



21ST CENTURY CHILDREN AS DIGITAL CITIZENS

Developing digital skills in childhood is important to ensure children are safely and effectively engaging with digital technologies, whether at home, for school, and later on in life in the workplace. Effective engagement with digital technology includes:

- **Access:** the majority of children in OECD countries have home Internet access and the array of digital tools at their fingertips is unprecedented.
- **Use:** Despite widespread access, there is a gap in the use of digital technology and corresponding skills, especially between advantaged and disadvantaged children. This gap is widening.

Education systems need to take an inclusive and holistic approach to ensure access for the most disadvantaged, and help foster the skills that all children need to become active and ethical users of digital technologies. Digital citizenship empowers children to actively and responsibly take part in society.



ENABLING ACCESS TO DIGITAL TECHNOLOGIES

Digital participation can enhance social inclusion. However, not everyone can benefit equally. Children with limited or no access to technology are excluded, which can affect their social, civic and academic lives.

In many countries, teachers and schools do not all have access to the most up-to-date software and digital knowledge. Geography also plays a role, as countries with more rural populations face difficulty in rolling out accessible broadband for everyone.



These days schools generally opt for individual owned forms of computing, rather than providing shared devices. Some common strategies include:






- providing devices that children can use in school and bring home
- BYOD – bring your own device.

No matter the approach adopted, mitigating social inequalities or divides should be at the forefront of any policy. Ensuring equal access to devices and avoiding exclusionary practices are essential.

DEVELOPING DIGITAL SKILLS

Ensuring access is not enough to guarantee children's active participation and engagement in digital environments. Despite having grown up with digital technologies, not all children have the skills needed to use them effectively. Demographic factors influencing skills and motivations for using the Internet include: gender, age, socioeconomic status and disability.

Children can start learning digital skills in primary education, but in most systems the bulk of instruction takes place at the secondary level. Examples of policies and practices to incorporate learning digital skills into education systems include:

	Expanding and updating curricula	ICT Skills Action Plan (Ireland): provisions for promoting career opportunities to students, curricular reform, and ICT-related professional development opportunities for teachers.
	Learning frameworks and school-based strategies	National Strategy for the digitalisation of the Swedish school system 2017-2022: digital competence is one of the three main pillars of this national strategy, alongside equity in access and usage of digital tools, and research and evaluation on the effects of digitalisation in school.
	Teacher education	FATIH (Turkey): teacher professional development in this programme includes technology use, field-based training and content development.
	Extracurricular opportunities	digIT (Australia): ICT summer schools for year 9-10 students from groups that are underrepresented in STEM fields with additional five months of mentoring and a follow-up residential school.
	Digital resources	InCoDe.2030 (Portugal): development of digital educational resources on topics such as digital citizenship.

DEVELOPING SOCIAL AND EMOTIONAL SKILLS

To thrive in the digital economy, strong digital skills must be accompanied by social and emotional skills including collaboration, emotional regulation and openness to experience. Social and emotional skills play a role in:



Digital skill development should be complemented by building social and emotional skills. Key to promoting child well-being and pro-social development, social-emotional skills also form the foundation for digital citizenship and understanding/engaging in positive digital behaviours. Bolstering both sets of skills can foster inclusion for all children in digital and real world environments.

EMPOWERING DIGITAL CITIZENS

Empowering an active and ethical digital generation means equipping children to actively, positively and responsibly engage in society, whether this takes place on or offline.

Digital citizenship can be understood as norms of behaviour regarding the use of digital technologies. Digital citizenship involves:

- competent and positive engagement with digital technology (access and skills)
- active and responsible participation (empowerment and etiquette)
- lifelong learning in formal, non-formal and informal contexts (including risk management and resilience).

As engaging with digital technologies comes with risks, children must be empowered with the tools and information needed to navigate digital environments in an ethical and responsible way. This includes knowing how to identify, anticipate and react effectively to risks, for example cyberbullying and threats to security and privacy.

Countries have taken different approaches to foster the development of digital citizenship in their students. Some common approaches across education systems include:



incorporating digital and media literacy in the curriculum



educating teachers in digital literacy and citizenship and how to develop it in their students



information sharing, training and campaigns that target teachers, parents and communities



working with community actors and interest groups to disseminate or develop informational tools, training or share knowledge.

NETIQUETTE

Netiquette refers to acceptable behaviour in digital environments. Fostering netiquette is an important policy goal and an essential component of digital literacy and citizenship. Examples of some positive and negative behaviours in which children may engage in digital environments include:

Flop accounts	Trolling
These accounts on social platforms collectively managed by youth; they can act as fora to discuss complex social and political topics, and to intervene in cases of bullying, for example. However, they can also have a negative use e.g., to spread misinformation or share “cringeworthy” content.	Causing disruption or triggering conflict in digital environments for one’s own amusement. Internet trolls, often under the guise of anonymity, write controversial comments to get a rise out of other users.

RESPECTING OTHERS

Children participate in many different digital environments, from social media to multiplayer games. Some sites require the creation of accounts with real names and photos, while others allow children to use usernames and avatars and go incognito. Anonymity and factors such as the absence of body language, potential disconnection between digital and physical self, and absence of clear authority can influence what children say or do.



Positive: This can allow for more intimate disclosure between children, stimulating closeness between friends. It may also provide opportunities for marginalised groups (e.g., LGBTQ+ youth) to explore their identity and find support.

Negative: the lack of tone and body language in digital environments can make it difficult to understand others’ intentions, creating space for potential misbehavior and giving the illusion that such misbehavior is without consequence. It can also open the door to security and privacy threats.

Key readings

- Mascheroni, G. and K. Ólafsson (2016), “The mobile Internet: Access, use, opportunities and divides among European children”, *New Media & Society*, Vol. 18/8, <http://dx.doi.org/10.1177/1461444814567986> .
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- Selwyn, N. (2008), “A safe haven for misbehaving?”, *Social Science Computer Review*, Vol. 26/4, pp. 446-465, <http://dx.doi.org/10.1177/0894439307313515> .

For more, see: Burns, T. & Gottschalk, F. eds. (2019). *Educating 21st Century Children: Emotional Well-Being in the Digital Age*. Educational Research and Innovation, OECD Publishing, Paris, <https://doi.org/10.1787/b7f33425-en>.