Joint Input to Canada's AI Strategy

Introduction

Canada's national strategy to promote AI adoption and the related legislation must extend beyond adoption, innovation and efficiency to prioritize the rights, safety and wellbeing of children.[1] The current consultation process, hindered by a brief timeline, limited independent public interest in the taskforce, and narrow industry-friendly scope, overlooks crucial aspects needed to guarantee that AI systems are safe, effective, and uphold fundamental human rights.

To build systems worthy of public trust, Canada must embed in its strategy safeguards that ensure AI systems are safe, demonstrably effective against clearly defined objectives, and that they respect the human rights and rigorous protections afforded to individuals, particularly children who represent one-fifth of Canada's population.[2]

What conditions are needed to ensure Canadian AI research remains globally competitive and ethically grounded? // How does Canada retain and grow its AI research edge? What are the promising areas that Canada should lean in on, where it can lead the world?

In Canada, AI systems are already omnipresent in children's lives: from the toys they play with[3] and the algorithms that shape their social interactions,[4] to the EdTech products that define their outcomes[5] and the chatbots they turn to for comfort and companionship.[6] AI systems, much like previous technological advances, are frequently designed, developed, and governed for commercial gains without consideration for children, their rights, or their views.[7] This exposes them to serious risks, including:

- **Privacy violations:** Children's personal data is routinely harvested at scale, collected, shared, and used to profile them or train AI systems, undermining their privacy and agency.[8]
- **Manipulation and dependency:** AI-powered content recommender systems optimized for engagement exploit children's developmental vulnerabilities by overstimulating their reward pathways and promoting compulsive use of digital products and services.[9] Similarly, AI-driven chatbots marketed for companionship present many risks for children's health, cognitive and social development as

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[1] Our use of the terms "child" or "children" refers to all individuals under the age of 18 as defined in the UN Convention on the Rights of the Child, art. 1.

[2] Statistics Canada, Population estimates on July 1, by age and gender.

[3] Chen, AI toys are all the rage in China—and now they're appearing on shelves in the US too.

[4] Office of the Privacy Commissioner of Canada, Growing up with AI: What are the privacy risks for children?

[5] Gooderham, From blackboards to algorithms: the rise of AI in Canadian classrooms.

[6] The Dais, (Gen)eration AI: Safeguarding youth privacy in the age of generative artificial intelligence.

[7] 5Rights, Disrupted Childhood: The cost of persuasive design.

[8] The Dais, (Gen)eration AI: Safeguarding youth privacy in the age of generative artificial intelligence and Office of the Privacy Commissioner of Canada, Growing up with AI: What are the privacy risks for children?

[9] 5Rights, Disrupted Childhood: The cost of persuasive design.

deliberately manipulative design features such as Fear of Missing Out (FOMO) hooks or emotional neglect can foster unhealthy emotional attachment.[10]

- **Misinformation and disinformation:** AI technologies can amplify and generate false, misleading, or harmful content at scale and speed. Recommendation systems driven by engagement metrics prioritize sensational or emotionally provocative content spreading false information faster than accurate content.[11]
- **Bias and discrimination:** AI systems trained on biased or incomplete datasets risk perpetuating harmful stereotypes, generating misleading information, or contributing to inaccurate and discriminatory outputs and outcomes, as is the case with algorithmic school dropout predictions already in-use in Canada.[12]
- **Educational impact:** The deployment of AI in educational settings raises critical questions about its actual pedagogical value and long-term effects on children's learning, critical thinking, and social-emotional development.[13]

These risks are heightened for children, who are developing and acquiring the necessary knowledge, experiences, and resources to understand or challenge automated decision-making, algorithmic unfairness and the subtle, cumulative, or acute ways AI shapes their lives.[14]

This dynamic is further intensified by an imbalance of power, knowledge, and control between children and those who design and deploy AI systems, making the impact more severe, persistent, and difficult to detect.[15] Considering AI-specific characteristics (e.g. opacity, complexity, dependency on data),[16] AI systems that are not designed based on child-centered principles, trained on appropriate data sets, and tested to ensure neutral or positive outcomes for children can have significant impacts on children's rights safety, privacy,[17] cognitive development, health and educational outcomes, social relationships, economic well-being and freedoms.[18]

In this context, and building on the CIFAR AI Insights Policy Brief on Responsible AI and Children, Canada has a unique opportunity to lead the world in placing children at the center of AI research, design, development, and deployment. To demonstrate that innovation does not have to depend on the commercial exploitation of children and the erosion of their privacy, capacities for critical thinking, or agency, Canada should prioritize AI research and governance which:

- Complies with Canada's obligations under the UN Convention on the Rights of the Child (UNCRC) and General comment 25: Integrate children's rights by design, ensuring systems anticipate and mitigate risks and harms before reaching children; and

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[10] De Freitas, How AI Chatbots Try to Keep You From Walking Away; Shasha et al, Playing With Danger: A Taxonomy and Evaluation of Threats to Smart Toys; eSafety Commissioner, AI chatbots and companions – risks to children and young people; and UNESCO, Recommendation on the Ethics of Artificial Intelligence, para. 128.

[11] UNICEF, Digital misinformation/disinformation and children, p. 11; UNICEF, Generative AI: Risks and opportunities for children; Vaidhyanathan, Making Sense of the Facebook Menace; and Vosoughi, Roy, & Aral, The spread of true and false news online.

[12] Muralidharan, et al. Recommendations for the use of pediatric data in artificial intelligence and machine learning; Régis and Gaumond, Assessing the impacts of AI on human rights.

[13] Atabey, Sylwander, & Livingstone, A child rights audit of GenAI in EdTech.

[14] 5Rights, Children & AI Design Code, pp. 51-54.

[15] UNICEF, Artificial Intelligence Governance in Motion.

[16] 5Rights, Disrupted Childhood: The cost of persuasive design.

[17] Federal Trade Commission, FTC and DOJ Charge Amazon with Violating Children's Privacy Law by Keeping Kids' Alexa Voice Recordings Forever and Undermining Parents' Deletion Requests.

[18] UNICEF, AI for children.

- Includes child rights and development experts, educators, and children's voices: Consult with Canadian and international experts to ensure technologies reflect and respect the realities of children's lives.

How can Canada build public trust in AI technologies while addressing the risks they present? What are the most important things to do to build confidence?

AI systems likely to be accessed by or to impact children must undergo rigorous, child-focused stress testing prior to deployment, and be subject to independent auditing, and transparent reporting.

Ensuring AI systems integrate data protection, privacy-by-design, and safety-by-design and that they undergo iterative testing throughout their design, development, and deployment so that they are safe and effective (meeting their intended outcomes) is essential to building public trust. This approach would ensure Canada harnesses the technology's benefits and continues to be a leader in the championing of human rights and democratic values. Yet, the unchecked development of AI systems has resulted in high levels of distrust. Four in five Canadians are concerned about the risks AI poses, [19] with only 5% being more hopeful for its potential benefits than worried about its risks.[20]

Human rights safeguards build trust, and Canadians are urgently calling for these: seven in ten Canadians support stronger regulation of digital products and services,[21] and 61% want *ex-ante* regulation of AI systems.[22]

Canada's past experience with PIPEDA shows that weak regulatory frameworks that fail to hold companies accountable also fail to boost consumer trust.[23] With the development of a new AI strategy, Canada has the opportunity to avoid this pitfall and create governance and oversight frameworks that hold companies accountable to design AI systems that are safe and built with children in mind.

Rights-respecting regulation with robust safeguards is necessary to harness the opportunities AI provides without undermining children's rights, safety or wellbeing.[24]

The United Nations' Convention on the Rights of the Child (UNCRC) is the most widely ratified international human rights treaty in history. This demonstrates the broad consensus that children must have distinct protections in light of their rights and evolving capacities. Among others, the UNCRC enshrines children's rights to have their best interests be a primary consideration in all matters affecting them,[25] privacy,[26] protection from commercial exploitation,[27] and freedom of thought.[28]

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[19] KPMG, Canada is lagging behind global peers in AI trust and literacy.

[20] OpenMedia, Survey: Canadians Want Proactive AI Rules for Rights, Privacy, and Sustainability.

[21] The Dais, Survey of Online Harms in Canada 2024.

[22] OpenMedia, Survey: Canadians Want Proactive AI Rules for Rights, Privacy, and Sustainability.

[23] Grimes, Antle, Steeves, & Coulter, Responsible AI and Children: Insights, Implications, and Best Practices; Micheti, Burkell, & Steeve, Fixing Broken Doors: Strategies for Drafting Privacy Policies Young People Can Understand; and Steeves, Data protection versus privacy: Lessons from Facebook's Beacon.

[24] Grimes, Antle, Steeves, & Coulter, Responsible AI and Children: Insights, Implications, and Best Practices, p. 4.

[25] UNCRC, art. 3; UNCRC General comment No. 14.

[26] UNCRC, art. 16.

[27] UNCRC, art. 36.

[28] UNCRC, art. 14.

The UN Committee on the Rights of the Child's General comment No. 25 clarifies that Canada's obligation to protect children's rights applies in the digital world,[29] which explicitly encompasses AI.[30] It also emphasizes the responsibilities of the business sector to respect children's rights, and to prevent, mitigate, and – where appropriate – provide effective remedies for violations.[31]

Additional international instruments to which Canada is a party highlight Canada's commitment to rights-respecting AI governance.[32] This further contributes to the global consensus that children's rights must be protected in the age of AI, as reflected in the UN High-Level Advisory Body on AI's Governing AI for Humanity, UN General Assembly resolution 78/187 on the Rights of the child in the digital environment, and UNICEF's Policy guidance on AI for children.

The Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law – to which Canada is a signatory – requires state parties to take due account of children's specific needs, vulnerabilities, and rights.

Identify and address the full spectrum of risks AI systems expose children to before harm occurs, ensuring that only AI systems proven to be safe and beneficial are permitted on the Canadian market.

Due diligence and risk mitigation are expected across industries, from food safety to aviation. The same must apply to the technologies children use daily. As such, companies should be required to carry out Child Rights Impact Assessments (CRIAs) to systematically ensure the risks to children created by AI systems are identified, eliminated, mitigated, or effectively managed.[33]

Undertaking CRIAs also has commercial benefits for businesses, as these allow them to take preventative action to mitigate harms that would become increasingly expensive or damaging if not identified and addressed *ex ante*.[34] CRIAs also notably allow businesses to identify positive features or functionalities which can enhance respect for children's rights and – when released publicly – represent valuable transparency tools, contributing to consumer and investor trust.

AI systems should be prohibited from manipulating or exploiting children, distorting their behavior, and generating unfair or discriminatory outcomes.[35]

UNCRC General comment No. 25 makes clear that AI and technologies such as emotional analytics, inference information filtering, and recommendation systems must not manipulate or interfere with children's freedom of thought and access to information.[36]

To this end, the European Union's AI Act, which aims to ensure a high level of protection of health, safety and fundamental rights, prohibits AI systems that exploit vulnerabilities

[29] UNCRC General comment No. 25, paras. 4 & 37.

[30] UNCRC General comment No. 25, para. 2.

[31] UNCRC General comment No. 25, para. 35; UNCRC General comment No. 16, paras. 28, 42 and 82; and UN Guiding Principles on Business and Human Rights.

[32] These notably include the Council of Europe Framework Convention on Artificial Intelligence, the Hiroshima Process International Code of Conduct for Organizations Developing Advanced AI Systems, and the 2025 G7 Leaders' Statement on AI for Prosperity and Data Protection and Privacy Authorities Roundtable Statement.

[33] UNCRC General comment No. 25, paras. 23 and 38. For guidance, see Department of Justice, Child Rights Impact Assessment tool and e-learning course and UNICEF, Assessing child rights impacts in relation to the digital environment.

[34] Livingstone and Pothong, Child Rights Impact Assessment: A Policy Tool for a Rights-Respecting Digital Environment, p. 3.

[35] UNCRC General comment No. 25, paras. 61-62.

[36] UNCRC General comment No. 25, paras. 53 & 62

due to age, recognizes the risks posed by addictive and exploitative AI design features, and accounts for anthropomorphic AI systems' potential to foster emotional dependencies and cause real-world harm.[37]

By developing future-proof and tech-neutral regulation which integrates safeguards and ensures transparency,[38] oversight,[39] access to remedy,[40] and accountability, Canada has the opportunity to harness emerging technologies' benefits from the outset and to meaningfully build trust in AI.

What frameworks, standards, regulations and norms are needed to ensure AI products in Canada are trustworthy and responsibly deployed?

Acting on the broad consensus that children must have distinct protections, Canada must hold tech companies accountable for respecting children's rights and their best interests – by design and default – so that children can enjoy the benefits of AI without having their privacy, safety, and agency compromised.[41]

Canada's AI strategy should be part of a broader systemic approach to digital governance explicitly grounded in children's rights, considering Canada's international human rights obligations.

This demands coherent, proactive online safety, privacy, and data protection laws that require comprehensive risk assessments, guarantee rigorous enforcement, and are subject to independent oversight.

The Office of the Privacy Commissioner of Canada has already championed this approach, advocating for a framework that embeds children's rights, safety and privacy into the very architecture of digital technologies.[42]

A crucial next step in building public trust in AI is to assess impact upstream—before technologies are put on the market and reach children. Only products and services that are independently demonstrated to be safe and effective for children should enter the market. To support the implementation of leading frameworks, best practice guidelines are emerging across the world, from the Law Commission of Ontario Human Rights AI Impact Assessment and the Council of Europe HUDERIA to the UNICEF D-CRIA Toolbox and 5Rights' Children & AI Design Code.

Research proves that upstream regulation leads to meaningful positive changes in the design of digital products and services for children.[43] By developing upstream and future-proof regulation spanning AI, data protection, online safety, and other realms of tech governance, Canada has the opportunity to ensure AI products are safe and age-appropriate – while creating a predictable and consistent regulatory environment in which responsible businesses can compete on safety and quality.

This must apply across both the public and private sectors. Additionally, the government must contribute to market incentives and ensure that the AI technologies it invests in and

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[37] UNICEF, Artificial Intelligence Governance in Motion.

[38] UNICEF, Policy guidance on AI for children.

[39] 5Rights, Shedding Light on AI: A Framework for Algorithmic Oversight.

[40] UNCRC General comment No. 25, para. 35; UNCRC General comment No. 16, paras. 28, 42 and 82; and UN Guiding Principles on Business and Human Rights.

[41] UNCRC General comment No. 14; Stoilova, et al. Children's experiences of generative artificial intelligence.

[42] Including in the Resolution of the Federal, Provincial and Territorial Privacy Commissioners and Ombuds with Responsibility for Privacy Oversight "Putting best interests of young people at the forefront of privacy and access to personal information"; the Roundtable of G7 Data Protection and Privacy Authorities Statement on AI and Children; and the Sweep Report 2024: Deceptive Design Patterns

[43] Wood, Impact of regulation on children's digital lives.

procures uphold children's rights (for example, through a Child Rights Impact Assessment), are demonstrated to be safe and beneficial for children, and are independently verified.

How can Canada proactively engage citizens and businesses to promote responsible AI use and trust in its governance? Who is best placed to lead which efforts that fuel trust?

To harness the potential of AI as a positive force for education,[44] play, freedom of expression, and exchange, it must be designed with children's rights, best interest, and well-being in mind.

It is entirely unrealistic to rely only on transparency, explainability, individual awareness, or digital literacy and expect children to fully understand or make informed choices when AI systems are not designed, governed, and overseen to be safe and rights-respecting from the outset.

Government, therefore, is best positioned to lead legislative efforts that build trust by holding tech companies accountable to their obligations. This requires strong, rights-based, and systemic regulation, consistent with Canada's duty to respect, protect,[45] and fulfil children's rights in the digital world.[46]

AI designers, deployers, and developers must also demonstrate that their products are safe, age-appropriate, designed for children's needs, and provide privacy-protective experiences by design and default.

Technology companies have a clear duty to respect children's rights and to prevent harm in the digital world. Yet, they have repeatedly failed to uphold even basic standards of safety and responsibility. In this context, Canada must implement robust, systemic regulation to reverse this pattern and ensure the respect, protection, and realization of children's rights online. This notably entails establishing an independent regulator with the necessary powers to enforce compliance - including where necessary by issuing penalties.

International best practices can guide this effort. Technical standards, such as the IEEE 2089 Standard for an Age Appropriate Digital Services Framework set out standards for the design of age-appropriate digital products and services. The introduction of legislation reflecting these standards would provide a strong basis for the regulation of AI in a way that is safe and rights respecting.[47]

In outlining a model for rights-respecting AI regulation, 5Rights' *Children & AI Design Code* – which builds on the above international best practices – provides a basis for Governments to proactively engage businesses. It offers a guided process, throughout the life cycle of an AI system against a set of clear criteria for safety, privacy, security. The Code requires those who build and deploy AI systems to consider risks to children by design and default; and provides practical tools to identify, evaluate, and mitigate the risks, and creates a record of decisions.

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[44] Stoilova, et al. Children's experiences of generative artificial intelligence.

[45] UNCRC General comment No. 25, para. 37.

[46] UNCRC General comment No. 25, para. 4.

[47] UNCRC General comment No. 25, para. 35; UNICEF, Taking a Child Rights-Based Approach to Implementing the UNGPs in the Digital Environment. UNCRC General comment No. 25, para. 35; UNCRC General comment No. 16, paras. 28, 42 and 82; and UN Guiding Principles on Business and Human Rights.

To regulate AI systems for children's rights and to harness the opportunities it presents, AI developers must be held accountable to respect the following criteria:[48]

- **Developmentally appropriate:** Ensure AI systems are designed, trained, and deployed to account for children's differing needs and vulnerabilities at different ages and stages of development, by design and default.
- **Lawful:** Confirm the AI system is compatible with relevant local, provincial, federal, and international law, rules, and regulations – such as PIPEDA or Quebec's Consumer Protection Act.
- **Safe:** Do not create or amplify risks to children's physical, mental or emotional safety and their wellbeing – including privacy and security risks.
- **Fair:** Ensure the model treats children and their data fairly, creating outcomes that are equitable and just. Discriminatory or inaccurate decisions can arise from AI models or datasets that include biased, are based on poor data, or incorrect assumptions - including assuming that children are adults for example.
- **Reliable:** Assess the AI system functions as expected, with performance and outcomes remaining robust over time, even in unexpected or harsh conditions or where atypical data is introduced.
- **Provide redress:** Ensure there are clear reporting and complaints systems to seek actionable and effective recourse and remedy where an AI system has caused concern or harm, with priority given to reports that relate to children.
- **Transparent:** Provide accessible information to promote understanding of what the AI system does, accounting for the capacities and needs of children.
- **Accountable:** Establish a chain of human and organizational responsibility for the lifecycle of an AI product, making clear how conformity with the Code has been met.
- **Uphold rights:** Ensure AI systems uphold children's rights under the UNCRC and General comment No. 25 - including children's rights to education and to be free from commercial exploitation - and prioritize children's best interests by design and default.

Conclusion

AI is already shaping the lives of children. Without action, it will continue to exploit them, amplify harm, and violate their rights at scale. With the right safeguards, instead, AI can be harnessed as a force for good, designed from the outset to respect and protect children's safety, privacy, best interests, and rights.

This choice is not theoretical – it is urgent, within reach, and it is being made every day, by developers, companies, and policymakers.

Building on existing child-centered consumer protection and Canada's human rights obligations, we call for:

[48] 5Rights, Children & AI Design Code, pp. 21–22.

Rigorous, child-focused stress testing of AI systems likely to be accessed by or have an impact on children prior to deployment, with independent auditing and transparent reporting to ensure risks are identified and mitigated over time.

To support this, the Government should establish an AI design code for children grounded in children's rights and the above principles, aimed at ensuring safety and effectiveness, with a dedicated regulatory authority responsible for investigating AI systems on behalf of children, overseeing implementation and enforcement.

As AI develops rapidly without consideration for children – among its most vulnerable yet most common early adopters – these are necessary steps to position Canada as a global leader in creating digital environments where children and innovation can thrive.

Signatories

Organizations

1. 5Rights Foundation
2. Children and Screens: Institute of Digital Media and Child Development
3. The eQuality Project
4. GoodBot
5. Helix Foundation for Children and Youth
6. Inspiring Healthy Futures
7. Kids Play Tech Lab
8. MediaSmarts
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