Foster innovation and an inclusive digital transformation in the service of sustainable development

UNESCO

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Key challenges

Digital technologies and innovation are increasingly critical to the advancement of human development and the creation of inclusive knowledge societies. New technologies such as artificial intelligence, blockchain technology and the Internet of Things hold huge promise for society.

However, this technological promise is increasingly being counterbalanced by a set of ethical and accessibility challenges that threaten to interfere with or even obstruct fundamental human rights.
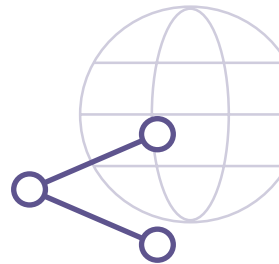
Issues such as increased surveillance, data mining and profiling, as well as algorithmic bias and automated decision-making, represent new risks to the rights to privacy and non-discrimination. In addition, divides in terms of digital skills and accessibility, both within and between countries, are reinforcing existing social, economic and gender inequalities.

UNESCO is addressing these challenges by promoting a truly multi-stakeholder approach to technological development that is aligned with the principles of respect for human rights, openness and accessibility.

| With your support, UNESCO will...

- Promote openness and the innovative use of digital technologies to reduce the digital divide and foster an inclusive digital transformation that respects and protects human rights. This will be achieved through a holistic approach encompassing capacity-building, risk monitoring, policy advice and awareness-raising.

- Monitor and address the potential risks of new technologies such as artificial intelligence (AI) by developing human-rights based international ethical standards and actionable frameworks, building capacities for their implementation, and preventing discrimination, including the proliferation of gender biases, through technology.

- Continue supporting national assessments of Internet development and its adherence to the principles of human rights, openness, accessibility, and multi-stakeholder participation (ROAM), through the application of UNESCO's Internet Universality Indicators framework.

- Advance the development of digital skills and competencies through projects such as the UNESCO YouthMobile Initiative which empowers teachers and learners with basic coding skills to develop mobile applications in support of sustainable development.

- Build capacity for the development of inclusive and human-centered AI in Africa through promoting open data, as well as strengthened networks and customized tools.

- Support the implementation of the UNESCO Recommendation on Open Educational Resources (OER), to harness the transformational potential of OER for lifelong learning, democratization of knowledge and innovation.

- Accelerate action to transform teacher education using digital technologies, and expand the use of the UNESCO ICT Competency Framework for Teachers (ICT-CFT) to strengthen learning in the digital age and help bridge the digital and knowledge divides.
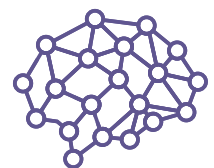
While around 51% of the global population uses the Internet, an estimated 3.7 billion do not have Internet access. In least developed countries, only 19% of the population uses the Internet.

| Recent UNESCO achievements include...

- Engaging in global partnerships on AI and initiating projects such as the AI Decision Makers' Essential toolkit to support ethical AI policy development, as well as co-launching the "Collective and Augmented Intelligence Against COVID-19" (CAIAC) initiative, an AI-powered tool to support decision-making. UNESCO also launched a global survey for the development of a massive open online course (MOOC) to build the judiciary's capacities on AI and the rule of law.

- Conducting an AI Needs Assessment in Africa to collect data on principal needs and requirements for capacity development in this field across the continent.

- Accelerating progress towards learning and knowledge for all by supporting the implementation of the 2019 Recommendation on OER, launching the OER Dynamic Coalition and promoting the creation and use of open license material for learning, teaching and research.

- Mobilizing stakeholders across the world to use the ICT-CFT and OER to ensure continuity of education during the COVID-19 pandemic.

- Assessing Internet development to help improve related policies in over 20 countries, using UNESCO's Internet Universality Indicators; and launching a Dynamic Coalition of Internet Universality to support international cooperation to improve the ecosystem in which emerging technologies are developed, applied and governed.

- Encouraging youth to use digital innovation in response to the COVID-19 crisis and beyond by organizing the global CodeTheCurve hackathon, which involved over 200 young innovators from 26 countries developing solutions to address the pandemic.

- Building digital skills in over 35 countries worldwide through the YouthMobile Initiative, with targeted action to benefit girls and young women. In line with UNESCO's Global Priority Africa, YouthMobile supported large-impact initiatives such as the Africa Code Week organized by SAP, the continent's largest annual coding event, initiating more than 6 million youth to computer coding between 2018 and 2019, of which 47% were girls or young women.

In response to COVID-19, UNESCO launched the #DontGoViral campaign, aimed at informing communities and addressing the spread of false information around the virus. The campaign, which mobilized renowned African artists, received more than 580 submissions from 54 African countries, and generated some 220 million hits on social media.