Left out and misunderstood: Children in digital policies A global review

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Digital Futures For Children

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About this report

This report investigates how children are represented in digital policies around the world. The focus is on global patterns and trends, as well as instances of good practice in supporting the realisation of children's rights as part of digital transformation and creating a more inclusive digital society. This report provides an overview of the approach, findings and recommendations emerging from the detailed examination, published separately, of national laws and policies, as well as regional policies and those from intergovernmental organisations (IGOs). Note that excerpts from policies in a language other than English have been translated for this report by the researchers.

There are two accompanying reports:

Left out and misunderstood: Children in global, regional and national digital policies describes the findings for the different governing bodies and countries in more detail, with an emphasis on their unique features and good practices.

Digital policy analysis methodological toolkit provides details on the method, both its theoretical framing and application. The report is designed to support researchers, policymakers and activists who are interested in evaluating and designing policies or in holding policymakers and stakeholders to account.

Acknowledgements

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We have not been able to do justice to the incredible work and depth of analysis done by all the researchers involved in this undertaking in the various reports published. There are far more detailed reports and analysis that we hope to make available in targeted publications in the future.

Executive summary

Digital **transformation** and digital **inclusion policies** are shaping the present and the future for millions of children around the world. Despite their impact on children, there has been little investigation into whether these policies mention children or how children are represented.

Analyses of **over 300 policies from 35 countries and organisations**, mostly in under-researched contexts, reveal incredible diversity but also consistent patterns in whether and how children are represented.

In every policy region or country reviewed, **there was at least one mention of children** across their digital transformation and digital inclusion policies. However, mentions of children tend to be **restricted to just a few policies**, with little meaningful engagement with children or their rights in policies beyond those related to **education** and **online safety**.

Notably, children are considered in a **homogenous manner**: inequalities or differences between them are rarely discussed. When children are considered more fully, they are **represented in two main ways**:

1. As digital **resources** – a future workforce in need of access and skills training
2. As digital **victims** – vulnerable and in need of protection.

Although rare, some policies did present children in a third way, which is arguably best practice:

3. As **rights holders** – as stakeholders and citizens with their own rights in digital environments.

Although children are listed as contributors to and vulnerable in digital societies, they are **rarely consulted** on opportunities or risks, and even less so on solutions. On those rare occasions that children are

consulted, there is a striking absence of the voices of **marginalised or vulnerable children**.

Children's rights relating to access, education, online safety and privacy are more widely included in digital policies. However, **children's right to play and family life** are universally **ignored**. Moreover, even in policies for which children are significant end beneficiaries, **key performance indicators** (KPIs) and other accountability mechanisms in policies are seldom designed around children.

Thus, children are framed as simultaneously needing **provision of access to and protection from** the digital world, yet policies **overlook them as agents** with key wellbeing needs and rights.

Key findings related to the three types of representation are as follows:

1. Children as digital resources

Improving connectivity and digital skills training for children are seen as tools to increase the **competitiveness** of a country, region and children themselves **in a global digital economy**. **Education policies** highlighting economic development fall into this category.

By improving **access** and technical digital **skills curricula** in schools, providing digital **devices** for the home and promoting online learning **platforms** and **content**, policies aim to prepare children for future digital jobs, creating a skilled workforce to increase national or regional competitiveness.

These policies often target children in under-resourced areas or groups, such as **rural areas** and **lower-income households**, or groups that are **underrepresented in education** and the workforce (e.g., girls in STEM subjects). In this way, **social inclusion** is linked to **economic outcomes**.

KPIs mentioned in education policies are related to infrastructure or curriculum improvements for **schools** (e.g., increasing access in rural areas), and rarely to **child-related outcomes.** Policies do not specify **non-digital outcomes** for children **less likely to benefit** from digitisation (e.g., increased labour market participation for girls, increased literacy for children from lower-income households)**.**

2. Children as digital victims

Online safety policies are another set of policies in which children feature more prominently; here, they are clearly represented as vulnerable victims. **Risk of harm** for children is presented as coming from the production of **illegal** (technology-facilitated child sexual exploitation and abuse [CSEA]) content, exposure to **inappropriate** (sexualised) or **harmful** content (mis- and disinformation) and from **commercial** practices (advertising, privacy).

Regulation of platforms and **digital literacy** are proposed as solutions; the emphasis in countries tended to be on one of these and rarely did they form part of an **integrated policy** framework.

In **digital inclusion** policies, **children** are often mentioned as part of a list of vulnerable groups (e.g., women, children, and people with disabilities). There is insufficient consideration of how children need distinct considerations from other groups with protected characteristics.

Policies refer to **non-discrimination**, but rarely in relation to children, and if so, mostly in relation to gender (girls). Notably, inequalities or differences in risk of harm for different groups of children or **intersecting vulnerabilities** were rarely discussed.

3. Children as rights holders in digital environments

Digital policies almost never refer to the **empowerment of children** as important stakeholders or citizens with rights. Education policies did propose digital literacy training to increase the **resilience** of children and, in a few isolated cases, their civic **participation**, but this very rarely relates to **critical digital literacy** (e.g., awareness of the business models of apps and platforms, algorithmic bias, the consequences of gamification).

While there is some mention of **wellbeing** and **child rights**, a broad-brush regulatory, legislative approach is applied with little consideration of **children's** varied, nuanced **needs, experiences,** and relevant **knowledge**.

Background and approach

This research examines whether and how children and their rights are considered in the digital transformation and inclusion policies that shape the societies in which they live.

Around the world, policies are being designed to propel regions and countries forward to maintain competitiveness, gain ground and prepare for a digital future. These 'digital transformation' policies aim to develop digital capabilities by setting infrastructure, content and human resources goals. Through the language they use, the stakeholders they consider and the performance indicators they hold themselves accountable to, they shape the opportunities for participation and wellbeing.

Research has shown that rapid digitisation without sufficient consideration of the existing economic, social and political structures in which information and communication technologies (ICTs) are introduced can amplify inequalities and lead to missed opportunities, precisely among those who could most benefit.[1,2] Thus, scholars and policymakers have realised that digital policies striving for a brighter and more prosperous digital future can be detrimental if anyone is left behind – for development in general and attainment of the Sustainable Development Goals (SDGs) in particular.

In response to this, 'digital inclusion' policies are springing up alongside digital transformation policies. These focus on social issues that might arise with increased digitisation for certain areas, individuals or groups within the region or country (including lack of access to [good] employment, services, education, information, civic participation, family and social relationships), and thus aim to increase the economic and civic participation of groups at risk of being left behind.

There is not always a clear separation between digital transformation and digital inclusion policies. One distinction is that the former tend to be optimistic and future-oriented and the latter more sceptical and conscious of historical factors shaping current societies.

The exclusion of children from digital policies is problematic both in the present, since children's needs and rights are not being met, and in the future, since these policies will shape the digital societies they inherit. In addition, if children's particular strengths and vulnerabilities are not recognised in digital policies, further inequalities will result, amplifying the differences in opportunities between already marginalised and vulnerable children and those who find themselves in privileged positions.

[1] Helsper (2021).
[2] van Dijk (2020).

Representations of children

Preliminary research suggests that digital inclusion policies tended to focus on adults at risk of exclusion.[3] If children were mentioned, it was mostly in education policies. This might be due to simply not seeing children as significant stakeholders and rights holders, but is also related to the myths of:

- Assuming all children are **digital natives** who carry the hopes for a digital future, and who, therefore, need no special interventions to ensure their inclusion as long as access is provided.
- Seeing children as **vulnerable victims** in need of protection, who might build resilience through literacy training, but not as active participants in society with their own rights.

Seeing children as digital natives who will drive the digital future or as vulnerable victims ignores them as rights holders with agency and varying stakes and positions of power. It also means that children are treated as a homogenous or separate group, as if the inequalities that make it hard for some adults to participate do not fully apply to children.

Creating blueprints for a digital present and future that either excludes children or misrepresents the diversity of their everyday lived experiences means that many children will be ignored, disempowered and unable to participate in and contribute to current and future society in safe and positive ways. Not considering how digitisation can amplify inequalities also takes away opportunities that would allow children experiencing challenging life circumstances to improve their everyday lives and future prospects.

In other words, leaving children out of or misrepresenting them in digital policies risks violating their rights, especially if those living in challenging circumstances are not explicitly considered.

Underpinning frameworks

This research builds on two conceptual frameworks. The first helps classify different types of digital policies and the second theorises digital inequalities. In combination they allow for the analysis of the goals of different policies and how this is linked to different digital interventions for different children (and important stakeholders in their lives).

[3] UNICEF Innocenti – Global Office of Research and Foresight (2023).

Digital policy goals

The Social Policy Goal (SPG) framework[4] is used to conceptualise which types of digital policies exist and how political and economic contexts shape them. It primarily takes a policy-as-discourse perspective, which assumes that political-economic circumstances and governing ideologies shape policy content and implementation.[5] However, the SPG framework grounds this fairly abstract perspective by including broader underpinning goals or aims (i.e., ideologies), and concrete beneficiaries, delivery mechanisms (i.e., interventions) and stakeholders. The SPG framework identifies four types of policies: economic development, social inclusion, civic participation and individual rights.

Economic development

These policies emphasise economic development, stressing the importance of government and industry providing infrastructure and access, alongside skills training, basing themselves on studies showing links between these digital resources, GDP, poverty and employment.[6,7]

Social inclusion

These policies consider digital inclusion crucial to overcoming systemic socioeconomic and sociocultural inequalities (e.g., based on class, gender, ethnicity, social capital and health). Interventions aim for equity in ICT access, provision of relevant content, skills and awareness of benefits. They highlight the relationship between digital inequalities and historic marginalisation.[8]

Civic participation

These digital inclusion policies promote digitisation as a pathway to citizenship and emphasise digital literacy and the provision of government services as enablers of active democratic engagement and increased, informed, civic participation. This is underpinned by research that shows that digitisation can empower citizens to participate more fully in society and public life.[9,10]

Individual rights

For this research project, the policy category of individual rights was subdivided into human and child rights-focused policies. Both recognise the importance of creating a digital space free of discrimination and with equal opportunities for individuals with protected characteristics.

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[4] Liu et al. (2024)
[5] Bacchi (2000).
[6] Cheney (2019).
[7] Mossberger et al. (2021).
[8] Ignatow & Robinson (2017).
[9] Boulianne (2016).
[10] López-Aguado et al. (2022).

Human rights-oriented: These policies emphasise digitisation as providing the opportunities needed for individuals to flourish, assert their rights and have agency in digital societies. Interventions focus on making sure all individuals have the opportunity to use digital resources (including skills, awareness, content and services) when needed for personal growth and wellbeing. Research suggesting bottom-up, community programmes and investment create an even playing field to enhance individual wellbeing.[11,12]

Child rights-oriented: These policies in their purest sense do the same as human rights policies but incorporate child rights explicitly and holistically. As stipulated in the United Nation's (UN) child rights in a digital age framework,[13] this includes the right to play, education, participation, fair and equal treatment, agency and control, information, privacy, safety and access.[14] Besides creating opportunities like those that are part of the human rights framework specifically for children, it also includes child-specific regulation (e.g., against technology-facilitated child sexual exploitation and abuse [CSEA] and age verification).

Digital inequalities

The approach taken to understanding which digital interventions, beneficiaries and stakeholders might be considered by policymakers is based on the framework first applied by the Digital Skills to Tangible Outcomes (DiSTO) project[15] and further developed by Ellen Helsper[16] into the socio-digital inequalities model.

This socio-digital inequalities model describes how global, regional and country resources and policies shape the analogue and digital environment of the child, and how this leads to differential outcomes from digitisation (see Figure 1).

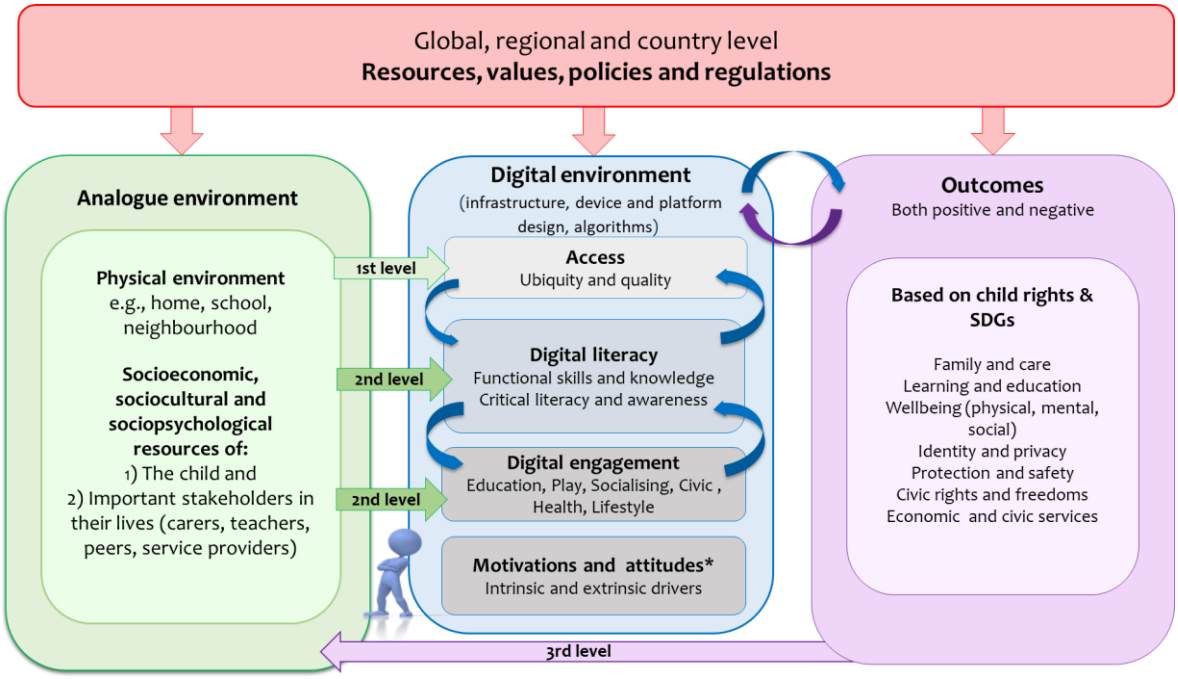
It is worth unpacking a few of the boxes in Figure 1 to explain what they stand for. The **analogue environment** is the physical, social and cultural environment in which children live their everyday lives. This includes the societal position of the groups (e.g., race, gender, religion, ability) they are part of; their parents' socioeconomic status; the services and activities provided to them in their neighbourhood; and their teachers' qualifications.

From research we know that the child's environment (and the inequalities therein) shape the **digital environment** the child experiences. That is, the access that a child has to technologies, their digital literacy and how much control they have over their own data, what they do with technologies and what technologies do to them, what content is

[11] Kleine (2013).
[12] Oosterlaken (2015).
[13] UN Committee on the Rights of the Child (2021).
[14] DFC (2025).
[15] www.lse.ac.uk/media-and-communications/research/research-projects/disto
[16] Helsper (2021).

available for and presented to them, and their motivations and attitudes towards what technologies are good at and should be used for.

Figure 1: Framework for the analysis of digital policy mechanisms and outcomes in relation to children



** Motivations and attitudes are under-theorised in the literature and are usually placed either at the level of access or in between the analogue and digital environment.*

Each of these can be further unpacked. There are definitive differences in the quality of **access** that a child has (e.g., various devices or phone only) and how easy it is for them to access it whenever they need to (ubiquity). At this first-level of digital inequalities, providing internet access or devices to schools in rural areas is an often-encountered delivery mechanism for digital policies.

There is also extensive literature on **digital literacy** and how it is unequally distributed.[17] This includes not only technical or functional skills (how to use technologies), but also a deeper understanding of how technologies work and a critical awareness of why certain content is produced (e.g., advertising), and how algorithms might be biased. At this second level of digital inequalities, rollout of a digital skills curriculum targeting youth not in education, employment or training (NEET) is an example of a delivery mechanism.

There is also considerable difference in how children **engage** with technologies and what **content** is available to them, often linked to their sociocultural background.

[17] Helsper et al. (2021).

Inequalities can be found in how visible, useful or attractive content is for particular groups. There are, for example, differences between boys and girls in how much they socialise with others online and in what kinds of games they play online. Digital Futures for Children centre (DFC) research also shows that children in global south countries feel under- and misrepresented in the information and images created by AI.[18] Online safety regulations that protect girls against technology-facilitated CSEA are an example of an intervention in this area, but so is the provision of educational content in different languages.

While consistently included in theories around digital inequalities as one of the areas in which inequality might occur,[19] there is less research on how **motivations** to use and **attitudes** towards technologies differ based on children or adults' background. However, increasing interest in (i.e., intrinsic motivation) engaging with technologies or creating positive attitudes about the wider benefits of digitisation (i.e., extrinsic motivation) through awareness campaigns has been part of digital inclusion interventions.

Finally, at the third level, there are inequalities in the **outcomes** of digitisation and engagement with digital technologies. In this project, these are defined as improvements in children's wellbeing in domains identified by the SDGs and child rights. In this case, those identified in the original Convention on the Rights of the Child rather than those identified in General Comment No. 25, since this also includes digital outcomes (e.g., access). There is evidence that there are inequalities in how digitisation impacts children from different ethnic, gender and religious backgrounds.[20]

In line with these outcomes to be achieved and combining this with the SPG framework, digital policies can be designed to achieve general improvements in economic, social, civic or individual wellbeing and/or for groups who are disadvantaged in these areas. Ideally, KPIs in policies should focus on improvements in these outcomes rather than simply on improving the digital environment of the child.

Research questions

A previous DFC review of General Comment No. 25's impact show that progress is being made on designing and implementing specific child rights-related regulation, even if this is still unequally distributed around the world and does not cover the full range of child rights.[21] However, it is not clear to what extent general digital policies take a child rights-respecting approach, or whether they create obstacles to intergovernmental, regional and national organisations fulfilling their obligations when it comes to child rights in the digital age.

[18] Stoilova et al. (2025)
[19] van Dijk (2020).
[20] Smahel et al. (2025).
[21] Ringmar Sylwander et al. (2025).

As a result of these general policies, programmes are rolled out, regulation is designed, and investments are made that shape the digital present and future. If children are not considered as stakeholders in policies that will have a significant impact on them, if they are only considered in isolated, child-specific policies, their full range of rights is unlikely to be respected.

The frameworks presented earlier allow us to fully explore the representation of children in general digital policies, so we can try to answer the overarching research question (RQ) for this study:

> In which way(s) do digital transformation and inclusion policies take children and their rights into account, potentially exacerbating or mitigating existing inequalities?

This can be broken up into three subquestions:

1. Are children considered in global, regional and country policies related to digital inclusion and transformation? If so, which policy areas do they feature in?

2. If children are mentioned, what types of measures are proposed to achieve digital transformation or digital inclusion? Which KPIs, stakeholders and delivery mechanisms mentioned are particularly relevant to children, and which are being left out?

3. How are children imagined (e.g., as digital natives, digital victims, rightsholders)? Which, if any, of their rights are recognised? Are they allocated any agency or participatory power in the policymaking and implementation process? And importantly, are inequalities among them considered? That is, which children are considered vulnerable to what types of digital exclusion, with what consequences?

Methodology

This section gives an overview of how the study was designed and analysis conducted. For more details, please see the *Digital policy analysis methodological toolkit*, which provides a detailed description of the methodology used for corpus construction, basic and advanced coding and analysis.

This study reviewed and analysed digital transformation and digital inclusion policies at global, regional and country levels. For the purposes of this project, we define a policy as: *a document authored by a government entity, either a ministry or other official government institution, for which the accountability for its implementation lies with a governing body*.

The document should identify a problem that the policy aims to solve, and ways in which the government and associated stakeholders will deliver the goals set in the policy: *a digital policy identifies economic and social problems to be solved through improvements in the diffusion, take-up or regulation of digital technologies.*

This definition was modified and adapted to different country contexts based on the policymaking and governance process, and various documents encompassing legislation, bills, programmes, schemes, agendas, etc. were included under the umbrella of 'policy'. The definition was also modified for the purposes of the international and intergovernmental organisations or regional bodies, policies from which are often not legally binding but enact a soft power on countries' digital agendas.

The underlying methodology and framework for analysis was based on previous research conducted with UNICEF.[22] This covers a different time period by analysing digital inclusion policies in place after 2020, and the codebook was improved and updated to account for the recent surge of attention to smart technologies and AI.

The current review encompasses:

1. policies from global IGOs such as the UN and its subsidiaries (e.g., UNICEF, UNESCO), and the World Bank and OECD;
2. policies of regional bodies (i.e., ASEAN [Association of Southeast Asian Nations], African Union, EU [European Union], CEPAL [Economic Commission for Latin America and the Caribbean] and Mercosur [Southern Common Market]);
3. policies of at least three countries per continent.

The emphasis was on countries not usually studied with policies in an official language other than English. The review encompassed larger and smaller countries with different levels of social and economic inequalities to get a diverse and comprehensive overview of whether and how children featured in these policies.

A team of 21 researchers worked on this report, each with knowledge of the language and policy landscape in the countries and regions they were investigating.

Phase I: Corpus construction

Different local and regional contexts necessitated different approaches to policy selection, but all researchers used the same criteria to construct a corpus of digital transformation and inclusion policies:

[22] UNICEF Innocenti – Global Office of Research and Foresight (2023).

1. policies had to be published, electronically or otherwise, authored by an official government body or ministry;

2. policies had to have social and economic goals such as improving the lives, wellbeing and prosperity of citizens or communities through digital delivery mechanisms (i.e., access, literacy, content/service provision, changing attitudes); policies primarily concerning technical specifications (infrastructure, spectrum awards, etc.) that did not have direct social goals were not included;

3. the policies had to be published in the preceding five years. The five-year period was chosen purposively to include the period of the pandemic, which saw increased attention to issues of digital exclusion as people came to rely on ICTs. Older policies were included if they were still being implemented and referred to as important by stakeholders.

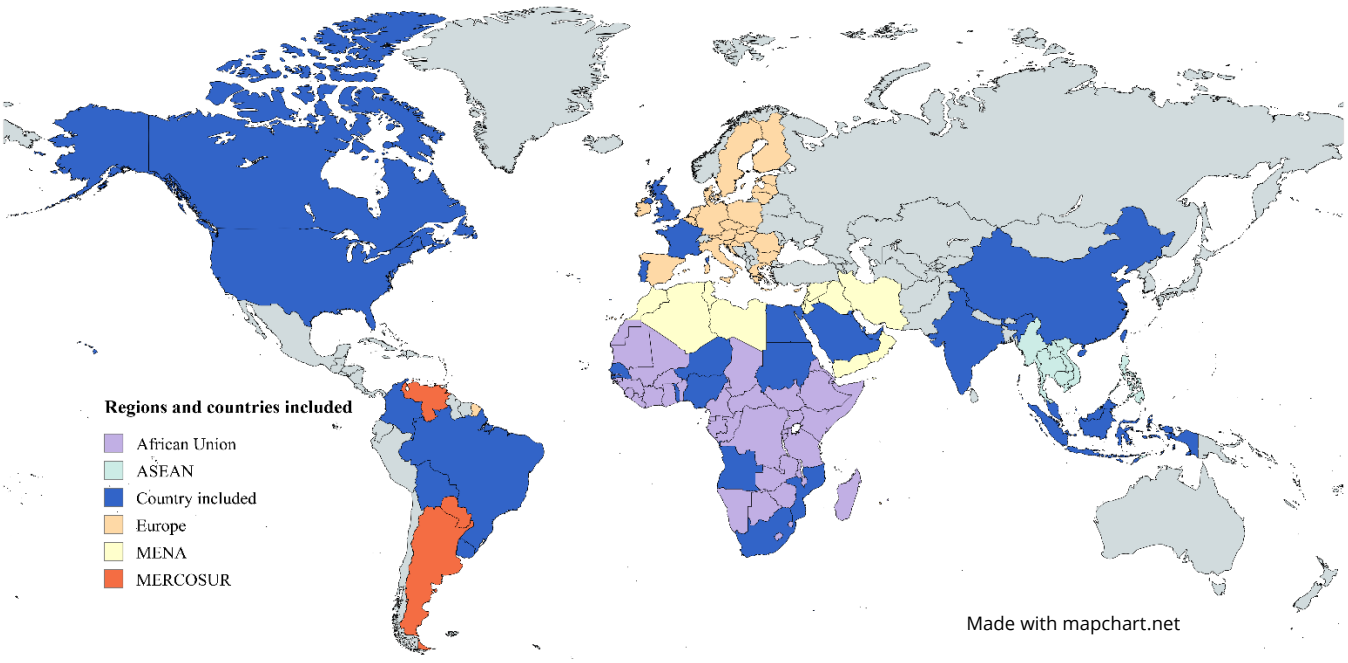
All policies were downloaded and saved for future reference and coding.

Starting keywords for searches for policies across all governing bodies were: 'digital agenda', 'digital inclusion', 'digital transformation', 'digital economy', 'digital education', 'digital skills', 'online safety', which were modified based on language and cultural terminology. Additional keywords were added to searches if this turned out to be necessary to capture the specific policy landscape (see the two accompanying reports[23, 24] for more detail). There were quite a few countries for which there was very little in the form of official documents, and communiques or presidential decrees needed to be relied on. On occasion it was difficult to separate legislation from policies, and only documents were included that referred to beneficiaries and stakeholders and had clear economic, social or civic goals. Individual researchers made decisions about inclusion or exclusion of policies after consultation with the research team.

A corpus of 300+ policies was created spanning digital policies across 4 IGOs, 5 regional bodies and 26 countries (see Figure 2).

[23] Helsper, Rao & Lyons Longworth (2025a).
[24] Helsper, Rao & Lyons Longworth (2025b).

Figure 2: Regional bodies and countries included in the project



Note: If a country from a regional body is included in the project it is marked in dark blue

Phase II: Basic coding

The second phase of the review consisted of initial coding of policies included in the corpus, to answer RQ1, and examined:

- Whether children were mentioned and how they were referred to
- What general discourses underpinned the policies in which children were mentioned.

All researchers used the same basic codebook to do an initial scoping of the policies in which children were mentioned. This phase was focused on seeing if children were mentioned and in what way, identifying the policy discourse according to the SPG framework, and understanding whether inequalities relevant to children were referred to in the policy document.

The codebook was adapted as the project progressed to include more nuanced categorisation.

The policies that mentioned children in a meaningful way (e.g., beyond listing them as one of the vulnerable groups to be taken into consideration) were included for more in-depth policy analysis (Phase III). Quite a few policies were not clear on the age range, using general terminology like 'youth' or 'young people'. If, on further analysis, it turned out that the way in which children were mentioned was not compatible with the UN Convention on the Rights of the Child (UNCRC) definition of a child as being an

individual under the age of 18, the policy was discarded for further analysis. For example, the analyses included policies referring to 'young people between 13 and 21 years of age' but not those referring to 'young people or students in university or higher education'.

Table 1: Basic codebook framework for policy classification

Coding category	General code	Detailed code
Mentions children?	No, not mentioned at all Yes, mentioned directly Yes, mentioned indirectly Yes, meaningfully mentioned (more than as part of a list)	Directly: youth, girls, boys, teenagers, toddlers, children, young people, etc. Indirectly: parents, mothers, fathers, students, teachers, disadvantaged households/schools; children's services, etc.
Policy discourse and goals?	Economic development	Economic prosperity and growth for the economy and workers
	Social inclusion	Promoting social equity and justice for disadvantaged or marginalised groups
	Civic participation	Increased civic engagement and responsibility (nation building) for the benefit of democracy, society and citizens
	Human rights	Enhanced opportunities for individual development and wellbeing
	Child rights	Promoting, respecting, protecting and fulfilling all children's rights in the digital environment
Mentions inequalities?	Yes/No	Race, class, caste, ethnicity, gender, sexuality, sexual orientation, disability, wealth/poverty, education status, employment status, rural/urban, migration, age, religion, etc.

Phase III: Policy analysis

An advanced codebook was used to conduct an in-depth analysis of selected policies that mentioned children in meaningful ways. This phase used the socio-digital inequalities framework illustrated in Figure 1 to seek an answer to RQ2, examining whether and how policies that refer to children discussed:

1. Problems identified – first (i.e., access, attitudes) and second-level digital environment (i.e., skills, engagement)
2. Delivery mechanisms to tackle the issues (e.g., legislation; provision of infrastructure, training, content/services)
3. Predicted outcomes of digital interventions proposed in the policy (e.g., economic development, child rights, SDGs), including any mention of child-specific KPIs
4. Identified stakeholders (e.g., parents, teachers, NGOs, tech companies, ministries) that are poised to provide solutions

The detailed codebook included many subcategories for each of the four points. Researchers indicated the presence or absence of the different elements with qualitative observations and relevant quotes.[25]

In addition, the analysis determined how children were referred to: whether policies mentioned inequalities among children based on differences in their analogue environments, and whether policies framed children as digital natives, victims or agents in shaping the digital future (RQ3). When an initial scope revealed that a digital native framing was not overtly present, researchers reframed the classifications to: children as resources, children as victims, and children as rights holders. The analysis of representations was written up in narrative form.

This last phase allowed the project to look at whether including children was a box-ticking exercise or based on a real consideration of children's lived realities and rights.

[25] See Helsper et al. (2025a) for a detailed description of the coding categories and details.

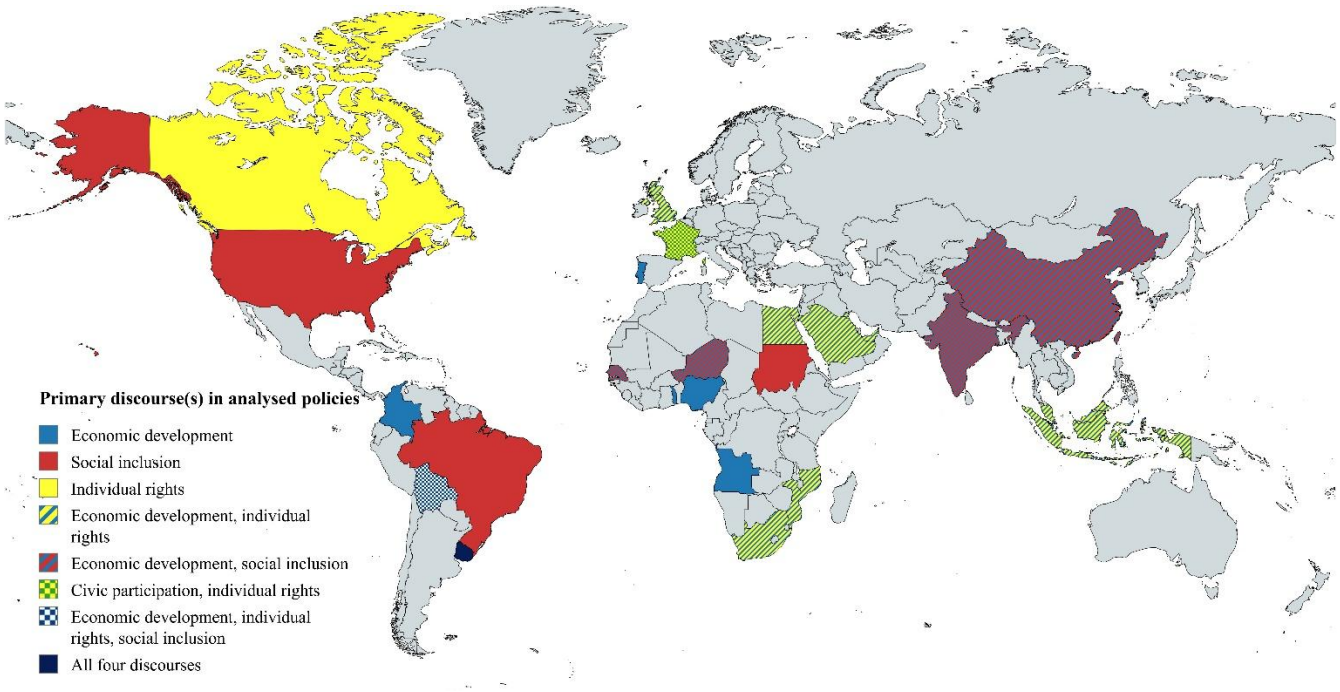
Global review

This section provides a global overview of digital policy discourses regarding children and whether inequalities among them were considered, detailing persistent patterns, common omissions and examples of good practice. Quotes were selected representing different countries and regions to points made about good practice or to provide an example of how a topic was represented. For global, regional and country-level in-depth analysis, please review the accompanying report, *Left out and misunderstood: Children in global, regional, and national digital policies.*[26]

Common policy characteristics

Here we discuss the general policy problems, stakeholders, delivery mechanisms and outcomes observed for policies in which children were mentioned. In every policy region or country reviewed, there was at least one mention of children across their digital transformation and digital inclusion policies. However, mentions of children tended to be restricted to just a few policies, with little meaningful engagement in policies beyond those related to education and online safety. These policies mostly had an economic angle, and some included references to social inclusion (see Figure 3).

Figure 3: Map of dominant policy discourses around the world



[26] Helsper et al. (2025b).

Note: While the most dominant approaches are indicated on the map, in practice, separating discourses was difficult – different policies tackle different discourses within each country.

The majority of digital policies analysed in this report can be categorised as **digital transformation** policies, emphasising the rollout of digital infrastructure and 'upskilling' to encourage **economic competitiveness** and **growth**. There is little engagement with inequity in these policies, with the exception of digital infrastructure for the development of rural areas and the provision of technical skills training for girls.

Policies concerned with **AI** and **smart infrastructure** are generally framed within this digital transformation discourse – seeing the production, uptake and skilled labour around this technology as a necessity to be competitive in the global market. They are not likely to mention children, with a few exceptions integrating AI into the education system:

> … by using digital technologies like AI and deep learning, Ruang Murid [Students' Space] becomes an education ecosystem that is oriented to student needs and supporting equal access distribution to quality education. (Indonesia: *Digital transformation of education through 'Rumah Penididkan' blueprint*, 2025)[27]

At times, digital transformation policies veer into the realm of **digital inclusion**, making sure that the historically disadvantaged are not left behind, and adopting an **individual rights** angle or **social inclusion** orientation.

Data protection and **online safety** policies are another large group of policies that refer to children in meaningful ways; they can be considered part of the **human and child rights** approach to policymaking. Outside these policies, **child rights** and inequalities were not really considered as specific policy goals.

Civic engagement goals in relation to children were absent from almost all national digital policies, although there was one exception in the UK:

> It will consider the key digital skills needed for future life and the critical thinking skills needed to ensure children are resilient to misinformation and extremist content online. (UK: *Digital inclusion action plan*, 2025)[28]

Often, **stakeholders** involved in digital policymaking and delivery of outcomes were not specified. When they were, the most common were the **public education** system and

[27] Indonesia Ministry of Education and Culture (2025).
[28] Digital Inclusion and Skills Unit (2025).

public–private partnerships (PPPs) with Big Tech and start-ups (especially in the Middle East and North Africa [MENA] and Asia). **IGOs** such as UNICEF and the World Bank were relied on for funding and through adaptation of their guidelines in low-income countries in Africa and Asia in particular. How PPPs were to be involved was often rather vague and did not go beyond providing (affordable) access, such as in Togo:

> [The PPP] will be responsible for the maintenance and operation of the Equiano submarine cable as well as the existing terrestrial fibre optic networks of the e-Government and the Benin Electricity Community (CEB) within Togolese territory. (Togo, *Google Submarine Equiano Cable PPP*, 2022)[29]

Civil society/NGOs and **youth organisations** were rarely mentioned, even if the beneficiaries were supposed to be young, disadvantaged people, although non-profits linked to the royal families were mentioned in MENA, and there were references to community-based programmes in South Africa:

> Strengthen youth service programmes and introduce new, community-based programmes to offer young people life-skills training, entrepreneurship training, and opportunities to participate in community development programmes. (South Africa: *National development plan 2030*, 2012)[30]

Policy **delivery mechanisms**, the ways in which a policy proposes to solve its access and inclusion problems, rarely referred directly to children. When they did, they covered mostly access and skills-based interventions in schools: broadband and 5G **infrastructure**, **devices**, redesign of the school **curriculum** (technical skills, programming, coding and critical literacy around misinformation), **teacher training** (upskilling), introducing the use of platforms and other **(Ed)Tech in schools**. Countries with fewer resources, such as Togo and Niger, tended to focus on infrastructure and access, while those with more resources, such as the EU, focused on curriculum development and teacher training and platform provisions.

There were three ways in which policies mentioning children **included accountability mechanisms by specifying outcomes** to be achieved in **KPIs**:

- The first and surprisingly common pattern was that KPIs **were not clearly defined** with timelines for delivery. This included policies that had no KPIs for children, even when they were mentioned as a target beneficiary group.

[29] Le ministère de l'Économie Numérique et de la Transformation Digitale du Togo (2022).
[30] National Planning Commission (2012).

- KPIs were **vaguely defined** (e.g., increasing the number of children with basic digital skills, improving access).
- Clearly specified **KPIs for children** with a future time horizon – which is rare.

Universally, KPIs aim to increase digitisation or digital inclusion (e.g., providing device access, skills training) rather than for ministries and other stakeholders to be held accountable based on the social or economic goals that the policy is aiming to achieve (i.e., poverty, employability, access to healthcare/education):

> ***The plan prioritises subsidies to provide one digital device per teacher and student in remote primary and secondary schools, while schools in non-remote areas receive one device per class for every six classes. (Taiwan: Digital learning enhancement program for primary and secondary schools, 2021)***[31]

That is, KPIs are almost solely related to access, infrastructure and literacy course rollouts rather than stipulating concrete improvements in economic or social wellbeing or participation. In other words, they focus on **equality of digital opportunity** rather than **equality of outcome**. Exceptions were policies in the EU and Mozambique:

> Ensuring that all children and youth are included in the education system and that geographical and gender disparities continue to decrease. (Mozambique: *Política para a Sociedade da Informação em Moçambique*, 2018)[32]

Regional policies from IGOs such as the African Union, CEPAL and ASEAN rely on **political will** for implementing recommendations, and often have no funding or legal powers, with the exception of the EU. This raises concerns about implementation.

Similarly, while local policies in the global South are often subjects of special reports by IGOs and reference these in their own policies, there is no **accountability mechanism** for non-compliance. Being a signatory to the **UN Convention on the Rights of the Child** or **General Comment No. 25** was almost never mentioned as part of accountability. One exception came from the Nigerian Federal Ministry of Education:

> Inaction not only threatens efforts to achieve Sustainable Development Goal 4 – to ensure inclusive and equitable quality education – but is also contrary to the Convention on the Rights of the Child and General Comment No. 25 on children's rights in the digital environment. (Nigeria: *National digital learning policy*, 2023)[33]

[31] Ministry of Education (2021).
[32] Boletim da República (2018).
[33] Federal Ministry of Education (2023).

Representations of children

This section discusses whether children were engaged with in meaningful ways, and if so, how they were represented.

In most policies, children were mentioned in cursory ways, **as part of a list** of vulnerable groups (e.g., low-income households, people with disabilities, women, children, minority ethnic groups). Very rarely were they engaged with in meaningful ways, and even more rarely were inequalities among them recognised. Policies related to emerging technologies, such as AI and smart cities, were least likely to engage meaningfully and conscientiously with children as stakeholders with diverse needs, although UNICEF's policy on AI was an exception:

> ***Not all children face equal circumstances and therefore not all can benefit equally from AI systems. (UNICEF: Policy guidance on AI for children, 2021)***[34]

There were two policy areas in which **children** were more meaningfully engaged with: in education and in online safety/data protection policies.

In these types of policies, two representations of children dominate: children as digital resources and children as victims. Only very rarely are children considered as rights holders.

Education policies had two emphases. First, increasing digital **infrastructure** and device **provision** to make sure children could **access formal education** and **educational content**. Second, promoting **digital literacy** mostly through digital **skills training** including coding – framed as guaranteeing a skilled future workforce. There were patterns across regions too. In most Western and Southern African policies, aside from South Africa, children were seen as a vehicle for countries to **leapfrog** economically, whereas in MENA and Asia, children were positioned as a source of **digital talent** in the service of entrepreneurship and becoming global or regional digital hubs.

Children in education policies were mostly imagined as **economic resources** for a future labour market. There was a distinctly utilitarian view that related digital education to instrumental outcomes, for example, digital education/literacy as an enabler for entry into STEM/digital workforce and employment more generally:

[34] Dignum et al. (2021).

> ***The Kingdom's children's skills and competencies are one of the most important and cherished resources… The Kingdom also will reinforce the ability of the economy to generate diverse job opportunities and attract global talents and qualified people. (Saudi Arabia: Saudi Vision, 2030)***[35]

Inequalities among children were primarily recognised in education policies, referencing **rural deprivation** and **low-income households**. However, the urban-rural infrastructure and access divide was often mentioned without clear definitions or reference to structural economic and social causes and/or consequences, with the unspoken assumption that **technology diffusion was a solution** to the lack of participation in and learning outcomes from formal education.

Gender was the second most mentioned inequality – with terms such as 'women' and 'children/girls'. This largely referred to female involvement in STEM, employment rates and, less frequently, the need for protection from exploitation.

Further intersections of vulnerabilities among children were shaped by **concerns in the country or region**: those receiving mention were children who are Black in Africa, Indigenous in South America/Canada, girls/women in Asia, refugees in MENA, left-behind children in China, and those not in education, employment or training (NEET) in the UK.

> Access to reliable and affordable connectivity services can enable the revival of Indigenous languages. It can facilitate distance education, help unlock the talents of Indigenous youth, and provide new business opportunities. (Canada: *Canada's Connectivity Strategy*, 2019)[36]

While children with disabilities were more universally mentioned, children with **mental health** issues were only indirectly referred to through mentions of 'needy' children or children 'at risk' associated with poverty. Occasionally, there was a distinction between different developmental stages/age groups requiring different curricula, but outside of this, **children's evolving capacities**[37] **were starkly missing** from the policies. UNESCO makes a clear reference to this:

> Community standards should be made available in age-appropriate language for children and, as appropriate, be created with the viewpoint of a diverse group of children; special attention should be paid to the needs of children with disabilities to

[35] www.vision2030.gov.sa/en/explore/programs/national-transformation-program
[36] Innovation, Science and Economic Development Canada (2019).
[37] Livingstone, et al. (2025).

> ensure they enjoy equal levels of access to information. (UNESCO: *Guidelines for the Governance of Digital Platforms (GGDP)*, 2023)[38]

Within **online safety and data regulation policies**, perhaps unsurprisingly, children were presented as victims, as **vulnerable and in need of protection**. Risk of harm refers either to children as victims of the production of illegal content (e.g., technology-facilitated CSEA) or children as exposed to content that would have adverse consequences on them (e.g., cyberbullying, misinformation).

> What is meant by "protection of children's rights" includes protection of personal data, privacy, and personal security of children both physically, mentally, and psychologically from misuse of Electronic Information and/or Electronic Documents that violate children's rights. (Indonesia: *Electronic Information and Transactions Law*, 2016)[39]

This is done through **regulation of the tech industry and platforms** in countries with more resources and through **digital literacy** training (in both high- and low-income countries). While **few** of these policies linked this to **civic engagement** or **social inclusion,** they did emphasise that online safety was a key condition for the preservation of human **rights**:

> Everyone has the right to security in cyberspace. It is the responsibility of the State to define public policies that ensure the protection of citizens and of information networks and systems, and to create mechanisms that increase safety in the use of the Internet, especially for children and young people. (Portugal: *Portuguese Charter of human rights in the digital age*, Law No. 27/2021)[40]

Inequalities were not generally recognised in online safety policies except for **girls** being more likely to be victims of abuse. **Minors** were mentioned as needing special protection and (large) platforms were to be held accountable if they were exposed to inappropriate content. What is **inappropriate** varies greatly between countries. For example, in MENA, any nudity and referral to non-heterosexual content is considered inappropriate, while in Brazil misinformation and freedom of speech are central:

[38] UNESCO (2023).
[39] President of the Republic of Indonesia. (2016).
[40] Diario da Republica. (2021).

> The right to freedom of expression of children and adolescents in the digital environment includes the freedom to seek, receive and share secure, accurate and appropriate information using any tool or service connected to the internet. (Brazil: National Council of the Rights of Children and Adolescents [Conselho Nacional dos Direitos da Criança e do Adolescente, CONANDA], 2024)[41]

When inequalities were recognised, **structural causes were mostly left unexamined**, and solutions and outcomes to be achieved were digital rather than embedded in changes in economic and civic inequalities (see the section on KPIs). A policy from South Africa provides one exception:

> Historical Inequities: Socio-economic disparities rooted in historical injustices can slow the adoption of AI technologies. Addressing these disparities requires inclusive policies that ensure broad access to AI benefits. (South Africa: *National artificial intelligence policy framework*, 2024)[42]

Child rights

Many policies only mentioned children as part of a list of vulnerable groups. The most common phrase was 'women and children', although other policies outlined other vulnerabilities (such as people with disabilities, low-income families and minority ethnic groups). These policies did not consider differences among children or their specific circumstances:

> The objective [is], primarily through mobile money transfer services, to promote financial inclusion with a particular emphasis on women and youth, and thus contribute to improving the well-being of the rural population and economic development. (World Bank: Niger's Smart Villages Project, 2022)[43]

Children were **rarely considered as distinct rights holders or citizens**, except in the UN, EU and African Union policies. Citizenship, when mentioned in relation to children, was positioned as a passive responsibility (e.g., detecting misinformation, maintaining values), and did not see them **as participants, decision makers** or **contributors**. **Children were rarely consulted** on the policies that shape their digital future, although

[41] National Council of the Rights of Children and Adolescents, CONANDA. (2024).
[42] Department of Communications & Digital Technologies (2024).
[43] ANSI (2022).

the EU has a youth forum, and Canada and Uruguay also mentioned consultations with youth.

Child rights were selectively invoked to justify adult-designed interventions aimed at **shielding children from harm** rather than empowering them as **rights holders** with agency in shaping digital ecosystems. The three rights that were recognised were **privacy**, **safety** and **education**.

When children were mentioned in safety policies it was often, especially in Asia and the MENA region, in reference to technology-facilitated CSEA, although some policies cast a wider net, and included nudity and attempts to 'corrupt youth' in ways that were locally unacceptable:

> ***… the age ratings that are adopted and filtered out internationally in most cases are still considered morally inappropriate in UAE. It has been a public demand to prevent access to such content in UAE as children's exposure to such content is intolerable. (UAE: Internet guidelines, 2016)***

Non-discrimination was mentioned in passing but not engaged with in meaningful ways, and engagement with children's rights to play and develop and freedom of thought and expression was absent, except in recommendations from IGOs, Uruguay and African Union policies:

> To democratise the access to culture … with digital contents that combine visual arts, performing arts, cinema, audio-visual content, lyrics, and music, for kids, teenagers, and adults. (Uruguay: *Agenda Uruguay Digital*, 2025)[44]

Benefits and risks were discussed in different policies, which could contradict each other. The IGOs working with children, South Africa and a few European policies were the only ones to position **benefits *and* risks** of technologies for children next to each other as part of a complex phenomenon:

> A solid and scientific understanding of the digital world can build on, and complement, broader digital skills development. It can also help young people to see the potential and limitations of computing for solving societal challenges. (EU: *Digital education action plan 2021-2027*, 2020)[45]

The vast majority of policies reviewed **did not engage with children directly** but through others, such as **parents** (mostly mothers) and **teachers**; they were the ones with agency, not children. **Children outside of formal** education were almost

[44] Uruguay Presidency. (2025).
[45] European Commission (2020).

universally left out; exceptions included the UK and South Africa: young people not in education employment or training (NEETs) 'are most likely to perceive a lack of digital skills as a barrier to future work.'[46]

Even less consideration was given to how to include children with problematic family situations and life circumstances. **Civil society** and **youth organisations** were rarely consulted in formal digital policymaking:

> Strengthen youth service programmes and introduce new, community-based programmes to offer young people life-skills training, entrepreneurship training, and opportunities to participate in community development programmes. (UK: *Digital inclusion action plan*, 2025)[47]

Select policies from the EU, Brazil and the African Union made explicit and meaningful reference to **child rights**, referencing instruments such as **General Comment No. 25**, or the SDGs:

> The Policy will provide a strong framework for the implementation of children's existing rights in the digital environment, including by the private sector and other stakeholders making products or offering services likely to be used by children. (African Union: *The African Union child online safety and empowerment policy*, 2024)[48]

Answering the question

The answer to the overarching question posed at the beginning of this report is that children are increasingly considered in digital transformation and inclusion policies around the world. However, children are still **almost never consulted for or meaningfully engaged with** in policies that impact them directly (which is a fundamental child right).

Children are commonly represented as a vehicle to increase the **economic competitiveness** of a country, with individual children benefiting in a (future) digital labour market. Another significant set of policies frames children as inherently **vulnerable** and in need of protection. While this does speak to children's rights (to safety and protection and to privacy), it does not recognise children as agents and comes at the expense of other rights (e.g., to participation, information, and play).

[46] Digital Inclusion and Skills Unit (2025).
[47] National Planning Commission (2012).
[48] African Union (2024).

Policies recognise that children require additional resources, but they speak little to **the differing needs of children**, their identities, their ideas and wishes, and do not identify child-specific outcomes (KPIs). This risks **exacerbating the inequalities** that already exist.

Few policies see children as **citizens with rights**[49] to express themselves and to participate in the shaping of a positive digital present and better future, even though this is considered the gold standard.

The point remains: policies around the world must consider children more fully.

[49] Livingstone et al. (2024).

Recommendations

This report analysed whether and how children and their rights are considered in digital policies that impact them. The research identified key themes and common omissions, allowing for conclusions to be drawn about what **good practice for digital policies** looks like.

Based on the evidence, we provide **seven key recommendations** to ensure that children and their rights are more meaningfully considered in digital policies.

1. **Inclusion matters**: Consider children across policies

Children should be included in **policies with social and civic goals** (e.g., citizenship, inclusion, wellbeing) and not just in those **economic and protection goals** (e.g., a competitive economy, education, employment opportunities, online safety). Children should also be considered as **stakeholders** in digital policies that shape both the present and the future they will inherit and should not only be positioned as future resources or helpless victims.

2. **Rights matter**: Incorporate children as citizens with specific, indivisible rights

Children as rights holders must be considered in accordance with their evolving capacities and their full and **indivisible range of rights**. Adopt rights-based frameworks when considering children in relation to digital environments, recognising them as agents with distinct needs. Go beyond privacy, safety, and education, and include children's rights to expression, information, family life, and play.

3. **Participation matters**: Consult children in design and implementation

Article 12 of the UNCRC states that **children should be consulted** in matters that affect them – it is their fundamental right. They have many valuable insights about how the digital world can realise their rights, and offer important contributions that advance adult understanding. Children with diverse experiences should be engaged **in meaningful ways**. Reaching children only through **formal education** institutions (e.g., school infrastructure, teacher training, curriculum development) or **online resources** (e.g., learning content, advice for parents) excludes children who do not, or cannot, access school or who live in precarious home circumstances.

4. **Language matters**: Take care with the terms 'youth' and 'children'

'Youth' and 'children' are often used synonymously in policy, which largely overlooks children's developing needs from **birth to 18**. Conflating 'children' with 'young people aged 18-24' means that policies made for young adults are made to support children, which is not appropriate. Ensure that policies include and serve children, taking into account **their diverse needs and evolving capacities at different ages**.

5. **Context matters**: Reflect the diversity of children and their digital environments

Children with **different lived experiences** have different needs. Policy needs to account for this and ensure it represents children from **diverse backgrounds** shaped by a variety of economic, cultural, and social factors. For example, they must go beyond merely referring to 'girls' (gender) or 'rural' (poverty) as factors shaping children's digital environment. They should reflect the complexity of how class, caste, religion, gender, citizenship status and other factors **intersect in shaping** children's access, skills, motivations and experiences in **digital environments**.

6. **Scope matters**: Broaden the range of stakeholders involved in policy delivery

Schools, families, community organisations, NGOs and child services are **important stakeholders in children's lives**, and should all be considered in delivering policy goals. Public–private partnerships with Big Tech companies are unlikely to represent children's lived experiences or needs. Policy deliberation and delivery must be led by **independent knowledge** and should prioritise **children's rights and best interests** over those motivated by profit.

7. **Accountability matters**: Align goals, delivery mechanisms and key performance indicators (KPIs)

To ensure **accountability** of governing bodies, policies must have clear **delivery mechanisms** (e.g., access, skills training, and content provision) **related to the causes of problems** identified for specific groups of children (e.g., reasons for non-participation in education and employment, and negative online experiences).

KPIs should be based on the **policy goals** (e.g., increased participation in education by girls from disadvantaged backgrounds, higher levels of wellbeing for children who are discriminated against), and not on the delivery of digital interventions. Across the board, there needs to be recognition that **not all social and economic policy goals** aimed at improving citizens' lives **have digital solutions**.

References

African Union. (2024). *The African Union child online safety and empowerment policy*. https://au.int/en/documents/20240521/african-union-child-online-safety-and-empowerment-policy

ANSI (Agence Nationale pour la Societe de l'Information, Niger). (2022). *Strategie de passation des marches du projet pour promouvoir le developpement.* https://documents1.worldbank.org/curated/en/099073124045047050/pdf/P167543133fc920071b75715ee1153b6741.pdf

Bacchi, C. (2000). Policy as discourse: What does it mean? Where does it get us? *Discourse: Studies in the Cultural Politics of Education*, 21(1), 45-57. https://doi.org/10.1080/01596300050005493

Boletim da República (Mozambique). (2018). Política para a Sociedade de Informação. 21 de Junho. https://archive.gazettes.africa/archive/mz/2018/mz-government-gazette-series-i-dated-2018-06-21-no-122.pdf

Boulianne, S. (2016). Online news, civic awareness, and engagement in civic and political life. *New Media & Society*, 18(9), 1840-1856. doi: 10.1177/1461444815616222.

Cheney, C. (2019). *China's digital silk road: Strategic technological competition and exporting political illiberalism*. Issues & Insights, Working Paper 19, July. https://pacforum.org/wp-content/uploads/2019/08/issuesinsights_Vol19-WP8FINAL.pdf

Department of Communications & Digital Technologies (Republic of South Africa). (2024). *South Africa national artificial intelligence policy framework*. August. https://fwblaw.co.za/wp-content/uploads/2024/10/South-Africa-National-AI-Policy-Framework-1.pdf

DFC (Digital Futures for Children centre) (UK). (2025). Your rights online. www.digital-futures-for-children.net/your-rights-online

Digital Inclusion and Skills Unit (UK). (2025). *Digital inclusion action plan: First steps*. Department for Science, Innovation, and Technology. February. www.gov.uk/government/publications/digital-inclusion-action-plan-first-steps/digital-inclusion-action-plan-first-steps

Dignum, V., Penagos, M., Pigmans, K., & Vosloo, S. (UNICEF) (2021). *Policy guidance on AI for children*. Innocenti – Global Office of Research and Foresight. www.unicef.org/innocenti/reports/policy-guidance-ai-children

European Commission. (2020). *Digital education action plan 2021-2027: Resetting education and training for the digital age*. https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0624

Federal Ministry of Education (Nigeria). (2023). *National digital learning policy: Inquisitiveness, Innovation, Inclusion*. May. https://education.gov.ng/wp-content/uploads/2023/08/MM-National-Digital-Learning-Policy-Final-Draft-2.0.pdf

Helsper, E. J. (2021) *The digital disconnect: The social causes and consequences of digital exclusion*. SAGE Publications.

Helsper, E. J., Rao, S., & Lyons Longworth, M. (2025a). *Digital policy analysis methodological toolkit.* Digital Futures for Children centre, LSE and 5Rights Foundation. https://eprints.lse.ac.uk/130446/

Helsper, E. J., Rao, S., & Lyons Longworth, M. (2025b). *Left out and misunderstood: children in global, regional and national digital policies*. Digital Futures for Children centre, LSE and 5Rights Foundation. https://eprints.lse.ac.uk/130445/

Helsper, E. J., Schneider, L. S., van Deursen, A. J. A. M., & van Laar, E. (2021). The youth Digital Skills Indicator. Zenodo. https://doi.org/10.5281/zenodo.4476540

Ignatow, G. & Robinson, L. (2017). Pierre Bourdieu: Theorizing the digital. *Information Communication & Society*, 20(7), 950-966. doi: 10.1080/1369118x.2017.1301519.

Innovation, Science and Economic Development Canada. (2019). *High-speed access for all: Canada's connectivity strategy*. https://ised-isde.canada.ca/site/high-speed-internet-canada/en/canadas-connectivity-strategy/high-speed-access-all-canadas-connectivity-strategy

Kleine, D. (2013). *Technologies of choice? ICTs, development, and the capabilities approach*. MIT Press.

Le ministère de l'Économie Numérique et de la Transformation Digitale du Togo. (2022). *Le Togo accueille le câble sous-marin historique «Equiano» de Google dans le cadre d'un partenariat avec CSquared qui transformera le secteur du haut débit du pays.* https://numerique.gouv.tg/le-togo-accueille-le-cable-sous-marin-historique-equiano-de-google-dans-le-cadre-dun-partenariat-avec-csquared-qui-transformera-le-secteur-du-haut-debit-du-pays

Liu, S., Wang, A., & Helsper, E. J. (2024). *Four models of digital inclusion policy making.* Paper presented at the 74th International Communication Association Framework Conference, Gold Coast, Australia.

Livingstone, S., Cantwell, N., Özkul, D, Shekhawat, G., and Kidron, B. (2024). *The best interests of the child in the digital environment*. Digital Futures for Children centre, LSE and 5Rights Foundation. https://eprints.lse.ac.uk/122492/

Livingstone, S. & Sylwander, K. R. (2025). Conceptualizing age-appropriate social media to support children's digital futures. *British Journal of Developmental Psychology*. https://doi.org/10.1111/bjdp.70006

López-Aguado, M., Gutiérrez-Provecho, L., Díaz, J. Q., & Llamas, J. L. G. (2022). Social exclusion and the digital divide. *Journal of E-Learning and Knowledge Society*, 18(3), 74-82. doi: 10.20368/1971-8829/1135660.

Ministry of Education (Taiwan) (2021). *Digital learning enhancement program for primary and secondary schools*. www.edu.tw/News_Plan_Content.aspx?n=D33B55D537402BAA&sms=954974C68391B710&s=01919CD25B7729AF

Ministry of Education and Culture (Indonesia) (2025). Digital Transformation of Education through "Rumah Pendidikan" Blueprint. https://fliphtml5.com/ivsgy/ixst/Cetak_Biru_Transformasi_Digital_Pendidikan_melalui_Rumah_Pendidikan/

Mossberger, K., Tolbert, C. J., & Lacombe, S. (2021). *Choosing the future: Technology and opportunity in communities*. Oxford University Press.

National Council of the Rights of Children and Adolescents. CONANDA (Brazil). (2024). *Direitos das crianças e adolescentes em ambiente digital. Resolucao, Nº 245, de 5 de abril de 2024.* Ministério dos Direitos Humanos e da Cidadania. Conselho Nacional dos Direitos da Criança e do Adolescente. www.in.gov.br/en/web/dou/-/resolucao-n-245-de-5-de-abril-de-2024-552695799

National Planning Commission (South Africa). (2012). *Our future – Make it work. National Development Plan 2030*. www.gov.za/sites/default/files/gcis_document/201409/ndp-2030-our-future-make-it-workr.pdf

Oosterlaken, I. (2015). *Technology and human development*. Routledge.

President of the Republic of Indonesia. (2016). *Law Number 19 of 2016 concerning Amendments to Law Number 11 of 2008 concerning Electronic Information and Transactions.* https://jdih.komdigi.go.id/produk_hukum/view/id/555/t/undangundang+nomor+19+tahun+2016

Sylwander, K. R. & Livingstone, S. (2025). The impact of General comment No. 25 in the UNCRC review process. Digital Futures for Children centre, LSE and 5Rights Foundation. https://eprints.lse.ac.uk/130267/

Smahel, D., Šaradín Lebedíková, M., Lacko, D., Kvardová, N., Mýlek, V., Tkaczyk, M., Švestková, A,, Gulec, H., Hrdina, M., Macháčková, H., & Dědková, L. (2025). *Tech & teens: Insights from 15 studies on the impact of digital technology on well-being*. EU Kids Online, London School of Economics and Political Science. doi:10.21953/lse.g4asyqkcrum7

Stoilova, M., Livingstone, S., & Atabey, A. (2025). *Children's rights in the age of generative AI: Perspectives from the global South*. Digital Futures for Children centre, 5Rights Foundation. https://eprints.lse.ac.uk/129527/

United Nations Committee on the Rights of the Child. (2021). *General Comment No. 25 on children's rights in relation to the digital environment.* https://digitallibrary.un.org/record/3906061?v=pdf

UNICEF Innocenti – Global Office of Research and Foresight (2023). *A global review of selected digital inclusion policies: Key findings and policy requirements for greater digital equality of children*. UNICEF Innocenti, September. www.unicef.org/innocenti/media/741/file/UNICEF-Innocenti-Digital-Inclusion-Global-Policy-Review-2023.pdf

UNESCO. (2023). *Safeguarding freedom of expression and access to information: Guidelines for a multistakeholder approach in the context of regulating digital platforms*. https://unesdoc.unesco.org/ark:/48223/pf0000384031?posInSet=131&queryId=3ec3f00d-db80-48fd-8b4c-fbcdfbeaca85

Uruguay Presidency. (2025). Agenda Uruguay Digital 2025. www.gub.uy/uruguay-digital/sites/uruguay-digital/files/documentos/publicaciones/agenda%202025%20Eng.pdf

van Dijk, J. (2020). *The digital divide*. Polity.

van der Spuy, A., Witting, S., Burton, P., Day, E., Livingstone, S. & Ringmar Sylwander, K. (2024) *Guiding principles for addressing technology-facilitated child sexual exploitation and abuse.* Digital Futures for Children centre, 5Rights Foundation. https://eprints.lse.ac.uk/126219/

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