Citizenship Education in the Global Digital Age
Thematic paper

This document, prepared by UNESCO Section on Global Citizenship and Peace Education with the contribution of Laura Engel and Evelyne Koumtingue, is part of several thematic papers developed by UNESCO to inform the Revision of the 1974 Recommendation concerning education for international understanding, co-operation and peace.

These papers focus on topics that are not currently covered in the Recommendation but that require greater attention in the revised version in view of ensuring it addresses contemporary challenges to lasting peace.

For more information on the revision visit the dedicated website.

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UNESCO, as the United Nations' specialized agency for education, is entrusted to lead and coordinate the Education 2030 Agenda, which is part of a global movement to eradicate poverty through 17 Sustainable Development Goals by 2030. Education, essential to achieve all of these goals, has its own dedicated Goal 4, which aims to *"ensure inclusive and equitable quality education and promote lifelong learning opportunities for all."* The Education 2030 Framework for Action provides guidance for the implementation of this ambitious goal and commitments.

Citizenship Education in the Global, Digital Age

Executive Summary

Our interconnected, digital world promised free, equal and equitable access to information; to open up new venues both for knowledge consumption and production; to more directly and readily connect people, places, and cultures; to offer new ways of understanding oneself in terms of worldview and place in the world; to offer new means of expressing individual and collective identities, along with their global projections; and to ensure new modes of participation in democratic institutions. We have some evidence that digital tools have lived up to these promises. And yet, the realities show we face a stubborn digital divide, with great disparities of access to information within and across countries. For example, 37% of the world's population is left without Internet, which means that rather than empowering individuals and communities through increased access to knowledge and participation in new modalities, the uneven access to Information and Communications Technology (ICTs) has instead broadened and deepened marginalization (International Telecommunication Union 2021). Moreover, the uses of ICTs have raised cybersecurity concerns, risks associated with automation, and fueled a global infodemic rooted in mis-, dis-, and mal-information, violent ideologies, hate speech, prejudice, bias, division, and confusion.

The developments in ICTs offer a series of new challenges and opportunities to education and its relationship to advancing international understanding, cooperation, peace, and education for human rights and fundamental freedoms. To achieve SDG 4 (inclusive and equitable quality education and lifelong learning opportunities for all) and SDG 16 (peaceful and inclusive societies for sustainable development), students and educators must be empowered with the knowledge, values, capacities, and dispositions needed to address both the opportunities and the challenges of the digital revolution at a time of mass migration, climate degradation and the unsustainable use of natural resources, increased inequalities, growing global divisions, and marked fragility of democratic institutions (UNESCO, 2021a). This paper synthesizes what we see as the main opportunities, challenges, and risks involved in the uses of digital tools in education for international understanding, cooperation and peace, and education relating to human rights and fundamental freedoms. It discusses the importance of forms of education oriented around the capacities required in the global, digital age, derived from approaches in media and information literacy[1] (UNESCO, n.d.), digital citizenship[2] (UNESCO, 2021b), and global citizenship education[3] (UNESCO 2015).

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[1] "MIL includes a set of competencies that enable individuals to search, critically evaluate, use and contribute information and media content wisely; to develop a knowledge of one's rights online; understand how to combat online hate speech, fake information and news and cyberbullying; understand the ethical issues surrounding the access and use of information; and engage with media and ICTs as producers of information and media content to promote equality, self-expression, pluralistic media and information, intercultural/interreligious dialogue, and peace" (UNESCO 2018c).

[2] Digital citizenship refers to the ability to "find, access, use and create information effectively, engage with other users and with content in an active, critical, sensitive and ethical manner, as well navigate the online and ICT environment safely and responsibly, being aware of one's own rights" (UNESCO, 2016, 2017; see also Jones & Mitchell, 2016).

[3] Global citizenship education refers to "an education that aims to empower learners of all ages to assume active roles - both locally and globally - in building more peaceful, tolerant, inclusive and secure societies" and entails three functions: cognitive, socio-emotional, and behavioural (UNESCO, 2015).

Implications for the 1974 Recommendation: Action Points for its Revision

The thematic paper points to several implications for the revision of the 1974 Recommendation and describes the following specific action points:

1. **Importance of Education as a Key Site for Developing Capacities Necessary for the Digital, Global Era**: The revision must identify the importance of high-quality public education as a key site for developing the necessary capacities for the global, digital era. The revision must address the digital divide and entrenched inequalities related to uneven access to ICTs, whereby education is a key context and space to ensure greater and more equitable access to ICTs.

2. **Investing in Digital Citizenship Education:** The revision should focus on an investment in digital citizenship education, which integrates global citizenship education, media and information literacy, and digital literacy components in order to build learners' capacities to decode and deconstruct hate speech and mis-, dis-, and mal-information, as well as have the ethical foundations, inclusive of empathy, to help not to share it and/or to create it.

3. **Supporting Educators:** Educators are essential to teaching and learning about the trade-offs and tensions related to the prevalence of digital tools in society. The revision should mention that ICTs have great potential to be enablers and promoters of meaningful learning experiences; however, it is important to develop opportunities for professional development and training to develop educators' capacity for globally-oriented digital citizenship education.

Changes since 1974 in terms of ICTs and its implications for education

Since the 1970s, the world has witnessed a monumental shift in the development and spread of ICTs, from low-tech radio, television and video disc (circa 1970s, 1980s), computers (circa 1980s), Internet, social media, video conferencing, to high-tech Artificial Intelligence (AI)[4] applications. These digital tools have shaped and reshaped the creation and sharing of knowledge and information, and altered how individuals and communities participate in political, economic, cultural, and social aspects of life. For example, more than 2/3 of the world's population accesses the Internet and uses a mobile phone; 70% of the world's youth has Internet access (UNESCO, n.d.). People around the world spend on average spend roughly 6 hours and 58 minutes a day online (Kemp, 2022). The Internet has "democratized" the creation and dissemination of content as it moved the control away from a very limited number of TV broadcasters and radio stations, which were heavily regulated by government, to individuals, where it became possible to create a webpage (1990s), blog (early 2000s), and YouTube (mid-2000s) to leverage individual voices and perspectives. The birth and expansion of social media, where globally people around the world spend 2.5 hours a day, the single largest share of their time, has created new channels by which individuals not only receive information, but also create the content that is shared within and across local, national, and global communities (Kemp, 2022). Individuals also decide what is deemed desirable to share with others, thus shaping how others view us (or at least how people want others to see them), meaning there are important socio-emotional and behavioral aspects to digital engagement. Moreover, digital tools have blurred the boundaries between social interactions online and offline and between the physical and the online world, calling for raised awareness of citizens on the physical, mental and socio-emotional impact it will increasingly have on their lives. There are also significant political ramifications. For some, social

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[4] AI is a general term used to describe systems that utilize machine learning, deep neural networks, large language models, and other tools; these are artificial narrow intelligence (ANI) rather than artificial general intelligence (AGI) applications.

media is a trusted place online to receive political news. For example, one in five U.S. adults use social media as a trusted platform to access political news (Mitchell et al., 2020).

ICTs also reshape how teaching and learning takes place globally. Some of these early technologies, such as radio, for example, were pioneers in distance learning with "air classes" available to any students within listening distance, and are still utilized today, such as, for example, by nomadic and pastoral populations in Kenya and South Sudan, by rural populations across Latin America, and in crisis and emergency contexts worldwide. The use of radio and television technologies increased access to knowledge and an ability to inform values of mutual understanding, principles of non-violence, and fundamental freedoms. With the introduction of computers in the classroom and the Internet, teaching and learning environments continued to shift to new modalities and open up additional possibilities (Vu, 2014). The recent disruptions of COVID-19 to on-site education around the world further normalized the use of video conferencing and other digital tools in the delivery of teaching and learning. More recent technological developments in AI are being "incorporated into administration, instruction or teaching, and learning" at rapid rates, creating, for example, more personalized learning and greater accessibility (Chen et al., 2020, p. 2).

While opening up new points of access, new modalities in education, and new potential for teaching and learning, the opportunities and benefits of ICTs have not been equally distributed. There has been a notable digital divide entrenched since 2000 when "there were just over 94 million Internet hosts in the world, with 95.6% in the OECD area and 4.4% outside of the OECD area" (OECD, 2001). To date, one third of the world's population is without Internet access (International Telecommunication Union 2021). The recent global pandemic has provided further evidence that the digital divide[5] has become more pronounced (Li, 2021). As a result, the uneven access to ICTs has both broadened and deepened inequalities within and across societies.

Developments in AI have led to new opportunities for data gathering and knowledge generation, personalized learning, while at the same time increasing risks in terms of privacy (UNESCO, 2019c). AI's impacts on education are growing as "intelligent, adaptive, or personalized learning systems are increasingly being deployed in schools and universities around the world, gathering and analyzing huge amounts of student big data, and significantly impacting the lives of students and educators" (Holmes, et al., 2019, p. 9). There are vast influences of AI in both formal and informal learning. For example, a search in the Google platform, which uses a PageRank algorithm primarily, shapes how we look for information and learn about the topics of the search, which means our learning will (continue to) adapt to these tools. AI also opens up new possibilities for formal and informal education for many communities, including access to learning opportunities for "marginalised people and communities, people with disabilities, refugees, those out of schools, and those living in isolated communities with access to appropriate learning opportunities" (UNESCO, 2019c, p. 12).

New modes of teaching and learning, along with new pedagogies, are now possible through availabilities of low and high-tech environments. Moreover, school closures due to the COVID-19 pandemic meant that the opportunities to use ICTs in education had to be increased and effectively used. And while there has been widespread educational investment in ICTs, the availability and use of ICTs does not mean there is knowledge of their uses within teaching and learning processes, full understanding of their potential, or critical thinking about the tradeoffs of digital tools within societies. The following section further develops an analysis of the different risks and opportunities of ICTs.

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[5] According to the OECD (2001), the term digital divide refers to "the gap between individuals, households, businesses and geographic areas at different socio-economical levels with regard both to their opportunities to access information and communication technologies and to their use of Internet for a wide variety of activities."

Analysis of risks and opportunities

The digital transformation of our societies is impacting our lives in unprecedented ways. Computers are quickly changing the ways in which knowledge is created, accessed, disseminated, validated, and used. Much of this is making information more accessible and opening new and promising avenues for education. But the risks are many: learning can narrow as well as expand in digital spaces; technology provides new levers of power and control which can repress as well as emancipate; and, with facial recognition and AI, our human right to privacy can contract in ways that were unimaginable just a decade earlier. We need to be vigilant to ensure that ongoing technical transformations help us thrive and do not threaten the future of diverse ways of knowing or of intellectual and creative freedom. (UNESCO, 2021a, p. 9)

Digital technologies have brought immense changes to how we learn, access information, and shape human understandings of ourselves and others, our core civic and societal values, and our understanding and engagement with others and the planet. Guided by SDG 4 (inclusive and equitable quality education and lifelong learning opportunities for all) and SDG 16 (peaceful and inclusive societies for sustainable development), it is essential to empower students and educators with the necessary tools to address both the opportunities and the challenges of the digital revolution. The digital era has emerged alongside immense global and planetary transformations taking place, including mass human migration, climate degradation, growing global divisions, increasingly fragile democratic institutions, war and conflict (UNESCO, 2021a).

The digital revolution promised to democratize access to information; to open up new avenues both for knowledge consumption and production; to directly connect people, places, and cultures; to offer new means of expressing individual and collective identities, along with their global projections; and to ensure new modes of participation in democratic institutions. Enabled by ICTs, there are new possibilities in enhancing international understanding in education through virtual exchange, the development of social and community networks, information sharing across time and space, and increased awareness of interlinkages between local contexts and global issues. Indeed, literature abounds in support of ICTs as powerful tools that can improve students' learning, high-level critical thinking, productivity, and interdependence (Unwin, 2009; World Bank, 2003; Yelland et al., 2008).

From some of the older technologies, such as radio, to some of the newer developments in AI, there is a widening of the scope of learning possibilities to inform values of international understanding, mutual respect, and non-violence. For example, there remains great potential in the use of radio and television technologies in education, including to hard-to-reach global populations or in humanitarian aid efforts. As digital technologies have created new channels by which individuals can now create the content that is shared within and across local, national, and global communities, there are new opportunities to cultivate inclusive online communities built around shared values of international understanding, sustainable development, and peace-building. To that end, social movements in the name of climate action, gender equality, and anti-racism, for example, have been enabled by the Internet and social media. Moreover, there are new opportunities to develop humanistic, ethical, and sustainable forms of AI, spurring new understandings of teaching and learning, sustainability, and inclusive learning. With these developments, there is a growing appreciation of the need to widen definitions of literacy beyond reading and writing in order to be more reflective of the ways citizens engage information and communicate with one another. Broadened definitions of literacy would include a range of text or subject matter, including oral, media, technological, art, and artifacts. More expansive orientations to literacy are particularly important in a time of narrowing curriculum and more restricted conceptions of education as an individual, private good.

Despite these promises and the appreciation of the important opportunities that exist vis a vis ICTs, there are a range of risks and challenges. Among the most notable challenge is the great disparities of access to information that exist within and across countries around the world. With 1/3 of the world's population without access to the Internet, the uneven access to ICTs has broadened and deepened marginalization in and across societies (International Telecommunication Union, 2021). The use of digital tools has also led to cybersecurity concerns, risks associated with automation, the circulation of dis-, mis- and mal-information, violent ideologies, intolerance, conspiracy theories, and hate speech. The growing prevalence of AI also raises new questions around rights as it pertains to privacy concerns and surveillance. Each of these risks have undermined the values inherent in the 1974 Recommendation on education for international understanding, mutual cooperation, peaceful and inclusive societies, human rights, and fundamental freedoms.

There are enormous opportunities that come from greater access to information. As stated by UNESCO (2020), it is "access to information, not disinformation, that makes the right to freedom of expression meaningful and helpful to societies; Verifiable, reliable information, such as that produced in science and professional journalism, is key to building 'Knowledge Societies.'" However, despite an evident rise of international norms on the importance of free, independent and pluralist media to achieving the sustainable development goals including peace and human rights, the viability of media is increasingly in decline. Fundamental rights to freedoms, despite major progress since 1974, have suffered recent setbacks, especially during the pandemic. False narratives and conspiracy theories have flourished online and been amplified by echo-chambers created vis a vis social media platform, in some cases being used as weapons through strategies that foster fear, tribalism and exclusion.

Developments in digital technologies have not been met at an even pace with platform transparency and accountability. Therefore, as information has become readily accessible through a range of platforms, in its uncurated forms and formats, it has become a potential breeding space for ideas and actions that directly counter international understanding, cooperation, peace, human rights, and fundamental freedoms. In particular, dis- and misinformation, in combination with hate speech, are direct threats to sustainable developments and the development of education for peace, international understanding and education for fundamental freedoms. Mal-information, which is "are created, produced or distributed by 'agents' who intend to harm rather than serve the public interest," often violates privacy to cause disruption, such as leaking personal information, emails or text messages with an intention to impact public perception (UNESCO, 2018a, p. 46).

It is important to note that the harm of hate speech is not new; however, the speed, spread, anonymity, and availability of hate speech and mis- and dis-information, particularly to influential, targeted populations, is the emergent problem. Social media has played a significant role in dividing communities, spurring hatred, and breaking down democratic and social institutions. For example, Toubiana and Zietsma (2017) found that social media sites, such as Facebook and Instagram, among others, can act as "echo chambers" for emotions expressed by individuals, affecting the self and others' perceptions, and reducing digital identities and digital participation to simplistic quantifications of "likes." Moreover, research has shown that online exposure to hate speech is linked to acts of ethnically motivated violence (Council on Foreign Relations, 2019). In fact, evidence suggests the extent to which individuals, groups and communities have suffered harm at many levels in online interactions devoid of digital citizenship (Barlett et al., 2014). Of concern to the revision of the 1974 Recommendation therefore is that these platforms can promote the behaviors and interactions that are contrary to peacebuilding and mutual respect.

AI, and particularly the development of humanistic, ethical, and sustainable forms of AI has the potential to locate malicious content (Watkins & Human, 2022). There is also potential in the training of developers within a human rights framework in order to avoid the reproduction (either directly or

inadvertently) of prejudices and bias in new technologies. Additionally, social media monitoring, fact checking, and warnings have proved to be useful. However, alone these interventions are not sufficient. It is essential that individuals have the critical skills to decode and deconstruct hate speech and to have the ethical foundations to help not to share it with others or to create it.

New Approaches to Digital Citizenship Education: Linking Global Citizenship Education, Media and Information Literacy, and Digital Literacy

In *A new social contract and a new grammar of schooling*, Sobe (2022) states that we must rise to the contemporary global and planetary challenges we face by "building individual and collective capacities to transform the world together." He calls for "a new social contract for education around principles, ideals and affects that support participation in transformative change." Here the utility of digital technologies expands the range of possibilities for learning inclusive of "diverse ways of knowing or of intellectual and creative freedom" (UNESCO, 2021a, p. 9). At the same time, the challenges and risks associated with ICTs mandate that students develop deeper and critical understanding of the various impacts of ICTs and develop a sense of belonging, empathy, and solidarity. For international understanding, peace, and cooperation, it is increasingly important to learn about the opportunities to use digital technologies to influence and shape more inclusive and peaceful societies (Kahne, Hodgin, & Eidman-Aadahl, 2016) and to enable students to be able to have a context for understanding their uses and opportunities, while mitigating the harmful aspects of digital technologies.

The revision of the 1974 recommendation therefore comes at a critical time to underscore the capacities required in the global, digital age that promote education for international understanding, cooperation, and peace, as well as support education for human rights and fundamental freedom. These capacities of digital citizenship integrate components of global citizenship education, media and information literacy, and digital literacy. Specifically, media and information literacy and digital literacy "empower people in all walks of life to find, evaluate and use content effectively… and to create their own messages of social value; promote dialogue and respect for the views and cultures of others; enable citizens to understand and act on content to achieve personal agency and autonomous development; help people to actively participate in achievement sustainable development goals and support democratic processes; [and] support lifelong learning" (p. 3; also see UNESCO, 2021). Digital literacy entails appropriate uses of digital tools, digital communication, digital identities, digital rights, digital health, and considerations of digital safety and security. These capacities are essential to navigating the complex information and communications environment; however, they need to be complemented by the cognitive, socio-emotional and behavioral dimensions of global citizenship education (UNESCO 2015), in order to help individuals to judge, challenge, and dispel mis-information (UNESCO, 2021b), to recognize and challenge hate speech, to understand the power structures at play in the digital world, to demonstrate socially-responsible attitudes in our interactions with others, to engage in actions that contribute to overcoming global challenges, and to participate (and create) inclusive online/digital communities.

Facilitating interconnections between people, cultures, and communities around the world is now a requirement for education worldwide (Engel & Yemini, 2020). This expectation is further underscored by the UN Sustainable Development Goals (SDGs), particularly SDG global indicator 4.7.1., which states that "global citizenship education and education for sustainable development, including gender equality and human rights, are mainstreamed in national education policies, curricula, teachers' education, and student assessment." Implementing this agenda must draw on core competencies of media and information literacy and digital literacy. For example, global citizenship is aimed at deepening an understanding of global concerns, trends, and challenges. Given the prevalence of digital tools in how individuals make sense of these global concerns, trends, and

challenges, and how individuals and communities seek to address global challenges, it is important to consider media and information literacy. These frameworks open up, for example, opportunities for students to critically reflect on the role of digital technologies in all facets of their lives, including the kinds of skills required in the altered communications and information landscape, and the social impacts of digital participation in their understanding of global concerns and challenges.

Moreover, students require capacities for using digital tools to creatively and actively participate in digital communities and movements that seek to address global challenges. In integrating capacities of digital literacy and global citizenship, education provides opportunities to develop skills in mastering digital tools and their uses, framing those around a broader set of values of international understanding, human rights, equality, social justice, and the common public good. Supporting a framework of digital citizenship is also potentially useful for integrating principles into the design of digital educational tools and support the development and use of ICTs "organized around the recognition of the role of collectivity, community and conviviality both as an essential feature of education and as a core component of educational purpose" (Facer & Selwyn, 2021, p. 14). Forms of teaching and learning enabled through these frameworks assist students in understanding, decoding, and deconstructing hate speech and inculcating values of international understanding, human rights, peace, cooperation, and fundamental freedoms.

Implications for the 1974 Recommendation: Action Points for its Revision

The creation of inclusive, sustainable, and humanistic digital communities is essential to the values inherent in the 1974 recommendation, and the opportunities to cultivate "the principles, ideals, and affects that support participation in transformative change" (Sobe, 2022). We offer the following recommendations specific for the revision of the 1974 recommendation.

1. **Importance of Education as a Key Site for Developing Capacities Necessary for the Global, Digital Era:** At a time of narrowed curriculum and the shrinking of conceptions of education as largely an individual, private good, the recommendation should identify the importance of an inclusive, expansive, globally oriented, and holistic approach to learning in the global, digital era. ICTs have the potential to facilitate the right to quality education for all and enable lifelong learning (UNESCO, 2019a) and in turn, education has the potential to facilitate more equitable access and use of ICTs. Given the potential of digital tools to undermine international understanding, cooperation and peace vis a vis the spread of intolerance, violent extremism, divisive rhetoric, and mis-, dis-, and mal-information, the recommendation must identify the importance of high-quality public education as a key site for developing the necessary capacities for the digital era. The revised recommendation must at the same time address the digital divide and the entrenched inequalities related to uneven access to ICTs, whereby education is a key context and space to ensure greater and more equitable access to ICTs.

2. **Investing in Digital Citizenship Education:** The digital age has brought with it a range of opportunities for learning, as well as significant risks in facilitating mis-, dis, and mal-information, surveillance and privacy concerns, and the circulation of hate speech, all of which undercuts democratic institutions and the core values of international understanding, peace, cooperation, human rights, and fundamental freedoms. The revision should make clear the importance of investing in digital citizenship education, which integrates global citizenship education, media and information literacy, and digital literacy components in order to build learners' capacities to decode and deconstruct hate speech and mis-, dis, and mal-information, as well as have the ethical foundations, inclusive of empathy, to help not to share it and/or to create it.

3. **Supporting Educators:** Educators are essential to teaching and learning about the tradeoffs and tensions related to the prevalence of digital tools in society (Watkins, Engel, & Hastedt, 2015). Through the COVID-19 pandemic, more educators gained experiencing using digital tools in learning environments; however, it is important to introduce a more sensitized appreciation for the relationship between ICTs in education and concepts like international understanding, cooperation, peace, human rights, and fundamental freedoms into education. ICTs have great potential to be enablers and promoters of meaningful learning experiences. As such, it is essential to provide educators with professional development and the autonomy to consider learning approaches that facilitate "critical and innovative thinking, complex problem solving, the ability to collaborate, and socio-emotional skills" (UNESCO, 2018b); to understand the relationship between hybrid learning and democratic educational practices; and to "encourage them to model good practice, and to set up learning environments that encourage students to create the kind of new knowledge required for more harmonious, fulfilling and prosperous societies" (UNESCO, 2018b, p. 9). With appropriate training and professional development training in forms of digital citizenship that integrate global citizenship education, media and information literacy, and digital literacy, the educator becomes a "learning designer, curating digital resources and designing activity sequences that create conditions for addressing sustainable development and global citizenship," providing ethical guidance to students in using ICTs that includes promoting the use of ICTs to create more safe, inclusive, and democratic environment (UNESCO, 2019b, p. 119).

Acknowledgments

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4 QUALITY EDUCATION

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