

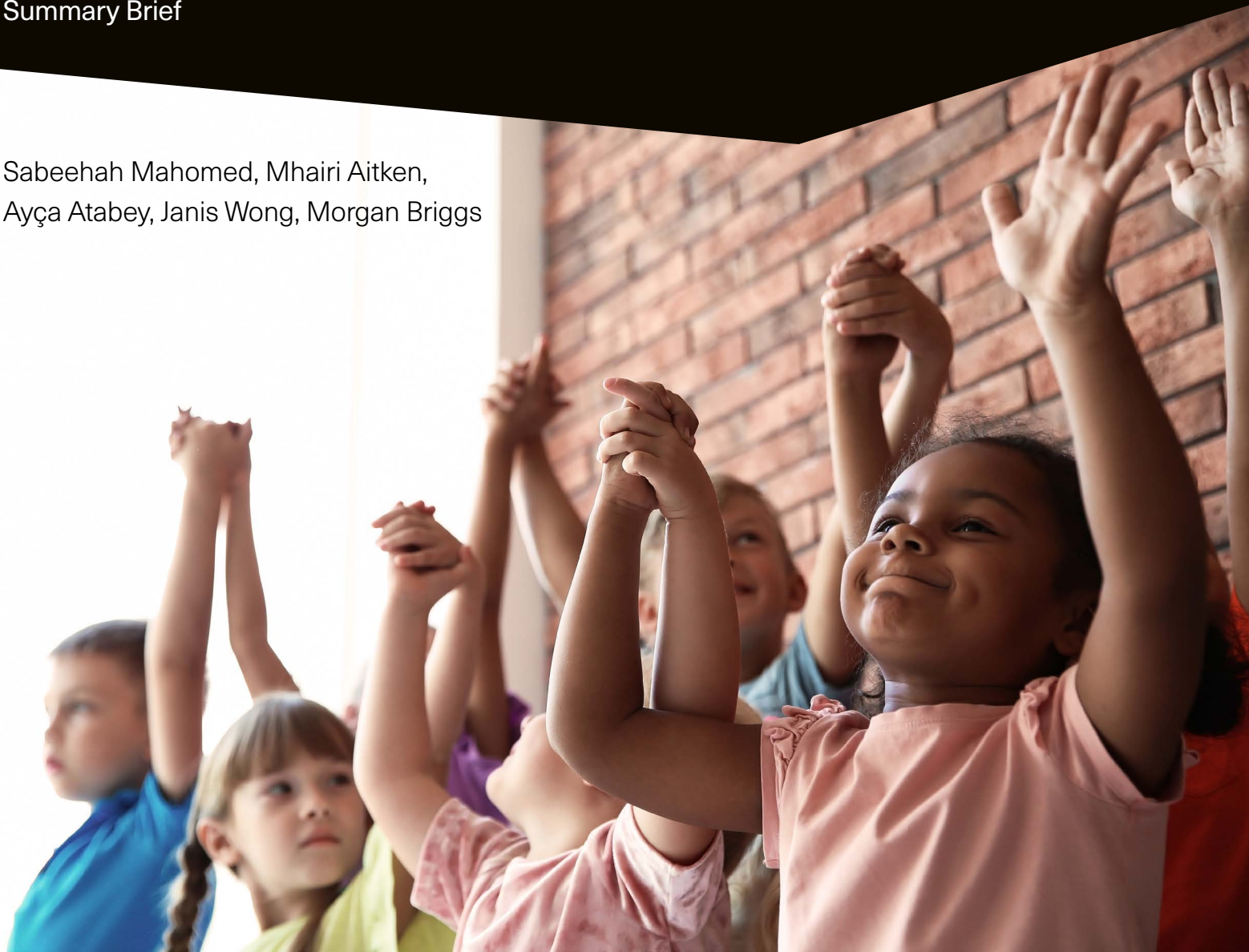
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## AI, Children's Rights, & Wellbeing: Transnational Frameworks

Mapping 13 Frameworks at the Intersections of  
Data-Intensive Technologies, Children's Rights,  
and Wellbeing

Summary Brief

Sabeehah Mahomed, Mhairi Aitken,  
Ayça Atabey, Janis Wong, Morgan Briggs



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## About The Alan Turing Institute

The Alan Turing Institute is the UK's national institute for data science and AI. The Institute is named in honour of Alan Turing, whose pioneering work in theoretical and applied mathematics, engineering, and computing is considered to have laid the foundations for modern-day data science and AI.

The Institute's goals are to advance world-class research in data science and AI and apply it to national and global challenges, build skills for the future and train a new generation of scientists, and drive an informed public conversation around data science and AI.

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## About the Public Policy Programme

The Public Policy Programme was set up in 2018 with the aim of developing research, tools, and techniques that help governments innovate with data-intensive technologies and improve the quality of people's lives. We work alongside policymakers to explore how data science and AI can inform public policy and improve the provision of public services. We believe that governments can reap the benefits of these technologies only if they make considerations of ethics and governance a priority.

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## About the Children's Rights and AI Team

The Children's Rights and AI team at The Alan Turing Institute is part of the Public Policy Programme's Ethics & Responsible Innovation Theme. Our research aims to advance child-centred approaches to the design, development, deployment, and governance of AI. We collaborate with a range of organisations (including UNICEF, Council of Europe, and Scottish AI Alliance) both in the UK and internationally to examine the ways that AI impacts children's rights, how children's rights can be protected in a digital world, as well as developing and testing approaches to meaningfully involve children in decision-making relating to AI. Our previous research includes piloting UNICEF's [Draft Policy Guidance on Children](#) and AI and working with [Children's Parliament and Scottish AI Alliance](#) to engage primary school children (aged 7 – 11) with AI and children's rights.

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## Acknowledgements

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# Executive Summary

## Frameworks

We adopted a broad approach to what constitutes a 'framework' for our analysis, including but not limited to binding and non-binding policy guidelines, recommendations, reports, policy briefs, tools, or concept notes meant to inform policy and guidelines in relation to data-intensive technologies and children's rights and wellbeing. This includes guidance documents aimed at different stakeholders, excluding academic literature or reports that do not explicitly aim to address the creation or implementation of an existing legal or policy framework.

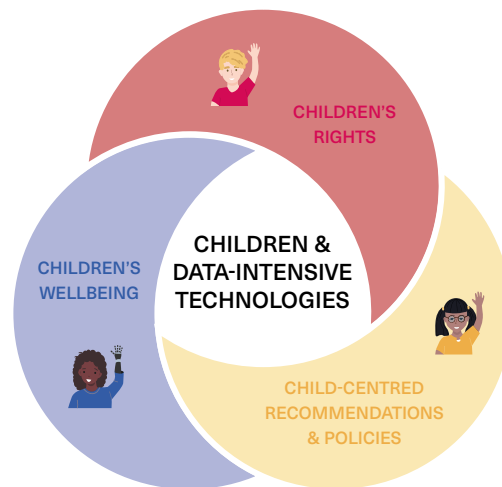
## Transnational

Extending beyond and across national boundaries of at least two or more countries.<sup>2</sup> Here, we focus on transnational frameworks which were created by authors across and representing different countries and are not specific to any particular national context.

As data-intensive technologies, including artificial intelligence (AI), is becoming more commonplace, children are being impacted since birth and over the course of their lives. However, currently, research is scarce when considering a comparative view of existing frameworks relating to AI, children's rights, and wellbeing. Our research aims to fill this gap by exploring the emerging international governance landscape in this context, emphasising transnational frameworks to offer a comprehensive view of this landscape.

Our report explores the international and global reach of AI to assess how children are directly and indirectly affected by AI. First, we introduce a glossary of key terms, followed by our methodology outlining the frameworks reviewed and key themes. These themes encompass **children's rights, children's wellbeing, and child-centred recommendations and policies**. We then present two heatmaps which assesses the key themes across 13 transnational frameworks and the extent to which they address specific considerations within these themes.<sup>1</sup> These include integrating children's rights, considering children's wellbeing and sociotechnical factors, involving children's voices, and addressing both opportunities and risks related to AI. Finally, we conclude with a brief discussion and point to areas for future research.

## Key themes



### CHILDREN'S RIGHTS

Integrating and upholding all children's rights according to the UNCRC in this framework

### CHILD-CENTRED RECOMMENDATIONS & POLICIES

Developing and implementing child-centred recommendations and policies

### CHILDREN'S WELLBEING

Children's sociotechnical, wellbeing, and related considerations

<sup>1</sup> See heatmaps on pages 8 & 9

<sup>2</sup> Rouse, 'International, Transnational, Multinational, Global'.

## CHILDREN'S RIGHTS

For the first theme on children's rights, we analysed the extent to which frameworks integrated children's rights according to the United Nations Convention on the Rights of the Child (UNCRC). At a granular level, we analysed four specific groups of children's aligned with certain Articles<sup>3</sup> of the UNCRC namely, non-discrimination, best-interests of the child, views of the child, and child exploitation.<sup>4</sup>

### Limited Substantial Discourse on Children's Rights

Despite all frameworks making some mention of 'children's rights', less than half had a strong focus on children's rights as defined by the UNCRC.<sup>5</sup>

### (Ir)responsible Governments

Frameworks primarily focused on the role of governments and policymakers in upholding children's rights through regulation and guidelines. However, the majority did not sufficiently address government's responsibility to avoid infringing on children's rights themselves.

### Protection from Child Exploitation

Across all frameworks there was consensus on the importance of protecting children from exploitation.<sup>6</sup> Specific concerns included online child sexual abuse and economic exploitation (via personal data monetisation, profiling, and microtargeting). Safeguarding children from these risks amongst others are crucial.

### Child Exploitation in Digital Environments

Frameworks indicated a growing concern regarding child exploitation in digital spaces, its **intersection** with unfair data and design practices in the technology sector, as well as poor or fragmented regulation.

### Relationship with Other Rights

Inclusion and accessibility of data-intensive technologies are considered in connection with children's rights such as non-discrimination and their impact on other rights such as the right to education, participation, play, and freedom of expression, amongst others.

<sup>3</sup> Articles 2, 3, 12, 13, 19, 32, 34-36.

<sup>4</sup> See 'Heatmap 2'

<sup>5</sup> Frameworks which included more than 50% coverage on children's rights according to the UNCRC.

<sup>6</sup> Guided by UNCRC Articles 19, 32, 34, 35, and 36.

## CHILDREN'S WELLBEING

For the second theme, we analysed the extent to which children's wellbeing and related considerations in relation to data-intensive technologies were included across frameworks, including specific considerations from a sociotechnical, socio-economic, and socio-cultural perspective. Additional considerations include the extent to which frameworks focused on the benefits or risks of technology to children's wellbeing and children's empowerment and agency amongst others.

### **Lack of Distinction between Children's Rights & Wellbeing**

Many frameworks do not clearly define 'wellbeing' and do not explicitly differentiate wellbeing from children's rights.

### **Benefits and Risks of Technology to Wellbeing**

There is acknowledgment of the dual impact of data-intensive technologies. Positive impacts were highlighted in educational, health, entertainment, and social contexts. Risks and online harms tended to focus on discrimination, safety, profiling, cyberbullying, harassment, abuse, and negative effects on physical and mental health (e.g. technology addiction).

Most frameworks concentrate more on the risks of data-intensive technologies rather than their potential benefits, despite children generally expressing enthusiasm for technology.

### **Accessible Information is Insufficient for Children's Agency**

Frameworks which discussed children's agency tended to emphasise the importance of ensuring children have access to age-appropriate information about their rights in the digital world. However, children's engagement can go beyond providing accessible information and should also extend to participatory processes that involve children in decision-making processes throughout the design and development of policies or services which impact their lives.

### **Digital Inclusion | and Equality**

Frameworks that addressed digital inclusion emphasised the link between access and equality in relation to unfair treatment of children and their data and the risks that could arise from these.

## CHILDREN'S WELLBEING (CONT.)

### **Disadvantaged & Vulnerable Groups**

All frameworks acknowledged the importance of considering disadvantaged and vulnerable groups of children to different extents. Some provided explicit examples of disadvantaged or vulnerable groups. Various frameworks emphasised supporting vulnerable and disadvantaged children with additional needs, specifically in education and internet access contexts.

### **Gender and Cultural Considerations**

Frameworks considered gender aspects and cultural norms that can influence children's enjoyment of their rights and wellbeing.

### **Limited Environmental Focus**

Only one framework linked the impact of technologies to the physical environment and discussed children's present and future wellbeing related to the environmental impacts of AI.

## CHILD-CENTRED RECOMMENDATIONS & POLICIES

The final theme focused on existing or future recommendations and policies that were child-centred or at the least, focused on upholding children's rights and wellbeing. This included recommendations such as age-appropriate measures, impact assessments, as well as both binding and non-binding requirements related to children's rights, wellbeing, and data-intensive technologies.

### **Generalised Policy Recommendations**

Overall, most recommendations were high-level and generalised, which may be due to their transnational focus.

### **Child Rights Impact Assessments (CRIA)**

Less than half of the reviewed frameworks mentioned or recommended a child rights impact assessment (CRIA).

### **Engagement with Children**

There was less mention of *direct* engagement with children in the private sector, and instead often indicated as a more general consideration of children's perspectives instead.



## CHILD-CENTRED RECOMMENDATIONS & POLICIES (CONT.)

### **Accountability and Liability**

The question of accountability and liability were addressed differently across frameworks. Only some frameworks called for binding regulations and holding both public and private stakeholders accountable.

### **Need for Decisive Global Collaboration**

More discussion and practical steps are needed on global collaboration. Some frameworks recommended an international approach to data governance and child-centred digital regulation and policies.







### **Influence of Geopolitics**

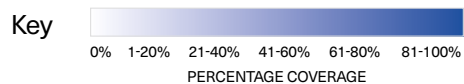
Limited mention was made regarding the growing role of geopolitics and how to address these imbalances and implications in relation to children's data governance and child-centred regulation.

Policymakers should work together with transnational organisations and other key stakeholders to uphold children's rights, wellbeing, and ensure child-centred AI for children. The frameworks included in this analysis cover diverse impacts of AI, recognising that it touches all aspects of children's lives and may pose significant consequences and opportunities for their education, play, sense of self, relationships, mental health, and social, emotional, and cognitive development (amongst others). It is vital that regulation, policy, and research engage with impacts on children as an urgent, high priority focus as technical innovation continues alongside the increasing deployment of AI technologies across almost all sectors and industries. Researchers could extend similar mappings of frameworks from less developed countries. There are additional key areas for further comparative analysis including, data protection, privacy, addressing manipulation and misinformation, enhancing enforcement measures, ensuring practical application of these frameworks, and fostering international collaboration to protect children's rights globally. We hope that this analysis provides a starting point for future research as well as a useful resource for policymakers and practitioners to explore ways forward in developing and applying child-centred approaches to AI.



# Heatmap 1: Percentage coverage of children’s rights, wellbeing considerations, and child-centred recommendations

	Children’s Rights	Children’s Wellbeing						Child-centred Recommendations & Policies
	Integration of children’s rights according to the UNCRC	Sociotechnical and wellbeing considerations	Importance of children’s voices & agency	Opportunities and benefits to children	Risks and harms to children	Digital inclusion and access to technologies	Disadvantaged and vulnerable children	
<b>AFRICAN UNION &amp; ACERWC (2023):</b> Day of the African Child 2023: The Rights of the Child in the Digital Environment: Concept Note								
<b>COE (2018):</b> Guidelines to respect, protect and fulfil the rights of the child in the digital environment 								
<b>OECD (2022):</b> Companion Document to the OECD Recommendation on Children in the Digital Environment								
<b>UNESCO (2022):</b> Recommendation on the Ethics of Artificial Intelligence								
<b>UNICEF (2022):</b> Towards a Child-Centred Digital Equality Framework								
<b>UNICEF (2021A):</b> Policy Guidance on AI for Children 2.0 								
<b>UNICEF (2021B):</b> The Case for Better Governance of Children’s Data: A Manifesto								
<b>UNICEF INNOCENTI (2023):</b> The Metaverse, Extended Reality and Children								
<b>UNICEF INNOCENTI (2022):</b> Responsible Innovation in Technology for Children: Digital technology, play, and child well-being 								
<b>UN (2023):</b> A Global Digital Compact — an Open, Free and Secure Digital Future for All								
<b>UN (2021):</b> General comment No. 25 on children’s rights in relation to the digital environment 								
<b>5RIGHTS FOUNDATION &amp; WSU (2021):</b> Our rights in the digital world: A report on the children’s consultations to inform UNCRC General Comment 25 								
<b>WEF (2022):</b> Artificial Intelligence for Children 								









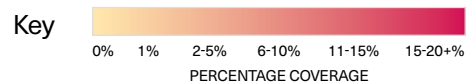
Direct engagement with children in the development of this framework





## Heatmap 2: Percentage coverage of key children’s rights in relation to data-intensive technologies

	Children's Rights			
	Non-discrimination (Article 2)	Best interests of the child (Article 3)	Views of the child (Article 12-13)	Child exploitation (Articles 19, 32, 34-36)
<b>AFRICAN UNION &amp; ACERWC (2023):</b> Day of the African Child 2023: The Rights of the Child in the Digital Environment: Concept Note	2-5%	6-10%	11-15%	15-20+%
<b>COE (2018):</b> Guidelines to respect, protect and fulfil the rights of the child in the digital environment 	6-10%	6-10%	11-15%	15-20+%
<b>OECD (2022):</b> Companion Document to the OECD Recommendation on Children in the Digital Environment	6-10%	6-10%	11-15%	2-5%
<b>UNESCO (2022):</b> Recommendation on the Ethics of Artificial Intelligence	11-15%	6-10%	6-10%	2-5%
<b>UNICEF (2022):</b> Towards a Child-Centred Digital Equality Framework	11-15%	6-10%	6-10%	2-5%
<b>UNICEF (2021 A):</b> Policy Guidance on AI for Children 2.0 	11-15%	6-10%	6-10%	2-5%
<b>UNICEF (2021 B):</b> The Case for Better Governance of Children’s Data: A Manifesto	6-10%	6-10%	6-10%	11-15%
<b>UNICEF INNOCENTI (2023):</b> The Metaverse, Extended Reality and Children	6-10%	6-10%	6-10%	11-15%
<b>UNICEF INNOCENTI (2022):</b> Responsible Innovation in Technology for Children: Digital technology, play, and child well-being 	11-15%	6-10%	15-20+%	2-5%
<b>UN (2023):</b> A Global Digital Compact — an Open, Free and Secure Digital Future for All	6-10%	6-10%	6-10%	2-5%
<b>UN (2021):</b> General comment No. 25 on children’s rights in relation to the digital environment 	11-15%	6-10%	6-10%	15-20+%
<b>5RIGHTS FOUNDATION &amp; WSU (2021):</b> Our rights in the digital world: A report on the children’s consultations to inform UNCRC General Comment 25 	6-10%	6-10%	15-20+%	11-15%
<b>WEF (2022):</b> Artificial Intelligence for Children 	6-10%	6-10%	6-10%	2-5%



Direct engagement with children in the development of this framework



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