



United Nations  
Educational, Scientific and  
Cultural Organization



Information for All  
Programme



United Nations  
Educational, Scientific and  
Cultural Organization



UNESCO Institute  
for Information Technologies  
in Education

# UGRA DECLARATION INFORMATION AND COMMUNICATION IN THE DIGITAL AGE



Government  
of the Khanty-Mansiysk  
Autonomous Okrug – Ugra

# **Final Document of the International Conference “Tangible and Intangible Impact of Information and Communication in the Digital Age”**

Khanty-Mansiysk, Russian Federation, 4–8 June 2018

The International conference “Tangible and Intangible Impact of Information and Communication in the Digital Age” took place in Khanty-Mansiysk, Russian Federation, on 4–8 June 2018, within the framework of UNESCO’s Information for All Programme and the X International IT Forum. It was organized by the Government of the Khanty-Mansi Autonomous Okrug – Ugra, Commission of the Russian Federation for UNESCO, UNESCO / UNESCO Information for All Programme, UNESCO Institute for Information Technologies in Education, Russian Committee of the UNESCO Information for All Programme and Interregional Library Cooperation Centre.

The interdisciplinary conference brought together about 100 participants from 40 countries – academicians and practitioners from the field of ICT and media, as well as philosophers, policy-makers, social scientists, representatives of higher educational institutions and research centres, libraries, public authorities, private sector and civil society institutions.

Conference activities included the following plenary sessions: “Expanding Digital Universe”, “Transformations of Social Communications”, “Openness or Exclusiveness in Cyberspace: Quo Vadis?”, “Digital Present: Expectations and Reality”, as well as a themed discussion “Media and Information Literacy” and two sections: “Culture and Languages in the Digital Age” and “Access to Information: Right and Equity”. A special seminar “Digital Preservation Challenges” was organized as a satellite event.

Conference participants argued on the problems, phenomena and trends of the information and communication field – both those that have come into focus in the last decade and those that are less evident, but might significantly impact the socio-cultural landscape in the nearest future. The conference was aimed to contribute to harmonizing the pace of development in the field of information, communication and related technologies and the ability of science and the society to comprehend the changing reality and thus influence the vector and nature of progress.

The conference considered modern socio-cultural processes accompanied by the widespread introduction of digital technologies and the digitisation of various spheres of life from the humanistic perspective of the UNESCO intergovernmental Information for All Programme, sharing the commitment to the principles of social justice, inclusion and non-discrimination, and the balance of rights, opportunities and responsibilities.

## **Concluding its work, the conference adopted the following Declaration:**

Rapid and constant changes in the information and communication field have become one of the most vivid and comprehensive features of the modern era. These changes are fuelled by the penetration of information and communication technologies into all spheres of our life and by nurturing the so-called converging technology generations. The development of e-services

(e-Government, e-Education, e-Health, etc.), embedded systems and devices, artificial intelligence and machine learning, the Internet of things, augmented and virtual reality, big data analytics and cloud computing, cryptocurrencies, block-chain, etc., foster the shift towards a new technological paradigm. The future brings both positive expectations of scientific and technological progress and distinctly perceived concerns and challenges, which are described and analysed by various communities – from media specialists to academics and politicians.

The speed of changes in an ever more complex world is so high that societies do not have sufficient time to interpret and thoroughly understand the current processes and trends as well as their impacts. Most studies focus on the receding reality; those trying to describe and analyse the current state-of-the-art and to forecast possible development lines and their consequences follow out-of-date models and approaches. At the same time, experts and the public have reached a relative consensus on the socio-cultural challenges coming into particular prominence:

- information overload, resulting in its devaluation, de-professionalization of journalism and loss of trust to professional media outlets;
- pervasive communications accompanied by ever more sophisticated and addictive communicative technologies;
- power and mid- and long-term effects of digital platforms, born within regulation grey areas and run by big monopolizing companies;
- dangers of dehumanization, with people gradually framed by technology, getting excluded from generating meanings and values and turning into functional supplements to communication flows;
- traditional cultural regulators of social relations and processes being displaced by automated social algorithms;
- blurring the borders between the real and the digital world, wide spread of simplified virtual mock-ups and simulacra;
- privacy being eroded by the spread of both commercial and government surveillance; personal data and digital footprint turned into goods which can be sold and resold to form the economic basis of cyberspace;
- post-truth in its heyday, with public perception shaped more by means of addressing feelings and personal opinion rather than operating real facts, with fakes, clickbaits, hypes and other tools introduced to form post-reality in the political and media culture, and furthermore to influence people to create and live in fake universes;
- artificial intelligence technologies tending to shape humanity's access to information and knowledge transaction processes.

While the convergence of digital, physical and biological environment is gaining momentum, traditional pre-digital interaction and management models are still used, which leads to a widening range of problems, in particular considering ethical and legal issues.

In this context, the reframing and promotion of competencies (skills, knowledge and attitudes) incorporated in the term “media and information literacy” and providing a safe and responsible critical use of networks and digital services, is gaining great importance. The development of such competencies is becoming indispensable.

## **The Conference elaborated the following recommendations:**

UNESCO Member States, relevant intergovernmental and public organizations, UN agencies and other stakeholders should reach a consensus on the preparation of a global report on sociocultural transformations accompanied and influenced by the prevalence of digital technologies. The report should be based on a holistic and interdisciplinary approach to ensure a better insight of the present and future challenges. Cooperation among ethics, social sciences, humanities and cyber scientists and developers must be activated to avoid unintentional drawbacks. In addition they must establish and support the activity of an interdisciplinary working group on cyber trends and emerging cyber technologies envisaging their potential impacts on society. This cooperation will not set limits to innovation but will promote “informed” innovation.

All relevant stakeholders should take steps to enable individuals to better manage the collection, storage, analysis and sharing of their personal data and digital footprint and to protect the privacy of users against intrusion, misuse and abuse by both governmental agencies and private sectors. Regulation should be elaborated on the limits of the use of personal data. Designers, developers and other stakeholders who are working with algorithms that process personal data should abide by Code of Ethics proposed by computer science and engineering societies such as The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems and ACM Principles for Algorithmic Transparency and Accountability.

Concerned stakeholders, specifically governments, academics, and civil society organizations as well as experts from the scientific community, librarians and teachers should contribute to the elaboration of educational and learning programmes concerning the ethical, legal, systemic, cultural and social aspects of living in a world saturated by digital communication and media. Such programmes should broadly and massively promote the empowerment and raise the competency of citizens (with a special priority towards young citizens), in particular through increasing the level of media and information literacy.

Access to knowledge is a condition for informed/knowledge-based societies. Open science must thus be a priority for governments and research institutions. Their policies and action plans must ensure sustainable and linguistically more diverse open access to scholarly communication, research data and open educational resources, facilitated by digital technologies.

\*\*\*

This document was elaborated by the representatives of Argentina, Armenia, Belarus, Brazil, Bulgaria, Burkina Faso, China, Colombia, Dominican Republic, Ecuador, Egypt, France, Georgia, Ghana, Hungary, India, Italy, Jamaica, Japan, Kazakhstan, Kyrgyzstan, Latvia, Moldova, Norway, Palestine, the Philippines, Russia, Serbia, Slovenia, South African Republic, Spain, Sri Lanka, Switzerland, Syria, USA, Uzbekistan, and Zambia.