

# The impact of technological transformation on the digital generation

## - policy recommendations

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## Introduction

The DigiGen project has documented how digital technologies play a central role in the everyday lives of children and young people across Europe (Seland et al. 2022). Digital technologies provide unique and new spaces and tools in itself, through social media, online gaming and educational technology. Just as important is how digital technologies link and connect family life (Kapella, Schmidt, & Vogl, 2022; Kapella, Sisask, & Barbuta, 2021), leisure (Parsanoglou et al., 2022), education (Eickelmann et al., 2021) and civic participation (Karatzogianni, Tiidenberg, & Parsanoglou, 2021).

Digital technologies, and in particular the internet has changed the way children and young people live, learn, socialize, communicate, and participate in society. The internet and the means to access it, such as tablets and smartphones, along with social media platforms and messaging apps, have become integral to the lives of youth around the world. They have transformed their education and learning, the way they make and maintain friendships, how they spend their leisure time, and their engagement with wider society.

In this policy brief, we present research-based policy recommendations, designed to combat systematic inequalities in the opportunities, capacities, and desires of young people to reap the benefits of digitalization.

The policy recommendations will assist national authorities to design policies that may support their work towards many of the child-focused Sustainable Development Goals (SDGs) developed by the United Nations. We show how the technological transformations affecting the lives of young people should be taken into account when reporting on progress towards these goals. Finally, we provide some tools to identify indicators and data on a European and national level to help identifying relevant focus areas.

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## UN Sustainable Development Goals

The UN Agenda for sustainable Development provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable development Goals. The EU has committed to implement the Sustainable Development Goals both in its internal and external policies.

A cross-cutting objective in the SDGs and the 2030 Agenda is to reduce inequalities and prioritize the most marginalized groups in order to secure that “no-one is left behind”.

Digital technologies are potentially inclusive and may help reduce poverty (Goal 1), secure good health and well-being (Goal 3), help develop quality education (Goal 4) and gender equality (Goal 5) and thus reduce inequalities (Goal 10) within and among countries.

## Understanding and documenting digital inequality

However, digital inequalities, which are often embedded in traditional inequalities affect how and who may actually benefit. Inequalities in access, use and tangible outcomes represent reproductive mechanisms that are rooted in existing inequalities and may reinforce existing inequalities. In order to reach the SDGs policies thus need to have a strong comprehensive focus on digital inequalities in the context of an ever-increasing digitalization of young lives. In addition, we need indicators and data to monitor development and progress towards these goals.

DigiGen has documented that, even if digital technologies are transforming the lives of most children and young people, some are at a high risk of being left behind. 5.4 percent of children in Europe are digitally deprived. Children who live in severe material deprivation, are poor and/ or have low educated parents are particularly at risk of digital deprivation. We also unveil that, once access is guaranteed, not all children show the same level of interest and confidence in using digital technologies. The prevalence of digital deprivation, disengagement and lack of confidence is particularly widespread in Eastern Europe, as well as in the Mediterranean countries, suggesting that these results



are interconnected. We also find that there are significant differences between students from urban and rural areas in terms of digital skills.

The COVID-19 pandemic has accelerated the process of adoption of digital technologies in young people's lives, and in particular for educational purposes. Access and digital competency are crucial for being able to keep up with education or falling badly behind. Good quality education for all, and most especially for vulnerable populations including poor children and children living in rural areas thus require both access to digital technologies such as computers, tablets, and the internet as well as competence and support. This is of critical importance because of education's transformative effects on the other sustainable development goals as education may provide the tools to secure reduction of poverty, gender equality and reduced inequality in the short and long term.

## Policy recommendations

Our research has identified two main areas where interventions can support the development of children and young people's resilience and mitigate vulnerabilities introduced or enhanced by the digital environment; *Access* to digital devices, connectivity, and to a digital environment that enables their active participation as digital citizens and *Competency* such as the development of digital and social skills, digital confidence, and interest. The policy recommendations for developing digital access and competency are directed at regulation, industry self-regulation, and awareness raising:

### Access

1

#### **EU and national legislators and policy makers can:**

- Expanding digital indicators in key EU statistical databases such as the EU SILC and in national authorities' UN SDG monitoring to be able to map and produce targeted interventions to reduce digital divides
- Ensure children and young people's rights to participate in the digital environment are appropriately balanced with protection obligations

### Industry can:

- Offer digital opportunities for all children, not just those who have access to new/less affordable digital devices
- Create digital spaces which allow children to participate actively as digital citizens by design

### Awareness raising can contribute by:

- Ensuring that children and young people's opinions on how digital access is integrated into their everyday lives is considered at all levels

## Competency

2

### EU and national legislators and policy makers can:

- Support children and young people's development of digital competences (digital skills, media literacy, and **social competences**) across their digital ecosystem
- Recognise children and young people's agency in developing their own and others' digital competences

### Industry can:

- Develop innovative tools to support parents in digital technology mediation that support the development of social digital competences through operationalising co-creation, negotiation, and co-activity
- Offer opportunities to bridge the worlds of school and home, education and play to create positive and inclusive environments for children and young people's development as digital citizens

### Awareness raising can contribute by:

- Fostering enabling environments for the development of digital competences (digital skills, media literacy, and **social competences**) across children and young people's digital ecosystem

The formulation of recommendations builds on the belief that reducing inequalities and providing a beneficial experience of ICT use is a collective responsibility between government, industry, and civil society.



## Monitoring progress

Monitoring the life chances of children is considered a necessary starting point for catalyzing social progress for and around children. Monitoring progress towards the sustainable development goals, taking into account the technological environment of children and young people, require transparent and harmonized data to monitor digital inclusion, access and competence. DigiGen has developed two tools to help national authorities in their voluntary reports to the UN on the progress towards reaching the different goals: one interactive map and an overview of databases:



Interactive DigiGen Map



Download National  
overview of databases

## Project background

The DigiGen project develops significant knowledge about how children and young people use and are affected by the technological transformations in their everyday lives. The project is uncovering both harmful and beneficial effects of technology in the everyday lives of children and young people. This includes a focus on the family, educational institutions, leisure time and children and young people's civic participation.

DigiGen is providing new knowledge about the barriers and opportunities that children from a variety of backgrounds experience in relation to technology. The project is developing effective social, educational, health and online safety policies and practices in collaboration with national and international stakeholders.

The project combines various research methods to develop new robust participatory methodologies for including children and young people as co-researchers, co-creators, and co-designers. The diverse and innovative data collection methods include a mixed-methods study design and methodological triangulation, multisite and comparative ethnographic studies, multimodal approach, interviews, and diaries. The interdisciplinary research team for this Horizon 2020 project comes from nine European countries.



**DigiGen**

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