COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)

Twenty-fourth session Geneva, 17 to 21 May 2021

Submissions from entities in the United Nations system, international organizations and other stakeholders on their efforts in 2020 to implement the outcomes of the WSIS

Submission by

United Nations Educational, Scientific and Cultural Organization

This submission was prepared as an input to the report of the UN Secretary-General on "Progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society at the regional and international levels" (to the 24th session of the CSTD), in response to the request by the Economic and Social Council, in its resolution 2006/46, to the UN Secretary-General to inform the Commission on Science and Technology for Development on the implementation of the outcomes of the WSIS as part of his annual reporting to the Commission.

DISCLAIMER: The views presented here are the contributors' and do not necessarily reflect the views and position of the United Nations or the United Nations Conference on Trade and Development.



UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION

Report by UNESCO on its role and activities in implementing the WSIS Outcomes (2020)

Contribution to the Report for the Commission on Science and Technology for Development (CSTD)

December 2020

Part One: Executive Summary

CSTD 2020 Guidance: "An executive summary (half a page) of activities undertaken, progress made, and any obstacles encountered."

In response to the Covid-19 pandemic and to support the achievement of the Sustainable Development Goals, UNESCO continued to implement its programmes as action line facilitator for open educational resources and digital skills and competencies; the promotion of e-science and open science; respect for cultural and linguistic diversity; freedom of expression; media development; and the ethical dimensions of the Information Society. In this regard, UNESCO reports as WSIS Action Line facilitator for C3 (Access to information and knowledge); C8 (Cultural diversity and identity, linguistic diversity and local content); C9 (Media); C10 (Ethical dimensions of the Information Society); as well as C7 (ICT Applications: e-Learning and e-Science).

In support of **Action Line C3** (Access to Information and Knowledge), UNESCO contributed to an increasing number of access to information legal frameworks adopted over the previous decade, critical to expanding universal access and adapting to digital transformation, as reported in Part Three.

The International Day for Universal Access to Information (28 September) was formally adopted by the United Nations General Assembly in 2019 and is the flagship event for promoting all aspects surrounding the right to information. UNESCO has commemorated the Day since 2016 with more than 100 events.

If access to verifiable, reliable information is empowering, then misinformation is disempowering. UNESCO has responded to the policy challenges of addressing online disinformation and misinformation, including through two policy briefs offering critical insights into the fast-growing COVID-19-related 'infodemic' that is impeding access to trustworthy sources and reliable information. This was followed by cooperation through a working group of the Broadband Commission for Sustainable Development to publish a global comprehensive report entitled Balancing Act: Countering Digital Disinformation while respecting Freedom of Expression, publicised across more than a dozen webinars.

On Action Line C7 (ICT Applications: e-Learning and e-Science), UNESCO launched the <u>Global Education Coalition</u> as a platform for collaboration and exchange to protect the right to education including the more than 1.5 billion students and youth across the planet who have been affected in 2020 by school and university closures due to the COVID-19 pandemic.

Members of the Global Education Coalition launched in March 2020 the Global Skills Academy initiative, providing youth and adults one-stop access to gain digital and employment skills and other competences through free access to online skills development programmes, facilitated by the UNESCO network of Technical and Vocational Education and Training Centres (UNEVOC) in more than 160 Member States.

UNESCO has initiated work towards a Recommendation on Open Science, based on the Recommendation on Science and Scientific Researchers adopted in November 2017 by the UNESCO General Conference, which addresses numerous issues related to WSIS.

UNESCO this year also launched the OER Dynamic Coalition to bring all stakeholders around Open Educational Resources (OERs) following the adoption in November 2019 by the 40th session of the UNESCO General Conference of the UNESCO Recommendation on OER.

In the framework of **WSIS Action Line C8** (Cultural diversity and identity, linguistic diversity and local content), UNESCO has continued to incorporate ICTs in the protection and promotion of cultural heritage and the diversity of cultural expressions. The culture sector has been deeply impacted by the coronavirus pandemic. In response, many initiatives have been undertaken online. ICTs are proving essential to delivering innovative solutions and platforms by which programme work, engagement with communities, and access to information have been made possible.

UNESCO and the Government of Mexico, in cooperation with a range of national, regional and international partners, organized the high-level event <u>"Making a Decade of Action for Indigenous Languages</u>" (Mexico City, 27-28 February 2020). The Los Pinos Declaration (Outcome Document) presents key recommendations and milestones toward the elaboration of the future Global Action Plan for the International Decade of Indigenous Languages, including in the area of "Digital empowerment, language technology and indigenous media".

UNESCO has continued to intensify its efforts to ensure access to reliable and accurate health information in languages understood by indigenous peoples, by compiling relevant resources in cooperation with Member States, other UN Agencies and partners, on the dedicated page <u>"COVID-19 pandemic: Language Matters"</u>. Furthermore, a UNESCO <u>bulletin focusing on the impact of the current crisis on indigenous peoples</u> was launched on the occasion of the International Day of the World's Indigenous Peoples (9 August).

Online and digital responses are supporting cultural diversity and identity, linguistic diversity and local content, as further reported in Part Three. These included the ResiliArt movement; the "Culture & COVID-19: Impact and Response Tracker"; an

interactive online exhibition and virtual tour featuring dozens of World Heritage properties from across the globe done with Google Arts&Culture; and an online survey to document and exchange the different experiences of living heritage during the pandemic from communities worldwide.

The digital transition opens new prospects for ensuring access to culture and participation in cultural life for all, drives innovation and creativity to a further level, and propels the accelerated development of new economic models in the field of culture. Yet the pandemic has revealed persistent inequalities in the digital realm, both within and between countries: issues related to availability of digital infrastructure, the cost of access and to the diversity of online cultural contents including their availability in diverse languages are thwarting the endeavor of achieving sustainable development while 'leaving no one behind'.

With respect to **Action Line C9 (media)**, UNESCO's actions in these areas have accelerated to meet the unprecedented challenges of the pandemic to support the achievement of the SDGs within the next decade. Freedom of expression, access to information - notably on public health - and quality news coverage are essential to face the Covid-19 pandemic and the parallel 'Disinfodemic'. Professional journalism delivering reliable information helps societies to adapt and organize responses to the spread of COVID-19, share knowledge and experiences and counter the increase of rumors and misinformation. World Press Freedom Day (3 May) and the International Day to End Impunity for Crimes against Journalists (2 November) are commemorated by UNESCO as flagship UN events providing high levels of participation and visibility.

The launch in April of the multi-donor <u>Global Media Defence Fund</u>; the publication of the <u>Report on the Safety of Journalists and the Danger of Impunity</u>; and commemoration of the <u>40th Anniversary of the International Programme for the Development of Communication</u> are among the highlights of UNESCO work in 2020, as further reported in Part Three of this report.

Action Line C10 - Ethical dimensions of the Information Society

The Information Society should be guided by universally held values and the common good to prevent abusive uses of ICTs. UNESCO contributes to the promotion of peace and upholding fundamental values, human rights and freedoms, equality, solidarity and raising awareness on the ethical dimension of ICT design, development, and deployment.

Following the decision of the UNESCO General Conference at its 40th session in November 2019, UNESCO embarked on a two-year process to elaborate the first global, intergovernmental standard-setting instrument on the ethics of artificial intelligence in the form of a Recommendation. In 2020, the focus has been on inclusive and multidisciplinary consultations toward a draft text for the Recommendation, with the assistance of an international Ad Hoc Expert Group, followed by a multi-stakeholder consultation and intergovernmental process to produce a final version of the Recommendation for possible adoption by UNESCO's General Conference at its 41st session at the end of 2021.

In November 2019, UNESCO launched at the Internet Governance Forum the Dynamic Coalition of Internet Universality Indicators (IUIs) embracing the ROAM

principles: a heuristic for Rights, Openness, Accessibility to all, and Multistakeholder participation under the Internet Universality framework endorsed by UNESCO General Conference in 2015.

Virtually all activities have pivoted online, further underscoring the need to address digital divides and promote digital skills and literacy. In addition to cost-savings and reduced environmental footprint, it has been possible through virtual conferencing to reach a greater number of participants and stakeholders. This was particularly useful for ensuring the participation of women and those from developing countries who may have difficulties obtaining visas and travel authorizations to attend events. However, it is important to note that the experience also underscores the value of face-to-face meetings, which allow for greater interpersonal connections leading to more networking and collaboration opportunities.

Part Two: Analytical Overview of Trends and Experiences

CSTD 2020 Guidance: "A brief (1–2 pages) analytical overview of trends and experiences in implementation at the national, regional and international levels and by all stakeholders, highlighting achievements and obstacles since WSIS and taking into account the follow-up and review of the 2030 Agenda for Sustainable Development. This could include information on the facilitation process of implementation, monitoring and cooperation among stakeholders."

Action Line C3 (Access to Information and Knowledge)

In response to the Covid-19 Crisis, UNESCO promotes <u>Media and Information Literacy</u> (MIL) and media development to address the spread of misinformation; fosters the reflection on the ethical uses of digital technologies such as artificial intelligence in response to the crisis; as well as highlights the importance of documentary heritage in past efforts to fight pandemics.

UNESCO contributed to the increasing number of access to information legal frameworks adopted in the previous decade. Between 2001 and 2020, around 90 countries enacted access to information laws. UNESCO shares good practices and provides technical assistance to the many Member States working to adopt access to information laws or improve the implementation of already existing legal frameworks, including training of staff and development of manuals.

In Morocco, Cambodia, Myanmar, Tunis, Sudan, and Jordan, UNESCO is assisting governments in the adoption of access to information (ATI) legislation. In South Sudan, the Organization is providing capacity building to the Information Commission to develop training manuals on access to information. In Armenia, the Organization, together with the Parliament, focused on bettering the implementation of access to information legislation. In South Africa, UNESCO trained information commissioners and their staff from different African countries. In Latin America, UNESCO conducted training on best practices for judges and lawyers, who are involved in solving access to information related cases. In Samoa, the Organization has launched an advocacy project, aimed to prepare for the ATI legislation.

Within the UN system, UNESCO has been designated as the custodian agency for the monitoring of SDG Indicator 16.10.2 that tracks progress towards public access to information. Under this mandate, UNESCO has developed a methodology to measure and report on the adoption and implementation of ATI guarantees. This consists of a survey developed in consultation with experts, which, in 2020, engaged the voluntary participation of 69 countries. Findings of UNESCO's data collection process feed into the annual UN Secretary-General Progress Reports towards the SDGs, as well as UNESCO's Global Report on Public Access to Information (based on SDG Indicator 16.10.2) and UNESCO's World Trends in Freedom of Expression and Media Development Report. UNESCO has also been strengthening the capacities of Member States to collect data and report on SDG indicator 16.10.2, including in Côte d'Ivoire, Ethiopia, Ghana, Honduras, Indonesia, Liberia, Mongolia, Morocco, Rwanda, Senegal, Sierra Leonne, Sri Lanka, Tunisia, and the Latin American region.

UNESCO's General Conference adopted the International Day for Universal Access to Information (IDUAI, 28 September) in 2015. In 2019, it was proclaimed an International Day by the United Nations General Assembly, as the main event for raising awareness regarding the importance of access to information for development and advocating for the right to information for strengthening human rights. UNESCO, both globally and on the Member States level, has held close to one hundred IDUAI commemorations since its founding.

UNESCO's Internet Universality concept and associated indicators are key instruments to counter challenges and maximize opportunities. This has followed an inclusive, multi-stakeholder, right-based, open, diverse and participatory approaches.

As further reported in Part Three of this report, UNESCO continues to address the impact of emerging issues, such as Artificial Intelligence, and the policies, practices, measures and mechanisms needed for harnessing AI to advance knowledge societies and achieve the SDGs.

Action Line C7 (ICT Applications: e-Learning and e-Science)

In response to Covid-19, UNESCO launched the <u>Global Education Coalition</u> as a platform for collaboration and exchange to protect the right to education during and beyond the pandemic. Members of the Global Education Coalition launched in March 2020 the Global Skills Academy initiative, providing youth and adults a one-stop access to gain digital and employment skills and other competences through free access to online skills development programmes, facilitated by the UNESCO network of Technical and Vocational Education and Training (UNEVOC) centres in more than 160 Member States.

The 2020 <u>Global Education Monitoring (GEM) Report</u> on inclusion and education is available in 4 languages and the <u>2020 Summary Report</u> is available in 24 languages. The GEM Report World Education Blog engaged with over 200,000 visitors on its 121 posts this year, and received over 40,000 views both in April and May for its <u>COVID-19 and Education blog series</u>.

The online edition of the flagship annual UNESCO <u>Mobile Learning Week</u> was held from 12 to 14 October 2020 on the theme of "Beyond Disruption: Technology Enabled Learning Futures" with a focus around digital learning during Covid-19.

Following its launch in 2018, UNESCO continues to operate the Gender Assessment Tools for Teacher Education to identify and address gender gaps and biases in teacher education policies, teaching-learning materials and practices. The results yielded from applying the six gender assessment tools helped to reveal areas that need to be addressed to make teacher education more gender-sensitive and gender-responsive.

UNESCO launched the OER Dynamic Coalition to bring all stakeholders around Open Educational Resources (OERs) following the adoption in November 2019 by the 40th session of the UNESCO General Conference of the UNESCO Recommendation on OER.

In e-sciences, UNESCO has initiated work towards a Recommendation on Open Science, based on the Recommendation on Science and Scientific Researchers adopted in November 2017 by the UNESCO General Conference, which addresses numerous issues related to WSIS.

Strengthening capacities in Member States in the field of evidence-based, inclusive and gender-transformative Science, Technology and Innovation (STI) policies, is an integral part of UNESCO's mandate in STI. The need to reinforce capacities has been systematically stressed at major STI international conferences, forums and summits, including the 2030 Agenda for Sustainable Development.

In line with the above, UNESCO has conducted a number of training programmes in STI policies at national and regional levels, including designed and delivered in partnership with UN agencies members of the UN-Inter-agency Task Team (UN-IATT) on capacity-building on STI for SDGs. An example of recent trainings are the online sessions on STI policy approaches in the context of the SDGs, delivered jointly with representatives of nearly 10 UN agencies, for STI officials from around 30 developing countries.

UNESCO has developed and launched the Global Observatory of STI policy instruments (GO-SPIN) open access platform, which collects and gathers data and information on STI policies, legal frameworks, instruments including for gender equality in STI, which features policy instruments and analysis for developing countries, including their links to specific SDGs and SDGs targets.

The 2030 Agenda for Sustainable Development established the Technology Facilitation Mechanism to support the application of science, technology and innovation (STI) for the SDGs. Milestones include launch and implementation of the Global Pilot programme on STI roadmaps, leading to the development of STI roadmaps in five countries.

As reported further in Part III, UNESCO organized a number of hackathons to address Covid-19, including the CodeTheCurve hackathon, the global HackingDisinfodemic with the Republic of Korea, and the virtual CodeHack training in Kenya.

Action Line C8 (Cultural diversity and identity, linguistic diversity and local content)

The unprecedented disruption of the pandemic calls for a profound rethinking of the role of culture in public policies with a view to forging a more sustainable and resilient future. The pandemic revealed the vast potential of art and culture to the recovery of economies and societies, prompted in particular by digital technologies and artificial intelligence. The acceleration of the digital transformation profoundly impacts the cultural sector and underlines the precarity of the digital divide and importance of access to culture for all. Indeed, automation, artificial intelligence and digital platforms are drastically shifting the landscape of the multicultural society that we live in today.

UNESCO is leveraging AI and Machine Learning-based Language Technologies (LT) to promote linguistic diversity and multilingualism. These technologies are helping six low-resource languages spoken in 22 countries to improve spelling/grammar check, speech and speaker recognition, machine translation for text and audio, speech synthesis, and spoken dialogue.

The <u>Los Pinos Declaration</u> presents key recommendations for the future and the milestones in the elaboration of the future Global Action Plan for the <u>International</u> <u>Decade of Indigenous Languages</u> (2022-2032), including in the area of "Digital empowerment, language technology and indigenous media". One of the key objectives of the International Decade will be the integration of indigenous languages into standard-setting national policies, strategic plans and regulatory frameworks.

There is an increased awareness about the inseparable linkage between ICTs and cultural heritage and expressions. ICTs play an essential role as vectors for the creation, dissemination and access to cultural expressions, especially in the light of the COVID-19 pandemic which has accelerated the migration of cultural creation and consumption to digital platforms, while raising new challenges for the diversity of supply and demand.

As creative transactions increasingly shift online, adapting to new ICTs is a prerequisite for a flourishing creative economy in the 21st century. This transversal issue requires a series of concerted efforts to realise equitable access to the internet, copyright protection and remuneration for online cultural goods, improvement of ICT infrastructure, training of creative workers and the public to benefit from the new ICTs, and policy dialogues with major content platforms to safeguard local and diverse content. Appropriate training and curricular programmes are also needed to supply the labour market with technology-literate talents and to ensure the contribution of creative economy to the 2030 Agenda for Sustainable Development, and in particular to support decent job creation, entrepreneurship, creativity and innovation (target 8.3).

Our culture and our heritage, from tangible and intangible cultural heritage to cultural and creative industries and expressions, bring us together and access to them is imperative for the resilience, solidarity, inspiration and well-being of people everywhere in these challenging times. The closing of museums, theatres, cinemas, art galleries, concert halls and World Heritage sites represent the loss of access to culture, the loss of exchange and knowledge sharing, and the loss of employment, including for independent artists and creative professionals. Likewise, living heritage is affected by cancelled festivals and cultural events and restrictions of cultural practices and rituals. In response we have seen, for example on social media, inspiring videos of world-renowned artists and musicians performing for free for their neighbours, as well as online. Museums, concert halls and other cultural institutions worked quickly to open their doors online, providing free virtual tours of their collections and streaming performances for free. Libraries, including film libraries, have also opened up their collections to the public.

The acceleration of the digital transformation was echoed by the meeting of intergovernmental organizations and development banks organized by UNESCO's Culture Sector on 17 April 2020. It aimed to establish a collaborative platform for data exchange, cooperation and good practices at the regional and interregional levels.

Similarly, the Online Meeting of the Ministers of Culture, organized by UNESCO on 22 April last in the context of the pandemic considered the impact of the health crisis on the cultural sector, and the response of Member States in their resilience efforts. Over 130 Ministers and Vice-Ministers of Culture discussed the steep increase in consumption of online cultural contents since the beginning of the COVID-19 pandemic and the issue of subsidies to online cultural platforms thus making them widely available to the population. On the road to recovery, Member States identified areas of opportunity for the cultural sector, notably underlining the acceleration of the digital transformation and the development of diversified online content, strengthening the evidence of the weight of the culture sector on the economy of countries, including in the non-formal sector, and the importance of synergies between culture and education and building a comprehensive approach.

On 17 September 2020, the Director-General of UNESCO alongside the Mayor of Beijing and the Vice-Minister of Education of the People's Republic of China opened the third edition of the UNESCO Creative Cities Beijing Summit, under the theme 'Creativity empowers cities, technology creates the future'. The Summit brought together more than 40 speakers from around the world, including Mayors of Rome, Kortrijk, Brazzaville, Helsinki, and Santos among others, and representatives from UNESCO Creative Cities and the United Nations and other intergovernmental organizations, as well as academics and experts, innovators and entrepreneurs from the private sector, to engage in a discussion on the increasing role of new technologies, science and creativity in urban development. They showcased how innovative actions taken by cities combining culture, creativity, science and technology are increasing access to culture and education, and improving the overall well-being of their inhabitants.

An Online Meeting of Ministers of Culture was organized by the Kingdom of Saudi Arabia with UNESCO's support on 4 November last on the margins of the G20 Summit. Under the theme "The rise of the cultural economy: a new paradigm", it recognized, for the first time, the growing contribution of culture to the global economy in the framework of the G20 policy discussions. In a paradigm shift accelerated by the COVID-19 pandemic, this session of the G20 Summit further underpinned culture's contribution across the public policy spectrum in order to forge more sustainable societies and economies. Most participating countries underlined the opportunities offered by digital technologies, notably in terms of accessibility and innovation.

A "<u>Culture & COVID-19</u>: <u>Impact and Response Tracker</u>" launched in March 2020 provides an overall analysis of the impact of the digital transition on the cultural sector, while also raising key policy issues, notably the impact of the pandemic on the unprecedented acceleration in the digitization of culture access.

Action Line C9 (Media)

The 2020 <u>Report on the Safety of Journalists and the Danger of Impunity</u> provides an analytical report that includes the responses received from concerned Member States about judicial follow up to the killings of journalists. The 2020 Report indicates i.a. that a journalist had been killed on average once every four days over the previous decade.

Through its new Global Media Defence Fund, a Multi-Partner Trust Fund administered aimed at enhancing media protection and improving the access of journalists to specialized legal assistance, UNESCO will support more than 40 initiatives aiming to strengthen the legal defence of journalists in all regions.

The 40th Anniversary of UNESCO's International Programme for the Development of Communication (IPDC), celebrated in November 2020, gave an opportunity for foresight on the Future of Media Development and the value of IPDC-funded grassroot initiatives for media development, training, research, capacity-building, law reform and advancement of journalism education.

UNESCO commemorated several flagship events, including the World Press Freedom Conference 2020, which served as a joint celebration of <u>World Press Freedom Day</u> (3 May) and the <u>International Day to End Impunity for Crimes against Journalists</u> (IDEI, 2 November) through formats that merged digital and in-person elements and gathered more than 3,500 participants from 120 countries.

Action Line C10 (Ethical dimensions of the Information Society)

UNESCO launched a global online consultation on the ethics of artificial intelligence, to give everyone around the world the opportunity to participate in the work of a multidisciplinary *ad hoc* group of experts on AI, which takes into account the wide-ranging impacts of AI, including on the environment and the needs of the global south. This group has produced the first draft of a Recommendation on the Ethics of AI, to be submitted to UNESCO Member States for consideration for adoption in November 2021.

The UNESCO Recommendation is expected to define shared values and principles, and identify concrete policy measures on the ethics of AI, in order to ensure that ethical issues can be adequately addressed both in times of peace and in extraordinary situations like the current global health crisis.

Since 2015, UNESCO Member States have endorsed the concept of Internet Universality based upon the ROAM principles, a heuristic for:

(i) human **R**ights-based

- (ii) **O**pen,
- (iii) Accessible to all, and
- (iv) nurtured by **M**ulti-stakeholder participation.

Because **AI and other new technologies** have been evolving within the ecosystem of the Internet, UNESCO believes that the Internet Universality ROAM principles can serve as a well-grounded and holistic framework for UNESCO and stakeholders to help shape the design, application, and governance of AI. UNESCO thus recommended to implement the Internet Universality ROAM-X Indicators to measure human Rights, Openness, Accessibility and Multi-stakeholder participation and to thereby map and improve the ecosystem in which AI is developed, applied, and governed.

Adherence to the ROAM principles among national stakeholders, including governments, companies, and civil society, can be measured through the ROAM-X indicators framework, comprising 303 indicators. It also includes 79 cross-cutting Indicators (category X) concerning gender and the needs of children and young people, sustainable development, trust and security, and legal and ethical aspects of the Internet.

Moving forward, UNESCO is building a consolidated online platform and policy observatory to support optimization of data and deliver online tutorials/ help desks for stakeholders to research using UNESCO indicators and make intelligent use of data made available by the platform.

Part Three: A brief description (1–2 pages) of:

(a) Innovative policies, programmes and projects which have been undertaken by all stakeholders to implement the outcomes. Where specific targets or strategies have been set, progress in achieving those targets and strategies should be reported.
(b) Future actions or initiatives to be taken, regionally and/or internationally, and by all stakeholders, to improve the facilitation and ensure full implementation in each of the action lines and themes.

Action Line C3 (Access to Information and Knowledge)

UNESCO organized multiple online events to mark 28 September as the 2020 International Day for Universal Access to Information. The events underscored the importance of the right to information in times of crisis and emphasized the advantages of having constitutional, statutory and/or policy guarantees for public access to information to save lives, build trust and help the formulation of sustainable policies through and beyond the COVID-19 crisis. In October 2019, the 74th UN General Assembly proclaimed 28 September as the International Day for Universal Access to Information (IDUAI). The day had been established by the UNESCO General Conference in 2015, following the adoption of <u>38 C/Resolution 57</u>.

Access to verifiable, reliable information makes the right to freedom of expression meaningful. If information is empowering, then misinformation is disempowering. UNESCO published <u>two policy briefs</u> offering critical insights into the fast-growing COVID-19-related 'infodemic' that is impeding access to trustworthy sources and

reliable information. This was followed by cooperation with the <u>Broadband Commission</u> for <u>Sustainable Development</u> to publish a comprehensive report entitled <u>Balancing Act:</u> <u>Countering Digital Disinformation while respecting Freedom of Expression</u>.

UNESCO, in partnership with the Innovation for Policy Foundation (i4Policy), launched the <u>#DontGoViral online campaign</u> in Africa to invite artists to amplify life-saving information to combat the Covid-19 pandemic among fans and followers, and engage with cultural and creative industries in awareness-raising. The campaign addressed the urgent need to mitigate the spread of COVID-19 on the African Continent through culturally relevant and open-licensed information in local African languages. Partnerships were established in 2020 with both African media outlets and global outlets, notably the BBC World Service and France 24. UNESCO is actively supporting artists to reach communities most at risk including offline. In three months, the campaign reached over 220 million people across the African Continent.

UNESCO convened a <u>High-Level Futures Literacy Summit</u> on 8-12 December 2020, bringing together 40 global leaders to address the massive disruptions of 2020 and provide practical solutions for overcoming today's challenges by becoming more "futures literate" by mobilizing and presenting the latest advances in human thought. UNESCO has since 2012 co-created over 80 Futures Literacy Laboratories for a diverse audience such as governments, international organizations and major business associations and developed a growing network of academic chairs on Futures Literacy across the globe.

To contribute to addressing misinformation on COVID-19 and promoting health measures, UNESCO produced a series of audio messages that can be freely used by radio stations from around the world. The <u>short audio messages</u> (available in English, French, Spanish and Arabic) give useful information on preventive measures, debunk myths about the virus, and highlight the importance of non-discrimination and solidarity.

UNESCO, with support from the European Union, launched a global project to strengthen the resilience of states in the face of the Covid-19 pandemic. The project is helping societies address the challenge of false information on the coronavirus. The <u>"#CoronavirusFacts</u>: Addressing the 'Disinfodemic' on COVID-19 in conflict-prone environments" project has already produced a series of relevant outputs, such as resources <u>hubs</u> in several languages.

In 2020, UNESCO facilitated a process to bring experts from the Global South together to revamp, reinvigorating and reorganize Global Open Access Portal (GOAP), by linking up with a modular Open Knowledge Platform to share OA resources, MOOCs, Non-commercial OA Journal production Workflows and tools, and other capacity building tools. The process in engaging representatives from Argentina, Angola, China, Bangladesh, Bhutan, Egypt, India, Indonesia, Malaysia, Mexico, Nepal, Thailand, Singapore, Sri Lanka and Zimbabwe.

UNESCO launched this year the Dynamic Coalition of Internet Universality Indicators (IUI's) based upon the ROAM principles (Rights-based, Open, Accessible to all, and Multistakeholder) as reported in greater detail under Action Line C-10 Ethical Dimensions of the Information Society. UNESCO has further applied its ROAM-based

indicators to the field of artificial intelligence, whose use and further development is closely linked to that of the Internet and the Internet of Things.

Action Line C7 (ICT Applications: e-Learning and e-Science)

The Global Education Coalition <u>launched by UNESCO</u> is a platform for collaboration and exchange to protect the right to education during the unprecedented Covid-19 disruption and beyond. More than 1.5 billion students and youth across the planet have been affected in 2020 by school and university closures due to the COVID-19 pandemic. The coalition brings together more than <u>150 members</u> from the UN family, civil society, academia and the private sector to ensure that #LearningNeverStops. Coalition members rally around three flagships, namely <u>connectivity</u>, <u>teachers</u> and <u>gender</u>, as well as support specific causes including the <u>educational recovery</u> following the deadly explosion in Beirut. All Coalition members are encouraged to <u>pledge for the</u> <u>protection of learners' personal information</u>, <u>privacy and security</u>.

Members of UNESCO's Global Education Coalition, launched in March, are teaming up to provide youth and adults with opportunities to gain digital skills and other competencies through free access to online skills development programmes. Partners' offers will be pooled within the Global Skills Academy, providing a one-stop access to training opportunities, with an objective to equip one million people with employability and resilience skills and help them find jobs. Founding partners include Coursera, Dior, Festo, Huawei, IBM, Microsoft, Orange Digital Centres and PIX. International Organizations and partners including ILO, OECD and WorldSkills Competition will also contribute to the project.

The Global Skills Academy will be facilitated by UNESCO's global network for institutions specialized in Technical and Vocational Education and Training (UNEVOC), with detailed information about available trainings shared with the 250 UNEVOC Centres in more than 160 Member States. Outreach to disadvantaged learners will be a priority. The Centres will identify interested participants and connect them to the Coalition members' training platforms.

Global Education Coalition partners are also developing a similar platform to provide training opportunities to teachers with an emphasis on digital pedagogy. This effort will help educators build skills and competencies to better support learners remotely through digital technologies.

As COVID-19 has revealed and exacerbated inequalities in 2020, the Global Education Monitoring Report emphasised the urgent need for improved inclusion in education.

The full 2020 <u>GEM Report</u> on inclusion and education is available in 4 languages and the <u>2020 Summary Report</u> is available in 24 languages. The Gender Report is available in <u>English</u>.

The GEM Report <u>World Education Blog</u> has engaged over 200,000 visitors on its 121 posts this year, and received over 40,000 views both in April and May for its <u>COVID-19 and Education blog series</u>. Its <u>Spanish counterpart</u> also featured over 60 blog entries in 2021 and attracted 150,000 visitors.

Three policy papers were produced: <u>Aid to education and COVID-19</u>, <u>Impact of COVID-19 on cost of implementing SDG 4</u>, and <u>Preparing teachers for inclusion</u>. Two new websites were launched: <u>Profiles Enhancing Education Reviews (PEER)</u> with 160 profiles on inclusion and <u>Scoping Progress in Education (SCOPE)</u> with five stories supported by interactive visualizations to allow readers to follow key global education trends.

The online edition of the flagship annual UNESCO <u>Mobile Learning Week</u> was held from 12 to 14 October 2020 on the theme of "Beyond Disruption: Technology Enabled Learning Futures". The week focused on ensuring effective national distance learning strategies in response to the Covid-19 pandemic and beyond.

The theme of the 2020 <u>UNESCO King Hamad Bin Isa Al-Khalifa Prize for the use of ICT in Education,</u> to be awarded in April 2021, is "the Use of Artificial Intelligence (AI) to enhance the continuity and quality of learning". Scalable AI-powered solutions or technology innovations have proven effective in improving learning outcomes of marginalized groups while ensuring ethical and equitable use of these technologies in education. these technologies in education. Special attention will be given to projects that provide access to education in remote areas or aim to improve the availability and affordability of connectivity for education and learning.

In March 2020, UNESCO hosted an <u>online meeting</u> of 77 ministers and representatives of science ministries from 122 countries to exchange views on reinforcing international cooperation in science, increase investment and integrate open science to mitigate global crises in the context of COVID-19.

To enhance the capacity of instructors delivering online learning, UNESCO has made available openly licensed tools that can be used by governments and institutions to implement the <u>UNESCO ICT Competency Framework for Teachers OER – Hub</u>. With regard to persons with **disabilities**, and online **education**, UNESCO also has an openly licensed tool '*Learning for All: guidelines on the inclusion of learners with disabilities in open and distance learning*'.

As it concerns **E-science**, UNESCO has developed and launch the Global Observatory of STI policy instruments (GO-SPIN) open access platform, which collects and gathers data and information on STI policies, legal frameworks, instruments including for gender equality in STI. So far, the platform includes information on policies and policy instruments for over 70 developing countries, analysed according to different policy dimensions, including their links to specific SDGs and SDG targets. The objectives include assembling STI evidence and promoting access to information.

Strengthening capacities in Member States in the field of evidence-based, inclusive and gender-transformative Science, Technology and Innovation (STI) policies, is an integral part of UNESCO's mandate in STI. Capacity building is essential for strengthening STI systems and the need to reinforce capacities has been systematically stressed at major STI international conferences, forums and summits, as well as in the 2030 Agenda for Sustainable Development.

In line with the above, UNESCO has conducted a number of training programmes in

STI policies at national and regional levels, some designed and delivered in partnership with UN agencies members of the UN-Inter-agency Task Team (UN-IATT) on capacity-building on STI for SDGs. An example of recent trainings are the online sessions on STI policy approaches in the context of the SDGs, delivered jointly with representatives of nearly 10 UN agencies, for STI officials from around 30 developing countries.

The 2030 Agenda for Sustainable Development established the Technology Facilitation Mechanism to support the application of science, technology and innovation (STI) for the SDGs. In the spirit of international cooperation, UNESCO has reinforced its contribution to the work and joint initiatives of the TFM UN-Interagency Task Team (IATT), by taking a co-lead of two major IATT workstreams: on STI for SDGs roadmaps development and Capacity-Building on STI for SDGs. Important milestones of the workstreams have been the launch and implementation of the Global Pilot programme on STI roadmaps, leading to the development of STI roadmaps in five countries, out of which UNESCO is supporting the process in Ghana, as well as the production of the joint UN Guidebook on STI roadmaps for SDGs. Furthermore, a joint UN capacity-building programme has been designed with the purpose to be regularly delivered to Member States in different regions. The first series of pilot on-line sessions has been organized in November/December 2020.

Following its launch in 2018, UNESCO continues to operate the Gender Assessment Tools for Teacher Education to identify and address gender gaps and biases in teacher education policies, teaching-learning materials and practices. The results yielded from applying the six gender assessment tools helped to reveal areas that need to be addressed to make teacher education more gender-sensitive and gender-responsive.

In order to improve access to information and to respond to the principles of openness and inclusiveness, UNESCO built on existing partnerships with the Indian Statistical Institute (ISI), Bangalore (India), and Red de Revistas Cientificas de America Latina y el Caribe, Portugal España y (Redalyc) (Mexico) to develop Covid-19 Universal REsource gateway (CURE) as a comprehensive online resource portal on open solutions on COVID-19. The portal uses AI engine to harvest information on the whole life cycle of the pandemic from multiple sources so that scientific community and the general public do not need to sift through numerous sources to find relevant and accurate information on the virus.

UNESCO continued to harness artificial intelligence and deep learning to develop an observatory that improves weather forecasting and the prediction of environmental disasters. Recent ICT-led innovations in environmental sensing, data processing, and interactive visualization show promise for participatory knowledge generation. UNESCO and its partners are implementing Landslide-Environmental Virtual Observatories (Landslide EVO) to support this approach to e-science. Landslide-EVO is part of the SHEAR research programme on natural hazards in South Asia and Africa, and is funded by the UK Research and Innovation (UKRI) and the UK Department for International Development (DFID).

The project based in remote mountainous parts of western Nepal has achieved several milestones, including the development of a landslide risk map at unprecedented resolution, installation of sensors and equipment to measure rainfall, and participatory

mapping of human vulnerability with local communities. The project aims to set up an ambitious schedule of citizen science activities in schools, to educate children on the natural processes that trigger landslides, and how they can be measured with scientific tools. The project also aims to work closely with the Department of Hydrology and Meteorology of the Government of Nepal, to improve operational weather and flood forecasting.

UNESCO applies new technologies to improve access to environmental data to deal with climate change. The <u>Urban Climate Downscaling Portal</u> (UCDP) provides an open access to the methodology, literature, applications and current developments on the downscaling of climate projections to urban areas. In order to improve forecasting of global and local climates, UNESCO has teamed up with the Indian Institute of Sciences to develop a portal to disseminate down-scaled data at the urban scale. UNESCO is also working with WUDAPT (<u>http://www.wudapt.org/</u>) to develop an improved data strategy at the city-scale to foster capabilities to address SDG challenges.

UNESCO is involved in the implementation of the <u>OPERANDUM</u> (OPEn-air laboRAtories for Nature baseD solUtions to Manage environmental risks) project, which is developing nature-based solutions (NBS) to mitigate the impact of hydrometeorological phenomena in risk-prone areas. This project, from July 2018 to June 2022 (4 years), which received support from the European Union's Horizon 2020 research and innovation programme, reflects the recognition by the COP22 that NBS is one of the key mechanisms to address climate change. OPERANDUM's multidisciplinary consortium consists of 26 partners coming from 13 European and non-European countries (Austria, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Slovakia, Spain, United Kingdom and Australia and China). The project is led by University of Bologna. UNESCO is one of main partners, in particular in charge of activities related to international cooperation and capacity building.

Following an extensive global consultation, UNESCO on 30 September 2020 submitted a <u>draft recommendation on Open Science</u> to its 193 Member States, a major step in facilitating international cooperation and universal access to scientific knowledge. The draft proposes a definition of Open Science, its objectives, a framework of shared values and principles, as well as an analysis of work that needs to be done before societies benefit from the vast potential of Open Science, including indigenous knowledge systems. UNESCO's Member States are scheduled to adopt the final draft during their next General Conference in November 2021.

Organised by SAP in partnership with UNESCO YouthMobile, Irish Aid and the German Federal Ministry for Economic Development and Google, Africa Code Week 2020 ran from 5 October to 10 December throughout Africa in a new online format, due to the pandemic. Students aged 8 to 16 years old from at least 18 countries were able to participate in the online challenge called AfriCANCode. While attendance varies significantly from country to country, Morocco's Ministry of Education reported 1.45 million youth participants (48% girls) with 10,000 teachers trained.

UNESCO organized the <u>CodeTheCurve</u> hackathon in April 2020 with teams from 26 countries – made up of members under age 25 - coding solutions to fight COVID-19, with support from American technology company <u>IBM</u> and the European software business <u>SAP</u>. A team from Spain won the three-week coding challenge, developing

a data model combining artificial intelligence and imaging technology to analyze chest X-rays of COVID-19 patients, to help doctors make faster, more informed decisions to treat severe coronavirus cases.

In October 2020, UNESCO and the Republic of Korea launched a global competition HackingDisinfodemic inviting young people worldwide to design innovative solutions to misinformation and related online challenges, in partnership with the World Health Organization, the United Nations Population Fund, the UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP), and IBM. The hackathon was organized in the framework of <u>Global MIL Week 2020</u> (24-31 October), under the theme of "Resisting Disinfodemic: Media and Information Literacy for Everyone and by Everyone."

In September 2020, within the UNESCO <u>YouthMobile Initiative</u>, 150 young women, aged 17–28 years from marginalized communities, joined the virtual <u>CodeHack</u> training held in six regions in Kenya to create digital responses to the societal challenges related to the pandemic, through the initiative of the NGO <u>Pwani Teknowgalz</u>. YouthMobile puts a particular focus on reducing inequalities and the digital gender gap, as digital and information literacy supports the economic and social empowerment of women.

In June, the UNESCO Office in Beijing, together with NetEase <u>Youdao Kada</u> and <u>Little</u> <u>Turing</u>, launched the "2020 Beautiful Planet – Coding for Sustainable Development" initiative to promote coding education among young people in China, especially women, in order for them to develop digital competencies in support of the 2030 Agenda. The initiative closed on 31 December 2020.

Action Line C8 (Cultural and linguistic diversity)

To support **Action Line C8** (Cultural diversity and identity, linguistic diversity and local content), UNESCO has continued to integrate ICTs throughout its programmatic work in the field of culture in 2020. Actions were undertaken to protect and promote tangible and intangible cultural heritage, the diversity of cultural expressions, and the cultural and creative industries

UNESCO and the Government of Mexico, in cooperation with a range of national, regional and international partners, organized a High-level event <u>"Making a Decade of Action for Indigenous Languages</u>", that took place from 27 to 28 February 2020 in Mexico City, Mexico. The High-level event generated the <u>Los Pinos Declaration</u> (Outcome Document) that presents key recommendations for the future and the milestones in the elaboration of the future Global Action Plan for the <u>International Decade of Indigenous Languages</u> (2022-2032), including in the area of "Digital empowerment, language technology and indigenous media".

One of the key objectives of the International Decade will be the integration of indigenous languages into standard-setting national policies, strategic plans and regulatory frameworks. The International Decade was proclaimed at a critical moment, in view of the disappearance of indigenous languages and the fact that only ten years

remain to achieve the 2030 SDG Agenda, which provides a framework for immediate and urgent actions.

In the context of the online event "Policies and initiatives supporting linguistic diversity, multilingualism and local and indigenous languages online" (9 November 2020), UNESCO presented ongoing work concerning reporting on the implementation of the activities undertaken in 2019, including in preparation for the <u>International Decade of Indigenous Languages</u>.

UNESCO submitted a contribution to the 2020 Report of the Best Practice Forum on Local Content on "Local and indigenous content in the digital space: Protection, preservation and sustainability of creative work and traditional knowledge", focusing on good practices and case studies in the area of multilingualism, linguistic diversity and indigenous languages.

An initiative within the framework of the "EU/UNESCO Expert facility on the governance of culture in developing countries: support for new regulatory frameworks to strengthen cultural and creative industries and promote South-South cooperation" aims to develop public policies supporting community and indigenous media in Mexico, as well as a regulatory framework to incorporate indigenous content in public and private media. Based on a participatory methodology, more than 40 discussion round tables and working groups have been held to analyze the needs of these media and the process will continue in 2021 with the celebration of a regional forum to recover experiences and good practices that enrich the work. Among the actors that participated are representatives of community and indigenous media and public media, organizations, academics; civil society and the Federal Institute of Telecommunications, INPI, INALI and several federal government agencies, such as the Ministry of Culture through Radio Educación, the National Music Library, as well as the Mexican Institute of Radio (IMER), the Ministry of Telecommunications; the Ministry of the Interior and members of the legislative body and the Senate.

Through an alliance with UNESCO, the National Institute of Indigenous Peoples developed a series of apps to promote the use and learning of indigenous languages and cultures. Stickers, interactive games and puzzles, a virtual visit to the National Museum of Indigenous Peoples and soon, a videogame whose narrative is based on the Aztec culture and cosmogony. The apps were presented during the National Indigenous Language Fair.

UNESCO participated in several sessions of the WSIS Forum, including on "Inclusiveness, Access to Information and Knowledge for All" (23 July 2020), presenting initiatives undertaken to promote access to information and knowledge trough ICTs and digital technologies for indigenous language users and persons with disabilities.

In the context of the ongoing COVID-19 pandemic, UNESCO has continued to intensify its efforts to ensure access to reliable and accurate health information in languages that are best understood by indigenous peoples, by compiling relevant resources in cooperation with Member States, other UN Agencies and partners, on the dedicated page <u>"COVID-19 pandemic: Language Matters"</u> on the IYIL2019 website. A social media campaign is being run in parallel to promote these resources.

Additionally, on the occasion of the International Day of the World's Indigenous Peoples on 9 August 2020, UNESCO released a <u>Bulletin focusing on the impact of the current crisis on indigenous peoples</u>. It includes information concerning targeted actions taken by the Organization in different areas, as well as good practices for the future.

UNESCO is leveraging the power of AI and Machine Learning based Language Technologies to promote linguistic diversity and multilingualism. These technologies are helping six low-resource languages spoken in 22 countries to improve spelling/grammar check, speech and speaker recognition, machine translation for text and audio, speech synthesis, and spoken dialogue.

A weekly "<u>Culture & COVID-19: Impact and Response Tracker</u>" was launched in March 2020 providing an overview of the rapidly evolving situation caused by COVID-19. It revealed the impact of the health crisis on the unprecedented acceleration in the digitization of culture access. The renewed Tracker "Culture and Public Policy", which is now issued on a monthly basis, continues to monitor and accentuate the impact of the digital transformation in Member States. Issue 2 of the Tracker (October 2020) focused on the digital transformation through its cutting-edge rubric, providing an overall analysis of the impact of the digital transition on the cultural sector across its different domains, while also raising key policy issues linked with this global trend.

The UNESCO Ramallah Office is supporting the Palestinian Ministry of Culture in its efforts to explore the possibility of investing in technology and the different electronic platforms as a new alternative sphere through which culture can be enhanced and promoted during the COVID-19 pandemic and in case of any future emergencies. Through international expertise on digital culture, UNESCO will help the Ministry of Culture create a dedicated national team capable of utilizing E-Culture during times of crises; this will also support artists and allow them to have a space for expressing/showcasing their arts, and reach out their public and potential clients.

The <u>UNESCO Creative Cities Network</u> (UCCN) since 2004 has promoted cooperation with and among cities that have identified creativity as a strategic factor for sustainable urban development. The Network is composed of 246 cities from over 80 UNESCO Member States, in 7 creative fields: Crafts and Folk Art, Design, Film, Gastronomy, Literature, Media Arts, and Music. UNESCO Creative Cities were invited to share the innovative measures and good practices they were implementing to cope with the pandemic. Numerous <u>digital responses</u>, from Bergamo, Italy's virtual museums, to Hangzhou, China's crafts and arts online classes, to Curitiba Brazil's 3-D production of face shields, were gathered and shared online and in a <u>UNESCO publication</u>.

Challenges and opportunities linked with cultural and digital transformation as well as cultural literacy in digital environment were also strongly emphasized on the occasion of Mobile Learning Week 2020 and <u>Global Media and Information Literacy Week 2020</u>. Among other activities, an online and interactive quiz on UNESCO's actions for culture was launched. This quiz – available in French, Spanish and English – includes questions on the different dimensions of the work of UNESCO in culture. Envisioned as a pedagogic and entertaining tool, the quiz was disseminated through social media

outlets and has provided an effective tool for advocacy on culture for sustainable development.

The <u>TechCul</u> initiative brings together tech and culture leaders with startups and entrepreneurs to develop innovative digital solutions and win-win business models to address challenges faced by the culture and creative sector that were magnified by the COVID-19 pandemic. It aims to identify innovative tech and entrepreneurial solutions to tap into the power of digital transformation in order to rebound and pivot to new opportunities for the culture sector in the long term. The initiative kickstarted in December 2020 with an Ideathon to solicit a wide range of solutions that connect culture and technology. Potential solutions will be selected for further support through resources mobilized from private sector and development partners.

UNESCO is working to monitor the implementation of roadmaps at the national level of the 2005 UNESCO Convention for the Protection and Promotion of the Diversity of Cultural Expressions (2005 UNESCO Convention), documenting these processes and collecting good practices that can inspire other countries. The <u>Guidelines on its</u> implementation on in the digital environment and of an <u>open road map to guide</u> <u>Member States in their implementation</u> help to guide Parties on the promotion of cultural diversity, including the need to adapt to the opportunities and challenges raised by ICTs.

The results of these efforts will be presented to the governing bodies of the Convention in 2021. Within the framework of UNESCO's standard-setting work in the field of artificial intelligence, particular attention is paid to the impact of these technologies on the creation, production, dissemination of and access to cultural expressions.

With a view to enhancing digital literacy, a gender-transformative programme UNESCO|Sabrina Ho initiative "You Are Next: empowering creative women" supported four projects that strengthened the technical and entrepreneurial skills of young women under the age of 40 in Mexico, Palestine, Senegal and Tajikistan. Through the initiative, more than 100 young women were trained and gained new skills in virtual reality, visual arts, music and video production. The initiative "You Are Next" has contributed to improving creative women's access to the digital sphere and raised awareness about relevant policies that would ensure gender equality in the creative industry and actions to foster women entrepreneurship in the digital environment.

Within the framework of an European Union/UNESCO programme, "<u>Supporting new</u> regulatory frameworks to strengthen the cultural and creative industries and promote <u>South-South cooperation</u>", UNESCO has been supporting selected developing countries to strengthen local content production, distribution and dissemination through revision of copyright legislation and local content programme, other countries are developing their national film industries with a view to supporting the diversity of local audiovisual content. Within the same framework, UNESCO is supporting Mexico in the design of a standard regulation to incorporate indigenous content in commercial and public media.

<u>The ResiliArt movement</u> was launched in response to the pandemic on 15 April 2020, World Art Day. It sheds light on the current state of creative industries amidst the crisis

through an exclusive global discussion with key industry professionals while capturing experiences and voices of resilience from artists – both established and emerging – on social media. The devastation brought upon the entire culture value chain will have a long-lasting impact on the creative economy; ResiliArt aims to ensure the continuity of conversations, data sharing, and advocacy efforts long after the pandemic subsides. As of 3 December 2020, 233 ResiliArt online debates have taken place in 116 countries, in particular providing creative and artistic workers as well as museum and art gallery communities a space to express their concerns, needs and solutions.

Under the <u>#Resiliart</u> movement, the Palestinian Ministry of Culture in cooperation with UNESCO Ramallah Office, organized three talks livestreamed on the Ministry's Facebook page to discuss future prospects for the cultural scene. The three talks allowed different stakeholders to debate using digital platform. One of the sessions addressed 'Youth, online artistic forms and emerging technologies', focusing on the needs of youth and the innovative solutions that young generations have adopted during the COVID-19 pandemic to promote their production.

The International Year of Creative Economy for Sustainable Development in 2021 will provide key momentum to promote the role of digital technologies as essential elements of policies supporting creativity for sustainable development. In this framework, UNESCO will invite Member States to consider taking measures to enhance the status of artists and cultural professionals in order to ensure an enabling and safe environment for the creation and production of cultural goods and services in the digital environment, and to adapt cultural policies to the challenges and opportunities of the digital transformation.

To support implementation of the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003) UNESCO launched an <u>online survey</u> to document and exchange the different experiences of living heritage and how its safeguarding is affected in the context of the COVID-19 pandemic as well as the role it can play in maintaining social connectivity and solidarity during physical distancing and lockdown. Over 200 responses were received from communities in more than 70 countries. The rich knowledge, practices and experiences shared by communities worldwide are available on a UNESCO web platform.

Using web-semantics and graphic visualization, 'Dive into Intangible Cultural Heritage' is an online tool proposing a broader conceptual and visual navigation through more than 500 living heritage elements. It allows users to explore and visualize deep interconnections among the elements, geography, ecosystems and the domains of the UNESCO 2003 Convention for the Safeguarding of Intangible Cultural Heritage. A new version of the Dive online tool showcasing the interrelations between living heritage and the 2030 Agenda for sustainable development is under development.

The "Women e-nspire Culture" multi-sectoral project aims to empower Hmong ethnic minority artisan women in Doi Pui, Northern Thailand to safeguard and promote their intangible cultural heritage through digital and entrepreneurship skills. Financed by Samsung with participation of Samsung and UNESCO staff, the project commenced with a Hackathon (August 2019) to generate ideas connecting intangible cultural heritage and digital technology. Two selected ideas (a website and a Facebook page that promote the Doi Pui village and its artisans) were identified for further

development. A final workshop took place on 11-12 July 2020 to gather feedback on the new centralized website for Doi Pui village (<u>https://hmongdoipui.com/</u>); strengthen artisan women's ability to safeguard their intangible cultural heritage using digital/entrepreneurial skills; and enable artisan women to use the new website to promote their way of life, rituals and traditional crafts. Throughout the project, 38 Hmong adult artisan women and 17 youths (girls) under the age of 20 benefited from various training and support.

As part of efforts to protect underwater cultural heritage (2001 UNESCO Convention) and build national capacities of Member States in that regard, UNESCO elaborates online training tools and promotes their use by heritage institutions and professionals. The COVID-19 pandemic has also led to an acceleration of the digitization of training resources. Digital tools are also increasingly used in the virtualization of underwater archaeological sites, which are used for practical trainings. UNESCO is working with its associated UNITWIN Network on Underwater Archaeology, which connects universities and professional training institutions working in the field of underwater archaeology, to develop digital training materials.

As part of the #ShareOurHeritage campaign, UNESCO is working to promote access to culture – from World Heritage properties to living heritage practices – during this time of mass confinement. With the support of Google Arts & Culture, UNESCO launched an interactive <u>online exhibition</u> and virtual tour featuring dozens of World Heritage properties from across the globe. First-hand <u>video accounts from World Heritage site managers</u>, the caretakers of these outstanding places, were also provided to offer a unique glimpse into the impact of COVID-19 on World Heritage sites. Additionally, the closures of World Heritage sites due to the pandemic have been monitored and are represented on an updated <u>map online</u> with statistics of countries whose sites are open, partially open or closed.

UNESCO Beijing Office, in collaboration with Communication University of China (CUC), conducted a series of two online capacity-building workshops on heritage promotion through social media platforms. The objective of the workshops was to enhance the resilience of cultural transmission and the sustainability of livelihoods of intangible cultural heritage bearers and cooperative members at World Heritage sites in China, especially under the impact of the pandemic. Fourteen participants (57% women) from four World Heritage sites have been empowered to develop digital content and mobilize social media tools for effective public outreach and awareness-raising. In 2021, UNESCO Beijing Office plans to launch jointly with CUC a three-year social media campaign #HeritageSoYoung, the aim of which is to enhance the engagement of children and youth in cultural heritage promotion through a series of online and offline activities.

A Webinar series on Heritage Science and Africa was launched in June 2020 in partnership with the Egypt-Japan University of Science and Technology (E-JUST) in Alexandria, Egypt, to provide an online platform for information sharing and learning among heritage experts and museum professionals and to enhance international cooperation within the framework of UNESCO's Global Priority Africa. The third session of this Webinar series was held on 10 December 2020 under the topic of Heritage, ICT, and Digital Transformation in Africa. The experts, including those from Africa (Egypt, Morocco, Rwanda, Sudan, and Tanzania), presented good practices in

the application of ICTs and digital technologies for heritage preservation and museum management in the information society.

In response to the COVID-19 crisis, the UNESCO Ramallah Office, in close coordination with the Palestinian Ministry of Tourism and Antiquities (MoTA), started the preparation for digitizing an educational museum called the '*Traveling Museum*' established by MoTA in 2019. The museum was originally designed to travel between schools in Palestine to introduce the history and culture of Palestine through small archaeological and historic objects. To overcome the confinement restrictions, the objects are currently being digitized using 3D scanning, and will be exhibited using a website and an application that includes descriptive information.

The UNESCO Yaoundé Office is supporting the National Museum of Cameroon in the creation of its very first 360° Virtual Museum, to showcase and put online the rich cultural diversity of Cameroon.

The Office is also supporting the *Centre de Réflexion pour le Développement du Noun* (CERDEN) in the enhancement of the identity of the Bamoun people, through the virtual realization of the biennial festival "Nguon", to compensate for the cancellation of the festival (due to Covid-19), which highlights the rich intangible heritage of the Bamoun people.

Within the framework of intersectoral collaboration, UNESCO will strengthen the capacities of community radios to broadcast messages in the 230 national languages of Cameroon, around heritage education (cultural and natural), the safeguarding and transmission of intangible heritage, the enhancement of linguistic and cultural diversity for peace-building and awareness raising to fight against illicit trafficking of cultural goods.

UNESCO Bangkok has developed an online app using open source software for collecting data at heritage sites. The "Heritage Steward App" is developed as a monitoring tool for heritage agencies as well as civil society, to help in monitoring World Heritage and other heritage sites. It will facilitate the collection of basic information on the condition of the property and identify possible threats, conservation issues and management problems. It has been introduced to World Heritage site managers in Lao PDR and Thailand, and the demo version will be shared with civil society partners such as heritage trusts in the Southeast Asia sub-region as well.

COVID-19 presents new challenges for parents and guardians of young children, many of whom are out of school. Yet confinement can also be an opportunity – for learning, creativity and discovery. To encourage this creativity, UNESCO, through the <u>Little</u> <u>Artists</u> initiative, invited children between the ages of 6 and 12 to draw a UNESCO World Heritage site that matters to them and submit their artworks digitally. On World Day for Cultural Diversity for Dialogue and Development (21 May), UNESCO presented the artworks of 572 children from 55 countries online.

The response to the impact of COVID-19 will shape future management and information systems for World Heritage sites and digital technology will play a key role in the transformation. From a sustainable tourism perspective this provides an opportunity to strengthen visitor management strategies for practitioners and the flow

of data and information for business and consumers. For consumers, heritage interpretation is vital for the transmission of heritage values that underpin UNESCO's cultural conventions. Starting in 2021 UNESCO will be initiating online training certification for tourist guides and craft makers for World Heritage in eleven properties in eight countries. This will complement the UNESCO Sustainable Tourism Pledge platform with the Expedia Group working and the hospitality industry and national tourism boards.

The Arab World Heritage Young Professionals Forum (organized within the framework of the UNESCO/UNOCT project on the Prevention of Violent Extremism (PVE) through Youth Empowerment in Jordan, Libya, Morocco, and Tunisia, co-funded by Canada) which took place in Tunis, Tunisia, in December 2019, provided training to young professionals on communication strategies for promoting heritage and peacebuilding within their communities. The impact of the ICT tools and trainings provided to the participants was further witnessed in the participant-led follow-up projects that were carried out within the Arab States region, ranging from online edit-a-thons, to photography contests, geodatabases, virtual games and digital publications.

The **1970** Convention on the Means of Prohibiting and Preventing Illicit Import, Export and Transfer of Ownership of Cultural Property marked its 50th anniversary in 2020. UNESCO launched the international communication campaign "The real price of art" created with the communication agency Doyle Dane Bernbach (DDB). Information and communication technologies were used to organize numerous virtual meetings and training sessions at UNESCO's headquarters and/or with Field Offices and partners to raise awareness, reinforce capacities and discuss future cooperation with different stakeholders and decision-makers in the fight against the illicit trafficking of cultural property.

For the first celebration of the International Day for the Fight against Illicit Trafficking of Cultural Property (14 November), communication and awareness-raising content including social media and digital posters were published by UNESCO's Headquarters and Field Offices.

In partnership with the Peace Operations Training Institute (U.S.), UNESCO developed an online training course on the protection of cultural property for the military, police and law enforcement, including for the personnel of the United Nations peacekeeping operations. Launched in December 2020, it is composed of five lessons and includes information on rules and good practices of engagement with cultural property in the course of emergencies and is enriched with case studies and video tutorials. Developed on the basis of UNESCO's Military Manual on the Protection of Cultural Property, the online course is expected to reach approximately 500 students annually. On the occasion of the 66th anniversary of the adoption of the UNESCO Convention on the Protection of Cultural Heritage in the Event of Armed Conflict and its Two Protocols (1954 and 1999), 14 May 2020, UNESCO convened an online meeting of the Blue Shield Platform with its partners to discuss threats to cultural heritage in conflict zones in the context of COVID-19 and how to increase coordination and impacts of international support measures in conflict-stricken countries. The meeting brought together representatives of the Blue Shield International, the International Committee of the Red Cross (ICRC), the International Council of Museums (ICOM), the International Council on Monuments and Sites (ICOMOS) and the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), International Council on Archives (ICA) and International Federation of Library Associations and Institutions (IFLA). The participants agreed to establish a digital coordination platform to strengthen the impact of projects on the ground. Modalities of the digital platform will be agreed by the end of 2020.

UNESCO launched the online *Report on Museums around the World in the face of COVID-19* available on the UNESCO Digital Library. The report presents an initial evaluation of the impact of COVID-19 in the museum sector with key trends of the world's museums, their response and capacity for resilience, and the challenges of accessing culture and collections, including through digital and virtual means. More than ten webinars were organized for museum professionals and the public to discuss and find solutions for the future of museums. This was in cooperation with partners, such as IBERMUSEUMS, the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), the Egyptian Ministry of Tourism and Antiquities (MoTA) and the International Institute for the Inclusive Museum.

The Online Seminar on COVID-19 and Museums in Egypt was organized in June 2020 in cooperation with the Ministry of Tourism and Antiquities (MoTA) in Egypt. The Seminar brought together key museums in Egypt, including the Egyptian Museum in Cairo, the Grand Egyptian Museum, the National Museum of Egyptian Civilization, and the Museum of Islamic Arts in Cairo to share their experiences in the emergency response to the pandemic. One of the outcomes of the Seminar was a strategy and action plan proposed for coping with and recovering from the impact of the pandemic on the museums, including digitization of museum collections to make them available virtually online.

Under the ongoing project for the National Museum of Egyptian Civilization (NMEC) in Cairo, the UNESCO Office in Cairo extended assistance to the development of the database, website, and mobile applications of the museum.

Under the Memorandum of Understanding between UNESCO and the Operational Satellite Applications Programme (UNOSAT) of the UN Institute for Training and Research (UNITAR), UNESCO requested satellite-image based damage assessments of heritage sites in Fiji and Vanuatu following Tropical Cyclone Harold in April 2020. The assessment was valuable information for local authorities who, at the time of the cyclone, were facing a national lockdown due to the COVID-19 pandemic and were unable to travel to conduct assessment onsite.

On 13 April 2020, a fire broke out and destroyed the roof of the Milot Church, which is located within the World Heritage property of the National Historic Park - Citadel, Sans Souci, Ramiers, in Haiti. In the framework of the response to the disaster, UNESCO, with the support of the Heritage Emergency Fund, financed the production of key architectural documentation of the Milot Church prior to the fire. The documentation, which constituted more than 350 raw pictures and 3D model screenshots dating from 2014, represented essential pre-disaster baseline data used to analyze the extent of the damage caused by the fire and, subsequently, to inform and guide the rehabilitation process.

Action Line C9 (media)

UNESCO <u>commemorated the 2020 World Press Freedom Day</u> (3 May) in a virtual event moderated by the journalist Jorge Ramos and held 4 May with UN Secretary-General António Guterres; UNESCO Director-General Audrey Azoulay; UN High Commissioner for Human Rights, Michelle Bachelet; journalist Younes Mujahid, President of the International Federation of Journalists; Maria Ressa, investigative journalist from the Philippines, founder of the Rappler news website; the Secretary General of Reporters Without Borders, Christophe Deloire and, Monika Bickert, Head of Global Policy Management at Facebook. A series of videos featured messages from Heads of State and Government, Ministers and other high-level figures. The celebration was accompanied by the global campaign FACTS, highlighting the importance of quality journalism to address misinformation. The campaign was embraced by major news media outlets worldwide.

UNESCO and the Kingdom of the Netherlands organized the World Press Freedom Conference on 9-10 December 2020. The conference jointly celebrated <u>World Press</u> <u>Freedom Day</u> (3 May) and the <u>International Day to End Impunity for Crimes against</u> <u>Journalists</u> (IDEI, 2 November) through a format that merged digital and in-person elements. The conference gathered more than 3,500 participants from 120 countries, including key speakers such as Christiane Amanpour, Maria Ressa, Carmen Aristegui, Jineth Bedoya, discussing central challenges for press freedom and the media ecosystem.

The event commemorating IDEI 2020, held on 10 December, entitled "<u>Strengthening</u> investigations and prosecutions to end impunity for crimes against journalists", presented the guidelines for prosecutors for investigating and prosecuting crimes and attacks against journalists, developed in partnership with the International Association of Prosecutors. The UNESCO Issue Brief on "<u>Safety of Journalists Covering Protests</u>: <u>Preserving Freedom of the Press During Times of Turmoil</u>" was presented and discussed, along with the 2020 UNESCO Director-General Report on the Safety of Journalists and the Danger of Impunity.

This 2020 <u>Report on the Safety of Journalists and the Danger of Impunity</u> responds to a call from the 39 Member States in UNESCO's <u>International Programme for the</u> <u>Development of Communication (IPDC)</u> to provide an analytical report that includes the responses received from concerned Member States about judicial follow up to the killings of journalists. The 2020 Report indicates i.a. that a journalist had been killed on average once every four days over the previous decade.

UNESCO commemorated on 24 November the 40th Anniversary of the International Programme for the Development of Communication (IPDC), through a virtual session on the Future of Media Development. Over its first four decades, the IPDC has supported more than 2,000 media development projects with grants of more than 120 million USD in 140 developing countries, mainly via supporting grassroot initiatives through media development, training, research, capacity-building, law reform and advancement of journalism education.

Through its new Global Media Defence Fund, a Multi-Partner Trust Fund administered aimed at enhancing media protection and improving the access of journalists to

specialized legal assistance, UNESCO started the support of more than 40 initiatives aiming to strengthen the legal defence of journalists in all regions.

The International Research Centre on Artificial Intelligence (IRCAI) in Slovenia, a category 2 centre under the auspices of UNESCO, has launched a Corona Virus Media Watch that seeks to provide global and national news updates based on a selection of media entities with open online news. The tool may be useful for policymakers, media and the public to observe the emerging trends related to COVID-19 in their country and the world.

Action Line C10 - Ethical dimensions of the Information Society

UNESCO's work on Action Line C10 continues to focus around the ethical dimensions of technological innovation and transformation.

Following the decision of UNESCO's General Conference at its 40th session in November 2019, UNESCO has embarked on a two-year process to elaborate the first global, intergovernmental standard-setting instrument on the ethics of artificial intelligence in the form of a Recommendation. In 2020, the focus has been on inclusive and multidisciplinary consultations toward a draft text for the Recommendation, with the assistance of an international Ad Hoc Expert Group, in advance of multi-stakeholder consultations and an intergovernmental process and negotiation to produce a final version of the Recommendation for possible adoption by UNESCO's General Conference at its 41st session at the end of 2021.

In November, UNESCO launched at the Internet Governance Forum the <u>Dynamic</u> <u>Coalition of Internet Universality Indicators</u> (IUIs) embracing the four ROAM principles: an acronym for Rights, Openness, Accessibility to all, and Multistakeholder participation. The <u>event</u> presented national assessments project of IUIs in 21 countries, via 6 regional and thematic sub-sessions gathering above 30 speakers including 11 high-level representatives across five continents. The Dynamic Coalition will strengthen synergies and partnership between UNESCO and IGF MAG and all stakeholders, National and Regional IGFs (NRIs), Best Practice Platforms (BPP) and others to jointly advance evidence-based Internet policies at national, regional and global levels.

UNESCO's Internet Universality ROAM-X Indicators framework is a set of 303 indicators that aim to assess adherence to the ROAM principles among national stakeholders, including governments, companies, and civil society. It also includes 79 cross-cutting Indicators (category X) concerning gender and the needs of children and young people, sustainable development, trust and security, and legal and ethical aspects of the Internet.

The ROAM-X approach has also been applied to AI in UNESCO's 2019 publication "Steering AI and Advanced ICTs for Knowledge Societies", which provides key recommendations on ensuring that use of AI is human-centered. UNESCO will continue to engage with governments, private sector, Internet intermediaries, technical community and academia to ensure adequate safeguards of privacy and personal data protection are put in place in AI related apps. UNESCO is building a consolidated online platform and policy observatory to support optimization of data and deliver online tutorials/ help desks for stakeholders to research using UNESCO indicators and make intelligent use of data made available by the platform. The online platform will particularly contribute to achieving global impact, deepening synergies among stakeholders and advancing countries agenda to transform information and policy recommendations into actions.
