultural heritage has increasingly been the target of systematic and deliberate attacks by extremist groups.<sup>78</sup> Due to the strong connection between culture and the identity of a population, the intentional destruction of cultural heritage causes significant obstacles in post-conflict peacebuilding and reconciliation.<sup>79</sup> Cultural heritage is fundamentally separated into two distinct categories: tangible cultural heritage and intangible cultural heritage (ICH).<sup>80</sup> ICH, such as oral traditions, performing arts, or rituals and festive events, lack a physical form and therefore require different measures for conservation than monuments, sites, and natural spaces, which are considered tangible cultural heritage.<sup>81</sup>

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, groups and, in some cases, individuals recognize as part of their cultural heritage.”<sup>82</sup> According to ICH, “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.<sup>83</sup> Additionally, post-conflict zones are identified as countries and territories that are in the wake of recent armed conflict.<sup>84</sup> The safeguarding of ICH in post-conflict areas is important in the pursuit of sustainable development because it contributes to many of the Sustainable Development Goals (SDGs) — safe and sustainable cities, economic growth, reduced inequalities, environmental protection, promotion of gender equality, and fostering peaceful and inclusive societies.<sup>85</sup> As part of its efforts toward the achievement of the *2030 Agenda for Sustainable Development* (2030 Agenda) (2015), UNESCO plays a significant role in safeguarding ICH in post-conflict areas.

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<sup>74</sup> Amartya Sen, *Culture & Development*, 2001, p. 1.

<sup>75</sup> UNESCO, *What is Intangible Cultural Heritage?*, 2011, p. 3.

<sup>76</sup> *Ibid.*, p. 3.

<sup>77</sup> *Ibid.*, p. 6.

<sup>78</sup> UNESCO, *The Role of Culture for Resilience, Peace and Security: a New International Agenda Promoted by UNESCO*, 2017.

<sup>79</sup> *Ibid.*

<sup>80</sup> UNESCO, *What is Intangible Cultural Heritage?*, 2011, p. 3.

<sup>81</sup> *Ibid.*, p. 3.

<sup>82</sup> UNESCO, *Convention for the Safeguarding of Intangible Cultural Heritage*, 2003, p. 2.

<sup>83</sup> *Ibid.*, p. 3.

<sup>84</sup> UNESCO, World Heritage Convention, *Warsaw Recommendation on Recovery and Reconstruction of Cultural Heritage*, 2018, p. 3.

<sup>85</sup> UNESCO Courier, *Agenda 2030: Challenges for us all*, 2030, p. 12.

## ***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.<sup>86</sup> 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.<sup>87</sup> 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.<sup>88</sup> At the of 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.<sup>89</sup> This Conference was one of the first times that the term “intangible heritage” was officially used by the United Nations (UN).<sup>90</sup> 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.<sup>91</sup>

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 ICH present in their territory.<sup>92</sup> 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.<sup>93</sup> Additionally, the 2003 Convention established the Intangible Cultural Heritage Fund, which is UNESCO’s primary method for funding projects to safeguard ICH.<sup>94</sup> 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 cooperation and assistance in safeguarding ICH.<sup>95</sup>

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 (IGOs) 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.<sup>96</sup> In particular, the *Warsaw Recommendation on Recovery and Reconstruction of Cultural Heritage* (Warsaw Recommendation) in 2018 was the product of an international conference that tackled the growing desire for universal guidelines on moving forward with

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<sup>86</sup> UNESCO, *Convention for the Protection of Cultural Property in the Event of Armed Conflict*, 1954, p. 5.

<sup>87</sup> UNESCO, *Declaration of Principles of International Cultural Co-operation*, 1966, p. 1.

<sup>88</sup> UNESCO, *Convention Concerning the Protection of the World Cultural and Natural Heritage*, 1972, p. 1.

<sup>89</sup> UNESCO, *World Conference on Cultural Policies*, 1982, p. 43.

<sup>90</sup> UNESCO, *1982-2000: from Mondiacult to Our Creative Diversity*, 2011.

<sup>91</sup> UN General Assembly, *Resolutions Adopted on the Reports of the Second Committee (A/RES/46/158(1991))*, 1991, p 123.

<sup>92</sup> UNESCO, *Convention for the Safeguarding of Intangible Cultural Heritage*, 2003, p. 5.

<sup>93</sup> 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.

<sup>94</sup> UNESCO, *Convention for the Safeguarding of Intangible Cultural Heritage*, 2003, p. 9.

<sup>95</sup> *Ibid.*, p. 2.

<sup>96</sup> UNESCO, *Browse the Lists of Intangible Cultural Heritage and the Register of Good Safeguarding Practices*, 2019; UNESCO, *2000 Onwards and the Drafting of the Convention*, 2011.



cultural properties of exceptional value after destruction due to conflict.<sup>97</sup> This recommendation furthered the 2003 Convention by addressing the growing impact of armed conflict on important cultural heritage.<sup>98</sup> The Warsaw Recommendation calls for the World Heritage Committee to develop clear guidance plans for reconstruction and recovery of World Heritage sites in post-conflict areas, advisory bodies to clarify its conservation and reconstruction doctrine, and for the international bodies, such as UNESCO, to reaffirm the vital role that World Heritage sites play in achieving sustainable development.<sup>99</sup> This recent effort directly assists in the achievement of SDG 4 (quality education), SDG 11 (sustainable cities and communities), and SDG 17 (strengthening of global partnerships for sustainable development).<sup>100</sup> More specifically, in post-conflict areas, UNESCO is dedicated to target 4.7 on the Education for Cultural Diversity and Peace, and target 17.17 on Public, Public-Private, and Civil Society Partnerships.<sup>101</sup> Regarding ICH specifically, UNESCO is dedicated to target 11.4 on the Safeguarding of Cultural and Natural Heritage, as well as target 17.9 on Capacity Building for the SDGs in National Planning, and target 17.16 on Multi-Stakeholder Partnerships.<sup>102</sup> In addition to the 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.<sup>103</sup>

### **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, for example, the establishments of the International Council of Museums in 1946 and the International Music Council in 1949.<sup>104</sup> UNESCO currently leads a network of over 170 intergovernmental organizations (IGOs) and non-governmental organizations (NGOs) in the mission of safeguarding ICH in post-conflict areas.<sup>105</sup> Since 2003, UNESCO has participated in 17 projects worldwide, which are targeted at safeguarding ICH in post-conflict areas, providing approximately \$1 million worth of aid to Member States.<sup>106</sup> Through partnerships with various Member States, NGOs, and the private sector, UNESCO contributes to five active projects spanning: Ukraine, Iraq, Colombia, and Niger. 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.<sup>107</sup> Additionally, the Intergovernmental Committee for the Safeguarding of Intangible Cultural Heritage 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.<sup>108</sup>

Aside from the efforts of UNESCO and other UN bodies, IGOs play their own role in the safeguarding of ICH.<sup>109</sup> For instance, the UN Office for Disaster Risk Reduction (UNDRR) works with its partners such as,

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<sup>97</sup> WHC, *Recommendations for World Heritage Recovery and Reconstruction Developed in Warsaw*, 2018.

<sup>98</sup> UNESCO, *World Heritage Convention, Warsaw Recommendation on Recovery and Reconstruction of Cultural Heritage*, 2018, p. 1.

<sup>99</sup> *Ibid.*

<sup>100</sup> UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015, p. 26.

<sup>101</sup> UNESCO, *Culture for the 2030 Agenda*, 2018, p. 18.

<sup>102</sup> *Ibid.*, p. 24.

<sup>103</sup> 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.

<sup>104</sup> UNESCO, *1946-1981: First Steps*, 2011.

<sup>105</sup> UNESCO, *Non-Government Organizations Accredited to Provide Advisory Services to the Committee*, 2019.

<sup>106</sup> UNESCO, *Projects for the Safeguarding of Intangible Cultural Heritage*, 2019.

<sup>107</sup> *Ibid.*

<sup>108</sup> UNESCO, *Functions of the Intergovernmental Committee for the Safeguarding of Intangible Cultural Heritage*, 2019.

<sup>109</sup> UNESCO, *Non-Government Organizations Accredited to Provide Advisory Services to the Committee*, 2019.

regional organizations, Member States, UN organizations, and civil society to research and publish documents directed at the safeguarding of ICH in times of crisis.<sup>110</sup> One example for this 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.<sup>111</sup> Other IGOs such as the International Centre for the Study of the Preservation and Restoration of Cultural Property provide workshops worldwide to ensure that ICH is preserved through training, information, research, and advocacy.<sup>112</sup> These IGOs play a vital role in addressing safeguarding of ICH in post-conflict areas by raising awareness and support for ICH conservation and restoration in post-conflict areas at all levels, from global bodies and governments to local communities.<sup>113</sup> 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, Southern African Intangible Cultural Heritage Cooperation, and Regional Centre for the Safeguarding of Intangible Cultural Heritage in South-Eastern Europe.<sup>114</sup>

NGOs, experts, and centers of research play a vital role in safeguarding ICH by preserving communities who are bearers of intangible cultural heritage and involving civil society in the implementation of the 2003 Convention in post-conflict areas at the national and international levels.<sup>115</sup> Article 9 of the 2003 Convention ensures that NGOs have the ability to effectively assist UNESCO in the safeguarding of ICH in post-conflict areas by providing accredited NGOs the ability to act in an advisory capacity to the Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage.<sup>116</sup> For example, the Aigine Cultural Research Center in Kyrgyzstan has worked since 2007 on promoting the inclusion of elements of traditional knowledge into formal educations, contributed to the safeguarding of ICH by exposing the "positive potential" of traditional culture in conflict prevention, and by empowering social groups who have become vulnerable due to conflict in achieving greater resilience through ICH.<sup>117</sup> A recent project from the Aigine Cultural Research Center, which ran from 2016 through 2017, worked on documenting the traditional wisdom of esteemed historic cultural figures.<sup>118</sup>

### ***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, it is addressed less frequently than tangible cultural heritage, which leads to far more devastating and long-lasting impacts or irreconcilable damages.<sup>119</sup> 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 eradicate certain cultures or populations.<sup>120</sup> 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.<sup>121</sup> 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

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<sup>110</sup> ICCROM, *First Aid to Cultural Heritage in Times of Crisis-Handbook*, 2018.

<sup>111</sup> UNDRR, *About PreventionWeb: Our Services*, 2019; UNDRR, *Themes & Issues*, 2019.

<sup>112</sup> ICCROM, *What is ICCROM*, 2019.

<sup>113</sup> Ibid.

<sup>114</sup> IRCI, *About IRCI: Organisation*, 2019; SAICH, *Measurable Impact*, 2019; Regional Centre Sofia, *About Regional Centre Sofia*, 2019.

<sup>115</sup> UNESCO, *Non-Governmental Organizations, Centres of Expertise and Research Institutes*, 2019; UNESCO, *Operational Directives for the Implementation of the Convention*, 2019.

<sup>116</sup> UNESCO, *Convention for the Safeguarding of Intangible Cultural Heritage*, 2003, p.5.

<sup>117</sup> Aigine Cultural Research Center, *Reset Building Anthropology in Eurasia, 2007-2010*, 2014.

<sup>118</sup> Aigine Cultural Research Center, *Building the Collective Memory about Outstanding Contemporary Guardians of Traditional Wisdom, 2016-2017*, 2019.

<sup>119</sup> ICHCAP, *ICH Courier Volume 33: Village Guardian Rituals and Communities*, 2017, p. 5.

<sup>120</sup> Ibid., p. 6.

<sup>121</sup> Ibid., p. 6.

use of its documentation to raise awareness in local communities of the valuable cultural impacts that ICH provides.<sup>122</sup>

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.<sup>123</sup> For example, a 2016-2018 project lead by UNESCO on the documentation and inventory of intangible cultural heritage in the Republic of the Sudan aimed to document and create a new inventory of the ICH in the Kordufan and Blue Nile regions of Sudan.<sup>124</sup> This project developed a national strategy and operational structure for documentation and inventorying that included preliminary training workshops focused on concepts and methods, fieldwork, and data collection.<sup>125</sup> On the groundwork of existing research in the region, this project established an inventorying database and website, purchased equipment for use by specially trained inventory teams, conducted fieldwork to document expressions, classified the data collected and elaborated on lists of each region's heritage.<sup>126</sup>

At the conclusion of the overall project, a sub-project called "The Culture Capital of Sudan" was to commence, which used annual presentations of ICH from each community in line with the national strategy for culture development to ensure continued sustainability after the initial project had ended.<sup>127</sup> The documentation and inventorying project intended to build the capacity of inventory and coordination teams of the project, researchers in ICH and related fields, ICH NGOs, and heritage professionals involved in the project, and to raise the awareness in local communities of the importance of their intangible cultural heritage by enabling them to participate in its documentation and inventorying.<sup>128</sup> Although documentation and inventorying is a common and effective method of building resilience for ICH, there are aspects of this process which can be improved upon, such as the cooperation with national governments to prepare a strategic plan that is optimized for the post-conflict area where documentation is occurring, adoption of superior methods of inventorying that can be applied generally, and development of efficient mechanisms to prepare elements of ICH for nomination and inscription into the Representative List of the Intangible Cultural Heritage of Humanity.<sup>129</sup>

### ***Role of Intangible Cultural Heritage 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.<sup>130</sup> Rather than ICH being solely perceived as a resource to be protected, it is instead being used as an asset that will help permeate social rehabilitation into post-conflict areas.<sup>131</sup> Of the five active projects targeted at post-conflict ICH, all of them incorporate elements that focus on the use of ICH for social benefit.<sup>132</sup> ICH is currently being used in Ukraine and Colombia to foster social cohesion and peace, assist the integration of internally displaced migrants into their host communities, and generate the conditions to help former combatants reintegrate into society following armed conflict.<sup>133</sup>

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<sup>122</sup> 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.

<sup>123</sup> UNESCO, *Identifying and Inventorying Intangible Cultural Heritage*, 2005. p. 14.

<sup>124</sup> UNESCO, *Request for International Assistance from the Intangible Cultural Heritage Fund*, 2015, p. 2.

<sup>125</sup> UNESCO, *Documentation and Inventory of Intangible Cultural Heritage in the Republic of the Sudan (a Pilot Project in Kordufan and Blue Nile Regions)*, 2019.

<sup>126</sup> Ibid.

<sup>127</sup> Ibid.

<sup>128</sup> Ibid.

<sup>129</sup> Ibid.

<sup>130</sup> UNESCO, *Colombia Bets on Intangible Cultural Heritage for Peacebuilding*, 2018.

<sup>131</sup> UNESCO, *Projects for the Safeguarding of Intangible Cultural Heritage*, 2019.

<sup>132</sup> Ibid.

<sup>133</sup> UNESCO, *Needs Assessment for Reinforcing Ukraine's National Capacities in Strategy Development for ICH Safeguarding*, 2019; UNESCO, *Protecting Cultural Heritage and Diversity in Complex Emergencies for*

A current project that 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*.<sup>134</sup> Following the signing of the peace agreement between the Government of Colombia and the Revolutionary Armed Forces of Colombia—People's Army (FARC-EP) at the end of 2016, this UNESCO project, funded in 2018, worked at using ICH as a means to support this peace agreement.<sup>135</sup> Though this project could not single-handedly bring lasting peace to Colombia, it succeeded in improving ICH resilience, while using ICH to help reintroduce ex-combatants into post-conflict society.<sup>136</sup> To improve ICH resilience and awareness, ICH education was promoted through civilian workshops that strengthened ICH management capacity.<sup>137</sup> To further fortify ICH, a collective memory construction initiative was implemented that related to the way in which the Conejo territory had been built socially and historically on ICH.<sup>138</sup> This initiative was focused in helping participants better understand the forms of ICH that were fundamental to their community's roots.<sup>139</sup> Additionally, this project helped reintegrate ex-combatants into civil society by arranging meetings that used shared elements of ICH to generate feelings of empathy between ex-combatants and civilians while creating an atmosphere that fosters rooting and reconciliation feelings.<sup>140</sup>

Although this project was effective as a community-led approach to using ICH for peacebuilding, by empowering the community to use ICH to revitalize their shared cultural identity within their post-conflict area, it was not entirely successful in ensuring peace.<sup>141</sup> As many of these community rehabilitation projects are still in their infancy, there are still many challenges yet to be overcome.<sup>142</sup> These challenges include ensuring that, while ICH is being used as an instrument for rehabilitation, it is also being safeguarded; the training and use of staff hired for a project who deeply understand the complex dynamic of the sensitive post-conflict territory and community that they are serving; and that agreements are made with local institutions to ensure that sustainability strategies are proposed and implemented from the onset of the project.<sup>143</sup>

## **Conclusion**

Though international efforts to safeguard ICH in post-conflict areas is still an initiative in its infancy relative to the safeguarding of tangible heritage, the international community has achieved many milestones at both the international and regional levels.<sup>144</sup> The efforts of the international community to effectively implement the mechanisms of the 2003 Convention, along with the targeted efforts of NGOs, IGOs, and regional governments, play instrumental roles in the achievement of the SDGs that are oriented towards the safeguarding of ICH.<sup>145</sup> Furthermore, it is important to identify the profound impact that documentation and inventorying plays in the safeguarding of ICH, as well as the unique role that ICH can play in the

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*Stabilization and Peace*, 2019; UNESCO, *Intangible Cultural Heritage as a Basis for Resilience, Reconciliation and Construction of Peace Environments in Colombia's Post-Agreements*, 2019.

<sup>134</sup> UNESCO, *Intangible Cultural Heritage as a Basis for Resilience, Reconciliation and Construction of Peace Environments in Colombia's Post-Agreements: Project Narrative Report*, 2019.

<sup>135</sup> Ibid.

<sup>136</sup> Ibid.

<sup>137</sup> Ibid.

<sup>138</sup> Ibid.

<sup>139</sup> Ibid.

<sup>140</sup> Ibid.

<sup>141</sup> UNESCO, *Meetings on Intangible Cultural Heritage (Co-) Organized by UNESCO: Paris Peace Forum*, 2019.

<sup>142</sup> UNESCO, *Intangible Cultural Heritage as a Basis for Resilience, Reconciliation and Construction of Peace Environments in Colombia's Post-Agreements: Project Narrative Report*, 2019.

<sup>143</sup> Ibid.

<sup>144</sup> UNESCO, *Tenth Anniversary 2003-2013: Share your activities*, 2013.

<sup>145</sup> ICHCAP, *Volume 27: Can ICH Safeguarding Contribute to the New 2030 SDGs? A Case Study from West Bengal, India*, 2016, p. 9.



reconciliation of post-conflict communities.<sup>146</sup> The vitality of ICH is deeply dependent on organizations like UNESCO and its partners to build strong and sustainable methods and frameworks that ensure that preserved elements of past societies can continue to be passed on to future generations.<sup>147</sup> It is the duty of UNESCO to develop mechanisms and frameworks to ensure that ICH is not at risk in post-conflict areas and can be used to assist in recovery efforts.<sup>148</sup>

### **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 ICH, 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 heritage, while also creating opportunities to use protected ICH for social development. Here are some further questions for Delegates to consider in their preparation. How can new technologies be used to improve ICH documentation methods for faster safeguarding? To what extent can Member States use pre-existing tangible heritage safeguarding methods to improve ICH safeguarding methods? What additional ways can ICH be utilized to foster sustainable development in post-conflict areas? Additionally, how can UNESCO continue to enhance the international efforts of safeguarding of ICH, at the local, regional, and international levels?

### **Annotated Bibliography**

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

*This UNESCO document is the culmination of over 50 years work of 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). *What is Intangible Cultural Heritage?*. Retrieved 15 August 2019 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 are 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. (2011). *1946-1981: First Steps*. Retrieved 18 August 2019 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*

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<sup>146</sup> UNESCO, *Identifying and Inventorying Intangible Cultural Heritage*, 2005, p. 14; UNESCO, *Colombia Bets on Intangible Cultural Heritage for Peacebuilding*, 2018.

<sup>147</sup> Intangible Cultural Heritage Courier of Asia and the Pacific, *Volume 27: Can ICH Safeguarding Contribute to the New 2030 SDGS? A Case Study from West Bengal, India*, 2016, p. 9.

<sup>148</sup> UNESCO, *Convention for the Safeguarding of Intangible Cultural Heritage*, 2003, p. 2.

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. (2019). *Projects for the Safeguarding of Intangible Cultural Heritage*. Retrieved 21 August 2019 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.*

United Nations Educational, Scientific and Cultural Organization. (2019) *Browse the Lists of Intangible Cultural Heritage and the Register of Good Safeguarding Practices*. Retrieved 25 August 2019 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.*

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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.”<sup>149</sup>*

### **Introduction**

One of the United Nations Educational, Scientific and Cultural Organization’s (UNESCO) main goals is to promote inclusive knowledge societies through the utilization of technology to make scientific knowledge more accessible, including through Open Access (OA).<sup>150</sup> Inclusive knowledge societies are defined as “a people-centered, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge.”<sup>151</sup> This ensures that individuals and communities can achieve their full potential and improves their quality of life.<sup>152</sup>

OA is the free access of scholarly peer-reviewed research to the public to read, use, copy, distribute, and to make use of the data and research in future work with proper credit to the original author.<sup>153</sup> 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.<sup>154</sup> As of 2019, over 13,000 journals containing more than 4 million scholarly research articles from 130 Member States were listed on the Directory of Open Access Journals.<sup>155</sup>

There are several sub-types of OA, each with different rights for users and different methods of publication.<sup>156</sup> The two most prominent of these sub-types are Green OA and Gold OA.<sup>157</sup> Green OA articles are published in subscription journals but self-archived in an OA archive, such as one operated by a university or research institution.<sup>158</sup> Generally, Green OA only allows consumers to read the articles, not to reuse the data and information for future work.<sup>159</sup> Gold OA articles are published on an Open Access Journal, which are defined by those listed on the Directory of Open Access Journals.<sup>160</sup> These articles allow for the public to read and reuse the article for any legal purpose, such as future scientific research, with proper credit given to the original author.<sup>161</sup> It is estimated that around 50% of the scholarly research is freely available online under some type of OA structure.<sup>162</sup>

While there is a growing prevalence of OA with more scholarly research published under some type of OA license, there are still many significant barriers to ensuring that all scientific research is OA.<sup>163</sup> Authors are accustomed to publishers handling how their work is made available.<sup>164</sup> OA shifts that responsibility to

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<sup>149</sup> 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.

<sup>150</sup> UNESCO General Conference, *Revised Draft Strategy on UNESCO’s Contribution to the Promotion of Open Access to Scientific Information and Research* (187 EX/10), 2011, p. 2.

<sup>151</sup> UNESCO, *Building Inclusive Knowledge Societies: a Review of UNESCO’s Action in Implementing the WSIS Outcomes*, 2015, p. 13.

<sup>152</sup> *Ibid.*, p. 13.

<sup>153</sup> UNESCO General Conference, *Revised Draft Strategy on UNESCO’s Contribution to the Promotion of Open Access to Scientific Information and Research* (187 EX/10), 2011, p. 2.

<sup>154</sup> UNESCO, *Policy Guidelines for the Development and Promotion of Open Access*, 2012, p. 3.

<sup>155</sup> Directory of Open Access Journals, *Directory of Open Access Journals*, 2019.

<sup>156</sup> Piwowar, et al., *The State of OA: a Large-scale Analysis of the Prevalence and Impact of Open Access Articles*, 2018, p. 1.

<sup>157</sup> *Ibid.*, p. 1.

<sup>158</sup> *Ibid.*, p. 1.

<sup>159</sup> *Ibid.*, p. 1.

<sup>160</sup> *Ibid.*, p. 1.

<sup>161</sup> *Ibid.*, p. 1.

<sup>162</sup> *Ibid.*, p. 1.

<sup>163</sup> UNESCO, *Concepts of Openness and Open Access*, 2015.

<sup>164</sup> *Ibid.*, pp. 59-60.

authors.<sup>165</sup> Quality concerns are often raised on how work is reviewed, although most OA journals do retain a peer-review process.<sup>166</sup> Additionally, financial sustainability and feasibility concerns are raised about how OA journals can operate without a traditional subscription-based model to access content.<sup>167</sup> Many of these concerns have been and are being discussed by UNESCO through collaborations and forums with publishers, authors, and institutions.<sup>168</sup> 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.<sup>169</sup> At least ten of the Sustainable Development Goals (SDGs) require frequent scientific input to achieve and availability of that information will be critical to achieving the targets set in the *2030 Agenda for Sustainable Development* (2030 Agenda) (2015).<sup>170</sup> OA is therefore a central supporting role for UNESCO in regard to the SDGs and ensuring that actionable policies to overcoming barriers to the adoption of OA will be central to achieving UNESCO's Open Access Strategy.<sup>171</sup>

### ***International and Regional Framework***

Article 27 of the *Universal Declaration on Human Rights* (1947) provides an historical underpinning to the notion of free access to scientific information.<sup>172</sup> It outlines an enshrined right to “freely participate in the cultural life of the community...and share in scientific advancement and its benefits.”<sup>173</sup> Building upon this, however, Article 27 does also recognize a right to the “protection of...material interests” related to the authorship of such information, ensuring that authors’ works are protected and that they can also benefit from their work.<sup>174</sup> These were both 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.”<sup>175</sup> UNESCO’s own constitution specifically highlights its objective to assist in the diffusion of knowledge as well as the “exchange of publications and...scientific interest.”<sup>176</sup>

The 1974 UNESCO *Recommendation on the Status of Scientific Researchers* is a formative document in outlining the role that science and scientific research can play in society as a whole.<sup>177</sup> In calling upon Member States to foster an environment through which the scientific community may thrive, the resolution formally recognizes that the open communication and sharing of scientific data, including results, hypothesis, and opinions, lie at the core of the scientific process.<sup>178</sup> 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 throughout.<sup>179</sup> These concepts were placed in a broader sociological perspective in 2003 with the adoption of the *Geneva Declaration of Principles and Geneva Plan of Action* from the first World Summit on the Information Society (WSIS).<sup>180</sup> These documents defined a “common vision” for a modern information society, wherein advances in technology

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<sup>165</sup> Ibid., p. 60.

<sup>166</sup> Ibid., p. 60.

<sup>167</sup> Ibid., p. 61.

<sup>168</sup> Ibid., p. 61.

<sup>169</sup> UNESCO General Conference, *Revised Draft Strategy on UNESCO’s Contribution to the Promotion of Open Access to Scientific Information and Research* (187 EX/10), 2011.

<sup>170</sup> UNESCO, *Open Access to Scientific Information*, 2017.

<sup>171</sup> Ibid.

<sup>172</sup> UN General Assembly, *Universal Declaration of Human Rights* (A/RES/217 A (III)), 1948.

<sup>173</sup> Ibid.

<sup>174</sup> UN General Assembly, *Universal Declaration of Human Rights* (A/RES/217 A (III)), 1948 Ibid.; Amnesty International UK, *What is the Universal Declaration of Human Rights?*, 2017.

<sup>175</sup> UN General Assembly, *International Covenant on Economic, Social and Cultural Rights* (A/RES/220 (XXI)), 1966.

<sup>176</sup> UNESCO, *UNESCO Constitution*, 1945.

<sup>177</sup> UNESCO General Conference, *Recommendation on the Status of Scientific Researchers*, 1974.

<sup>178</sup> UNESCO, *Recommendation on the Status of Scientific Researchers*, 1974.

<sup>179</sup> UNESCO General Conference, *Declaration on Science and the use of Scientific Knowledge and the Science Agenda -Framework for Action* (30 C/15), 1999.

<sup>180</sup> WSIS, *Declaration of Principles*, 2003.



and the removal of access barriers can allow for unparalleled access to information for all people, including via the sharing of scientific research.<sup>181</sup>

An understanding of how OA may be practically operationalized, however, 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).<sup>182</sup> Together, these documents have formed the commonly accepted definitions and differing methods of OA and how they may actually be implemented.<sup>183</sup> Generally, OA was defined as freely accessible information that everyone can read and utilize for future development of scientific knowledge with proper credit to the original author.<sup>184</sup> Recognizing that there exists multiple methods of OA, and debate over which may be the most preferable, these declarations collectively present a variety of OA methods.<sup>185</sup> Most prominently, the Berlin Declaration outlined what would later be termed “Green OA” and “Gold OA.”<sup>186</sup> The former entails an author publishing their work in any standard journal before self-depositing into an OA repository whereas the latter involves publishing their work immediately in an OA journal.<sup>187</sup>

Utilizing these commonly accepted working definitions, UNESCO has subsequently formalized its own 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 primary components of its work on the topic.<sup>188</sup> Building on its 1974 predecessor, UNESCO has also adopted an updated *Recommendation on Science and Scientific Researchers* (2017), which calls upon not only Member States but also individual institutions and scientists to promote open access to scientific research.<sup>189</sup> These incremental developments have led UNESCO, however, to recognize the lack of a universally accepted set of overarching norms and requirements of “open science.”<sup>190</sup> UNESCO is currently undertaking a series of preliminary studies and consultations towards a prospective adoption of a universal recommendation on open science and OA that may call for more stringent requirements on Member States to promote and foster its objectives.<sup>191</sup>

Alongside this, the international community has recognized the role that open access to scientific information plays in the achievement of other international frameworks.<sup>192</sup> Readily available research that can inform policy decisions has been noted as a significant advantage as Member States work to meet targets specified in the SDGs.<sup>193</sup> For example, SDG 3 (good health and well-being) requires consistent analysis of findings from medical journals that can inform policy and strategic decisions on the part of governments.<sup>194</sup> Furthermore, this fundamental relationship between access to information and development is recognized with SDG 16 (peace, justice and strong institutions), Target 10.2, which calls upon Member States to enact constitutional or systemic guarantees for public access to information.<sup>195</sup>

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<sup>181</sup> Ibid., p. 2.

<sup>182</sup> Suber, *Open Access*, 2015.

<sup>183</sup> Ibid.

<sup>184</sup> UNESCO General Conference, *Revised Draft Strategy on UNESCO’s Contribution to the Promotion of Open Access to Scientific Information and Research* (187 EX/10), 2011, p. 2.

<sup>185</sup> Suber, *Open Access*, 2015.

<sup>186</sup> Ibid.

<sup>187</sup> Max Planck Society, *Berlin Declaration*.

<sup>188</sup> UNESCO General Conference, *Revised Draft Strategy on UNESCO’s Contribution to the Promotion of Open Access to Scientific Information and Research* (187 EX/10), 2011.

<sup>189</sup> UNESCO, *UNESCO Recommendation on Science and Scientific Researchers*, 2017.

<sup>190</sup> UNESCO Executive Board, *Preliminary Study of the Technical, Financial and Legal Aspects on the Desirability of a UNESCO Recommendation on Open Science*, 2019, p. 3.

<sup>191</sup> Ibid., p. 3.

<sup>192</sup> UNESCO, *Open Access to Scientific Information*.

<sup>193</sup> Mamtora & Pandey, *Identifying the Role of Open Access Information in Attaining the UN SDGs: Perspectives from the Asia-Oceania Region*, 2018, pp. 6-7.

<sup>194</sup> Ibid., p. 6.

<sup>195</sup> UN DESA, *Sustainable Development Goal 16*.

## ***Role of the International System***

As the UN's specialized agency for science, UNESCO maintains a unique responsibility in advocating for the accessibility and diffusion of scientific research.<sup>196</sup> With the adoption of its own strategic action plan on OA, UNESCO has subsequently categorized its work into three “core areas”: the provision of policy advice to decision-makers, capacity-building support for organizations, and to serve as a clearing-house on OA codes of practice and resources.<sup>197</sup>

Policy advice entails UNESCO serving as a means through which national and regional governments can build their understanding of OA and subsequently prepare consistent OA policies that align with international standards.<sup>198</sup> 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.<sup>199</sup> Flagship publications, such as UNESCO's *Policy Guidelines for the Development and Promotion of Open Access* (2012), allow national policy-makers to better understand the opportunities and challenges of OA adoption.<sup>200</sup> Similarly, UNESCO's Global Open Access Portal (GOAP) is an online tool that provides an overview of the current global status of OA adoption.<sup>201</sup> In doing so, the GOAP is able to provide clear information for national policy-makers on where and why OA development has been most successful.<sup>202</sup> National examples 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 is OA.<sup>203</sup> Internally, UNESCO has also mandated that all of its own research publications must conform to OA standards.<sup>204</sup>

In addition to its role in advising national governments, UNESCO has developed partnerships with individual universities, publishers, libraries, and specialized non-governmental organizations in order to strengthen collaboration and build shared capacity.<sup>205</sup> To support this environment of collaboration, UNESCO partnered with the Science Communication Institute and George Mason University in 2015 to launch the Open Scholarship Initiative (OSI).<sup>206</sup> The OSI is designed as a series of regular conferences and discussion forums that can “correct a broad range of scholarly communications deficiencies,” bringing together multi-sectoral partners to discuss a range of OA topics.<sup>207</sup> The OSI is currently expected to release a series of action plans that will collate and summarise the findings from previous conferences across 51 individual topics around OA.<sup>208</sup>

Given the multi-sectoral nature of the topic, networks such as the WSIS Forum allow UNESCO to collaborate with fellow UN stakeholders involved with the ‘information society’, including the International Telecommunication Union, United Nations Development Programme, and the World Health Organization alongside partners from the private sector.<sup>209</sup> At its most recent session, coordinators of six international publication platforms formed the Global Alliance of Open Access Scholarly Communication Platform,

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<sup>196</sup> UNESCO Executive Board, *Preliminary Study of the Technical, Financial and Legal Aspects on the Desirability of a UNESCO Recommendation on Open Science*, 2019, p. 3.

<sup>197</sup> UNESCO General Conference, *Revised Draft Strategy on UNESCO's Contribution to the Promotion of Open Access to Scientific Information and Research (187 EX/10)*, 2011, pp. 7-9.

<sup>198</sup> *Ibid.*, pp. 7-9.

<sup>199</sup> UNESCO, *UNESCO Open Access Strategy*, 2011.

<sup>200</sup> UNESCO, *Policy Guidelines for the Development and Promotion of Open Access*, 2012.

<sup>201</sup> UNESCO, *Global Open Access Portal*, 2017.

<sup>202</sup> *Ibid.*

<sup>203</sup> 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.

<sup>204</sup> UNESCO, *Open Access Policy*, 2013.

<sup>205</sup> UNESCO General Conference, *Revised Draft Strategy on UNESCO's Contribution to the Promotion of Open Access to Scientific Information and Research (187 EX/10)*, 2011, pp. 7-9.

<sup>206</sup> OSI, *OSI 2018: Report on the 1<sup>st</sup> Summit Meeting of the Global Open Scholarship Initiative*, 2018, pp. 1-2.

<sup>207</sup> *Ibid.*, p. 2.

<sup>208</sup> *Ibid.*, pp. 7-9.

<sup>209</sup> ITU, *WSIS Forum 2019*.

designed to “democratize scientific knowledge” through technology transfer, shared methodologies, and shared advocacy.<sup>210</sup>

### **Capacity Building**

One of UNESCO’s main functions in promoting open access to science and research is through capacity building.<sup>211</sup> The United Nations defines capacity building as developing and strengthening skills, processes, and resources that organizations need.<sup>212</sup> UNESCO’s capacity-building activities include working with organizations, including governments, academic institutions and publishers, to strengthen and develop their OA policies and develop training curricula to train people on OA.<sup>213</sup>

There are several challenges facing the transition towards OA, ranging from copyright to quality concerns.<sup>214</sup> A major barrier remains the economic sustainability of OA platforms and to the researchers that conduct and ultimately publish their work.<sup>215</sup> A common misconception of OA is that costs are minimal, yet maintaining free and accessible OA journals and the digital infrastructure required for them does carry financial cost.<sup>216</sup> Some OA journals have replaced the subscription model, where the consumer pays to read and reuse the findings of the research, with a model where the researchers pay to get their work published.<sup>217</sup> These fees are known as “article processing charges.”<sup>218</sup> However, authors and researchers often challenge this approach, citing concerns over the fairness of their having produced valuable information yet being obligated to pay to get it disseminated.<sup>219</sup>

UNESCO also works to implement OA through capacity-building programs such as developing repositories and journals.<sup>220</sup> For example, UNESCO and The International Centre for the Registration of Serial Publications, an intergovernmental organization that streamlines and harmonizes internationally how documents are identified, created The Directory of Open Access Scholarly Resources (ROAD).<sup>221</sup> ROAD is system that gives people access to OA content globally.<sup>222</sup>

However, 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.<sup>223</sup> OA relies heavily on the distribution of freely accessible information online, however the global internet penetration is only 57%.<sup>224</sup> Improving access to the internet is an important capacity building target for UNESCO in order to implement OA globally.<sup>225</sup> As a result, in 2015 at UNESCO’s General Conference, internet universality was endorsed and recognized the important role that increasing access to the internet has on the SDGs.<sup>226</sup>

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<sup>210</sup> *Launch of the Global Alliance of Open Access Scholarly Communication Platforms to Democratize Knowledge*, UNESCO, 2019.

<sup>211</sup> UNESCO General Conference, *Revised Draft Strategy on UNESCO’s Contribution to the Promotion of Open Access to Scientific Information and Research (187 EX/10)*, 2011.

<sup>212</sup> UN Academic Impact, *Capacity Building*.

<sup>213</sup> UNESCO, *UNESCO Open Access Strategy*, 2011.

<sup>214</sup> UNESCO, *Concepts of Openness and Open Access*, 2015, pp. 59-60.

<sup>215</sup> *Ibid.*, p. 60.

<sup>216</sup> *Ibid.*, pp. 59-60.

<sup>217</sup> Foxall & Nailor, *Sustainability in Open Access Publishing: The eCancer case Study*, 2016, p. 113.

<sup>218</sup> *Ibid.*, p. 113.

<sup>219</sup> UNESCO, *Concepts of Openness and Open Access*, 2015, p. 62.

<sup>220</sup> UNESCO, *Open Access to Scientific Information and Research*.

<sup>221</sup> UNESCO, *UNESCO join hands with ISSN to create ROAD to enhance access to Open Access Scholarly Resources*.

<sup>222</sup> *Ibid.*

<sup>223</sup> UNESCO, *Open Access to Scientific Information and Research*; IGI-Global, *What is Internet Penetration*, 2019.

<sup>224</sup> UNESCO, *Global Open Access Portal: Africa*, 2017; Statista, *Global Internet Penetration Rate as of January 2019*, 2019.

<sup>225</sup> UNESCO, *Open Access to Scientific Information and Research*.

<sup>226</sup> UNESCO, *UNESCO’s Internet Universality Indicators: A Framework for Assessing Internet Development*, 2018.

## **Standard Setting**

In addition to UNESCO's role in capacity building for OA, it also works as a standard-setter and provider of policy advice on OA to Member States and organizations.<sup>227</sup> UNESCO develops courses and facilitates forums to train national governments and specific organizations on how to adopt OA policies, as well as providing advice on how OA principles can be integrated into national policymaking.<sup>228</sup> 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.<sup>229</sup> Ensuring a standard on how the work is archived in journals allows search engines to search all archives simultaneously.<sup>230</sup>

A major focus of UNESCO's role as a standard-setter for OA is to ensure that information is handled in an ethical and accessible manner.<sup>231</sup> Encouraging Member States to adopt consistent practices on how to archive scholarly articles is important in meeting this goal so that all information produced and archived can be easily accessed by all.<sup>232</sup> The Registry of Open Access Repository Mandates and Policies (ROARMAP) tracks mandates and policies adopted by research institutions, universities, and funders of research.<sup>233</sup> As such, collaboration and partnership building are core areas of focus for UNESCO in the adoption of standard OA policies and mandates.<sup>234</sup>

## **Conclusion**

OA to scientific information is an important tool in ensuring the targets set forth in the 2030 Agenda are met.<sup>235</sup> Many of the SDGs require consistent scientific input to track progress and to identify areas where further action is needed, requiring a transparent and accessible approach to the diffusion of scientific data.<sup>236</sup> More broadly, OA is a fundamental facet of promoting equitable development and the creation of modern 'knowledge societies'.<sup>237</sup> The more widely available scientific research, the greater the readership that can foster new innovations that lead to advances in all areas of scientific discovery important for human development.<sup>238</sup> However, there are barriers to OA adoption such as funding, copyright, publication methods, and general awareness raising needs on the benefits of OA.<sup>239</sup> UNESCO's role as a standard-setter and collaborative agency is important to continued promotion of OA and the benefits to adopting OA policy and mandates.<sup>240</sup>

## **Further Research**

In their own research on Open Access to Scientific Information and Research, Delegates should consider the following: What are potential other barriers to adopting OA policies not discussed in this guide? How can UNESCO facilitate discussion and work to finding actionable solutions to the barriers discussed above and other challenges facing full OA adoption? How can UNESCO fulfill its role as a standard-setter

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<sup>227</sup> UNESCO General Conference, *Revised Draft Strategy on UNESCO's Contribution to the Promotion of Open Access to Scientific Information and Research (187 EX/10)*, 2011.

<sup>228</sup> *Ibid.*

<sup>229</sup> UNESCO, *Policy Guidelines for the Development and Promotion of Open Access*, 2012, p. 15.

<sup>230</sup> *Ibid.*, p. 15.

<sup>231</sup> *Ibid.*, p. 15.

<sup>232</sup> Registry of Open Access Repository Mandates and Policies, *Welcome to ROARMAP*.

<sup>233</sup> *Ibid.*

<sup>234</sup> UNESCO General Conference, *Revised Draft Strategy on UNESCO's Contribution to the Promotion of Open Access to Scientific Information and Research (187 EX/10)*, 2011.

<sup>235</sup> UNESCO, *Open Access to Scientific Information*, 2017.

<sup>236</sup> *Ibid.*

<sup>237</sup> *Ibid.*

<sup>238</sup> UNESCO General Conference, *Revised Draft Strategy on UNESCO's Contribution to the Promotion of Open Access to Scientific Information and Research (187 EX/10)*, 2011.

<sup>239</sup> UNESCO, *Concepts of Openness and Open Access*, 2015.

<sup>240</sup> UNESCO General Conference, *Revised Draft Strategy on UNESCO's Contribution to the Promotion of Open Access to Scientific Information and Research (187 EX/10)*, 2011.



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?

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<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 keen understanding on the specific of the OA proposals and modes of OA publications it will be difficult to propose solutions that are appropriate for various Member States needs.*

Piowar H., et al. (2018). *The state of OA: a Large-Scale Analysis of the Prevalence and Impact of Open Access Articles*. PeerJ. Retrieved 14 September 2019 from:  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5815332/>

*This study provides a comprehensive list of the various types of OA and the state of OA journals and publications. Understanding the various sub-types of OA will be important for Delegates in order to differentiate and determine the appropriate specific OA standards and policies for the Committee and Member States. Delegates should know the various OA modes of publishing and the state of the industry in order to find solutions to the challenges to adopting OA policies.*

United Nations Educational, Scientific and Cultural Organization. (n.d.) *Open Access to Scientific Information and Research*. Retrieved 15 September 2019 from:  
[http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/images/GOAP/3544.11\\_CI\\_E\\_Open%20Access%20brochure.indd.pdf](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 work that UNESCO is 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 14 September 2019 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 15 September 2019 from: <https://unesdoc.unesco.org/ark:/48223/pf0000232207>

*This report is one of the various modules developed by UNESCO to education 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 in order 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 in order to propose solutions that meet these challenges.

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### III. Harnessing Emerging Technologies for the Achievement of SDG 4

#### **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).<sup>241</sup> While SDG 4 focuses solely on education, education related targets are featured within seven of the 17 goals.<sup>242</sup> The purpose of SDG 4 is to “ensure inclusive and equitable quality education and promoting lifelong learning opportunities for all.”<sup>243</sup>

While there is no universally agreed upon definition of ‘emerging technologies’ by the UN, the Secretary-General’s report on *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.<sup>244</sup> Societies can use the transformative power of emerging technologies to make their many knowledge forms (indigenous, local wisdom, techno-scientific knowledge) available for everybody.<sup>245</sup>

Universal Design for Learning, as defined by the United Nations Educational, Scientific and Cultural Organization (UNESCO), means that the design of products, programs, and services are to be “usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.”<sup>246</sup> Open educational resources (OER) are educational resources that are openly available for use by teachers and students alike.<sup>247</sup> Coupled with the growing ownership of mobile devices globally, it offers teachers and students a more flexible approach to learning by enabling anytime, anywhere learning as well as bridging formal and informal learning.<sup>248</sup>

Furthermore, the field of AI has gathered the interest of governments and industry alike, since its inception at the 1956 Dartmouth Conference.<sup>249</sup> While there is yet no agreed upon definition of AI, research on AI has focuses mainly on learning, reasoning, problem solving, perception and using language.<sup>250</sup> Therefore, educational data mining and learning analytics are two fields, which can help with the achievement of SDG 4.<sup>251</sup>

#### **International and Regional Framework**

The *Universal Declaration of Human Rights* (UDHR) was adopted by the UN General Assembly on 10 December 1948.<sup>252</sup> Article 26 of the UDHR states that every person has a right to education and that technological education should be available to all.<sup>253</sup> 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.<sup>254</sup> 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.<sup>255</sup>

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<sup>241</sup> UNESCO UIS, *Quick Guide to Educational Indicators for SDG4*, 2018, p. 7.

<sup>242</sup> *Ibid.*, p. 7.

<sup>243</sup> *Ibid.*, p. 8.

<sup>244</sup> UN Secretariat, *UN Secretary-General’s Strategy on New Technologies*, 2018.

<sup>245</sup> UNESCO, *UNESCO ICT Competency Framework for Teachers*, 2018.

<sup>246</sup> *Ibid.*

<sup>247</sup> *Ibid.*

<sup>248</sup> *Ibid.*

<sup>249</sup> UNESCO, *Artificial Intelligence in Education: Challenges and Opportunities for Sustainable Development*, 2019, p. 8.

<sup>250</sup> *Ibid.*, p. 9.

<sup>251</sup> *Ibid.*, p. 9.

<sup>252</sup> UN General Assembly, *Universal Declaration of Human Rights (A/RES/217 A (III))*, 1948.

<sup>253</sup> *Ibid.*

<sup>254</sup> UNESCO, *Convention Against Discrimination in Education*, 1960.

<sup>255</sup> *Ibid.*

The international community expanded upon this with the Millennium Development Goals and their successors, the SDGs.<sup>256</sup> With the adoption of 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.<sup>257</sup> In addition, target 4.4 measures technical and vocational skills of youth and adults and measures the age of people with skills in information and communications technology (ICT).<sup>258</sup> To advance progress towards SDG 4, the global education community adopted the Education 2030 Framework for Action in November 2015.<sup>259</sup> 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.<sup>260</sup> The 2015 *Incheon Declaration* directs UNESCO to lead and coordinate actions towards achieving SDG 4.<sup>261</sup> It states specifically that UNESCO should utilize ICT to increase literacy and to support numeracy programs.<sup>262</sup>

The *Qingdao Declaration* of 2015 provides Member States with policy recommendations on the implementation of ICT in educational settings.<sup>263</sup> 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.”<sup>264</sup> 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).<sup>265</sup>

Building on the *Qingdao Declaration*, UNESCO adopted the first international consensus on how best to harness the developing technologies of AI in the educational sector.<sup>266</sup> 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.<sup>267</sup> 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.<sup>268</sup>

### **Role of the International System**

UNESCO aims to fulfill its mandated role by the 2015 *Incheon Declaration* 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.<sup>269</sup> At the global level, UNESCO has convened three meetings of the SDG-Education 2030 Steering Committee, which is the main global multi-

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<sup>256</sup> UNESCO UIS, *Quick Guide to Educational Indicators for SDG4*, 2018, p. 7.

<sup>257</sup> *Ibid.*, p. 7.

<sup>258</sup> *Ibid.*, p. 30.

<sup>259</sup> *Ibid.*, p. 7.

<sup>260</sup> UNESCO Executive Board, *SDG 4: Education 2030 (205 EX/6 (2018))*, 2018.

<sup>261</sup> UNESCO, *Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4*, 2016.

<sup>262</sup> *Ibid.*, p. 48.

<sup>263</sup> UNESCO, *Leveraging Information and Communication Technologies to Achieve the Post-2015 Education Goal*, 2017.

<sup>264</sup> UNESCO, *Education 2030: Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4*, 2016, p. 32.

<sup>265</sup> UNESCO, *2017 Qingdao Statement*, 2017.

<sup>266</sup> *First Ever Consensus on Artificial Intelligence and Education Published by UNESCO*, UNESCO, 2019.

<sup>267</sup> UNESCO, *Beijing Consensus on Artificial Intelligence and Education*, 2019.

<sup>268</sup> *Ibid.*, pp. 10-11.

<sup>269</sup> UNESCO Executive Board, *SDG 4: Education 2030 (205 EX/6)*, 2018.

stakeholder coordination and consultation mechanism for the achievement of SDG 4.<sup>270</sup> At regional levels, SDG 4 – Education 2030 consultations have been organized across all regions/subregions.<sup>271</sup> 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.<sup>272</sup>

The High-Level Political Forum on Sustainable Development (HLPF) is the primary body responsible for policymaking in relation to and oversight of the SDGs.<sup>273</sup> It oversees a network of processes to “facilitate sharing of experiences, including successes, challenges and lessons learned, and provides political leadership, guidance and recommendations for follow-up.”<sup>274</sup> The HLPF meets each July under the auspices of the Economic and Social Council (ECOSOC) and also convenes every four years in September to review a set of five to six goals, ensuring that all are reviewed within a four-year cycle.<sup>275</sup> SDG 4 is being reviewed for the first time in 2019.<sup>276</sup> A companion publication by the UNESCO Institute for Statistics and the Global Education Monitoring Report, titled *Meeting Commitments: Are Countries on Track to Achieve SDG 4?*, will be launched on the occasion of the 2019 HLPF.<sup>277</sup> ICT implementation is one of the aspects measured in the report.<sup>278</sup> Indicator 4.4.1 measures the proportion of youth and adults with ICT skills.<sup>279</sup> These skills can range from sending emails to writing a computer program, and measure how knowledgeable and proficient the person is with new technologies.<sup>280</sup>

UNESCO has developed the ICT Competency Framework for Teachers (ICT CFT) as a tool to guide pre-, in-service as well as ongoing formal and informal technical support for teachers in education.<sup>281</sup> The ICT CFT is intended to be adapted to support national and institutional goals by providing an up-to-date framework for policy development and capacity building.<sup>282</sup> 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.<sup>283</sup> Doing so will assist teachers in knowledge acquisition, deepening and creation.<sup>284</sup>

UNESCO is also responsible for convening a variety of conferences and discussion platforms that allow for the exchange of best practice in relation to how ICT can impact education.<sup>285</sup> INIE 2030 convenes governmental agencies responsible for ICT in education, non-state agencies, regional and global partner organizations, and academic experts, including UNESCO Chairs.<sup>286</sup> The goal of this network is to “plan and coordinate projects on leveraging ICT for achieving Education 2030 in the following areas: 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.”<sup>287</sup> Conferences such as the International Conference on Artificial Intelligence and Education also serve as a forum for partners to discuss strategies for overcoming challenges around the integration of AI in education, and how policies may be adopted to incorporate its use in educational curricula.<sup>288</sup>

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<sup>270</sup> UNESCO, *Beyond Commitments 2019: How Countries Implement SDG 4*, 2019, p. 3.

<sup>271</sup> *Ibid.*, p. 3.

<sup>272</sup> *Ibid.*, p. 3.

<sup>273</sup> UN DESA, *High-Level Political Forum on Sustainable Development*. 3

<sup>274</sup> UNESCO, *Beyond Commitments 2019: How Countries Implement SDG 4*, 2019, p. 3.

<sup>275</sup> *Ibid.*, p. 3.

<sup>276</sup> *Ibid.*, p. 4.

<sup>277</sup> *Ibid.*, p. 4.

<sup>278</sup> *Ibid.*, p. 4.

<sup>279</sup> UNESCO UIS, *Quick Guide to Education Indicators for SDG 4*, 2018.

<sup>280</sup> *Ibid.*

<sup>281</sup> UNESCO, *UNESCO ICT Competency Framework for Teachers*, 2018, p. 8.

<sup>282</sup> *Ibid.*, p. 8.

<sup>283</sup> *Ibid.*, p. 8.

<sup>284</sup> *Ibid.*, p. 9.

<sup>285</sup> UNESCO, *ICT in Education*.

<sup>286</sup> UNESCO, *2017 Qingdao Statement*, 2017.

<sup>287</sup> UNESCO, *Leveraging Information and Communication Technology to Achieve Education 2030 Report of the UNESCO 2017 International Forum on ICT and Education 2030*, 2017, p. 27.

<sup>288</sup> UNESCO, *ICT in Education*.

Furthermore, UNESCO also organizes Mobile Learning Weeks.<sup>289</sup> The event is held annually at the UNESCO headquarters in Paris, France and features a symposium as well as strategy labs.<sup>290</sup> Mobile Learning Week 2019 focused on how AI can help with sustainable development.<sup>291</sup> UNESCO organizes this 5-day event with its confirmed partners to showcase new and innovative ideas that help further SDG 4.<sup>292</sup>

### ***Open Educational Resources (OER)***

The term OER was formalized at the 2002 UNESCO Forum on the Impact of Open Courseware for Higher Education in Developing Countries.<sup>293</sup> OER can be defined as, “teaching and learning resources in any medium, digital or otherwise, that permit no-cost access, use, reuse and repurposing by others with no or limited restrictions.”<sup>294</sup>

With low-cost mobile devices now becoming ubiquitous, even in developing countries, easier access to low or no-cost digital resources is more readily available.<sup>295</sup> While the idea to use cost-free resources is one beneficial aspect of OER, the license-free nature of it also allows educators to adapt and repurpose the content of the educational resource.<sup>296</sup> Especially important is the fact that educators can localize the material.<sup>297</sup> This makes educational resources relevant to an instructor’s or institution’s context and culture.<sup>298</sup> Providing access to educational material is another way OER can help in the achievement of SDG 4.<sup>299</sup> Low-cost mobile devices are becoming more readily available throughout the world and enable access to educational materials in areas with poorly developed infrastructure in both rural and urban contexts.<sup>300</sup> While low-cost mobile devices are becoming more readily available, continuous internet access is still limited for many people.<sup>301</sup> Different obstacles and limitations, such as the collaboration of copyright holders and the opposition of publishers, also inhibit the growth of OER.<sup>302</sup> Furthermore, while OER has been cited as being able to reduce costs for teachers or institutions, the debate over initial funding of the infrastructure required does remain an obstacle.<sup>303</sup> Funding for the infrastructure required to host OER may be allocated by national governments or, as shown with examples across Brazil and Canada, shared across a consortium of educational institutions that then distribute them more widely.<sup>304</sup>

The 1<sup>st</sup> World OER Congress, in 2012, resulted in the adoption of the *Paris OER Declaration*.<sup>305</sup> This declaration encourages governments to openly license educational materials that are publicly funded.<sup>306</sup> The second congress took place in Ljubljana, Slovenia in 2017.<sup>307</sup> Both conferences came to the conclusion that in order for OER to support the achievement of SDG 4, it needs to be integrated into

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<sup>289</sup> UNESCO, *Artificial Intelligence for Sustainable Development: Synthesis Report, Mobile Learning Week 2019*, 2019, p. 11.

<sup>290</sup> *Ibid.*, p. 12.

<sup>291</sup> *Ibid.*

<sup>292</sup> *Ibid.*, p. 13.

<sup>293</sup> UNESCO & Commonwealth of Learning, *Open Educational Resources: Policy, Costs and Transformation*, 2016.

<sup>294</sup> *Ibid.*, p. 2.

<sup>295</sup> *Ibid.*, p. 2.

<sup>296</sup> UNESCO & Commonwealth of Learning, *Open Educational Resources: Policy, Costs and Transformation*, 2016.

<sup>297</sup> *Ibid.*

<sup>298</sup> *Ibid.*

<sup>299</sup> *Ibid.*

<sup>300</sup> *Ibid.*

<sup>301</sup> *Ibid.*

<sup>302</sup> *Ibid.*

<sup>303</sup> *Ibid.*, pp. 4-5.

<sup>304</sup> UNESCO & Commonwealth of Learning, *Open Educational Resources: Policy, Costs and Transformation*, 2016.

<sup>305</sup> World Open Educational Resources Congress, *Paris OER Declaration*, 2012.

<sup>306</sup> *Ibid.*

<sup>307</sup> World Open Educational Resources Congress, *2017 Ljubljana Action Plan*, 2017.

educational policies and curricula from early childhood to post-secondary, higher education, as well as lifelong learning.<sup>308</sup>

### The role of Artificial Intelligence in achieving SDG4

AI is generally understood as a reproduction of human intelligence or behavior demonstrated by machines.<sup>309</sup> In practice, these are controlled by a computer program (software).<sup>310</sup> Due to this difference it is difficult to create a working definition of AI but a number of technologies are understood to be included.<sup>311</sup> These technologies can range from pattern recognition over image recognition to voice recognition and natural language processing.<sup>312</sup>

Machine Learning is one of the most promising and active fields in artificial intelligence.<sup>313</sup> 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.<sup>314</sup> 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.<sup>315</sup> 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.<sup>316</sup>

In education, AI and Machine Learning have begun producing new teaching and learning solutions that are now being tested in different contexts.<sup>317</sup> These technologies can be used to ensure equitable and inclusive access to education<sup>318</sup>. Implementation of AI technology can provide marginalized people and communities, access to appropriate learning opportunities<sup>319</sup>. The opportunities in which AI could revolutionize the way we learn is found in situations where learners are not physically in the same location.<sup>320</sup> Computer-supported collaborative learning provides students choices insofar as when and where they want to study, for example online discussion groups.<sup>321</sup> Based on AI techniques such as machine learning and shallow text processing, AI systems can be used to monitor online discussion groups.<sup>322</sup> This provides teachers with information about learner's discussions and support for guiding students engagement and learning.<sup>323</sup> 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.<sup>324</sup> AI can also provide people with disabilities or refugees appropriate learning opportunities through the use of online technologies.<sup>325</sup>

However, since AI requires large amounts of data to function, transparency in data collection, use, and dissemination will have to be discussed.<sup>326</sup> Therefore, developing reliable and inclusive data systems are important, yet many countries struggle in basic but critical educational data.<sup>327</sup>

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<sup>308</sup> Ibid.

<sup>309</sup> UN OICT, *Emerging Technologies Whitepaper Series: Artificial Intelligence*, 2018.

<sup>310</sup> Ibid.

<sup>311</sup> Ibid.

<sup>312</sup> Ibid.

<sup>313</sup> UN OICT, *Emerging Technologies Whitepaper Series: Machine Learning*, 2018.

<sup>314</sup> Ibid.

<sup>315</sup> Ibid.

<sup>316</sup> Ibid.

<sup>317</sup> UNESCO, *Artificial Intelligence in Education: Challenges and Opportunities for Sustainable Development*, 2019.

<sup>318</sup> Ibid.

<sup>319</sup> Ibid.

<sup>320</sup> Ibid.

<sup>321</sup> Ibid.

<sup>322</sup> Ibid.

<sup>323</sup> Ibid.

<sup>324</sup> Ibid.

<sup>325</sup> Ibid., p. 12.

<sup>326</sup> Ibid., p. 32.

<sup>327</sup> Ibid., p. 32.



## 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.<sup>328</sup> With this growing momentum, UNESCO are 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.<sup>329</sup> While obstacles around infrastructure costs and coordinated policymaking remain, developing technologies may be able to significantly contribute to the achievement of SDG 4 (quality education).<sup>330</sup>

## Further Research

In further research on harnessing emerging technologies for the achievement of SDG4, Delegates could explore the following questions: What are challenges in the field of sustainability and scale of emerging technologies? What part do changing roles and norms especially in the field of AI play? 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 curricula in a coordinated and effective manner?

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*The Qingdao Declaration is a key document that deals with ICT implementation in the classroom. It was passed by UNESCO and provides Member States recommendations on the implementation of ICT. This report provides an executive 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 14 July 2019 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 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 14 July 2019 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 while 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*

<sup>328</sup> UNESCO UIS, *SDG 4 Data Digest: Data to Nurture Learning*, 2018.

<sup>329</sup> UNESCO Executive Board, *Exploring the Potential of Artificial Intelligence to Accelerate the Progress Towards SDG 4 -Education 2030 (206 EX/44 Rev.)*, 2019.

<sup>330</sup> UNESCO, *ICT in Education*.

*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 14 July 2019 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 SDG4. 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 August 2019 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.*

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