RIGHTS.AI: Children's Experiences of Generative Artificial Intelligence in Thailand

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Preface

Around the world, children and young people are increasingly encountering technologies based on generative artificial intelligence (GenAI) at home, school and elsewhere via apps, bots and other digital products and services. GenAI can answer questions or respond to prompts to create new kinds of content. It can be found in dedicated apps such as ChatGPT or Copilot, or embedded in familiar platforms such as Snapchat, WhatsApp and Google Search. Schools may also deploy AI-enabled educational technology (EdTech), and mental health services are experimenting with GenAI chatbots, among many other emerging applications.

Such technological innovation stimulates children's curiosity as well as raising public concerns. As GenAI technologies evolve rapidly, policymakers are scrambling to keep up and find ways to balance innovation with protections. We have witnessed a range of international and regional AI regulations and policies being introduced, primarily from the Global North, calling for responsible and ethical development and use (e.g., by the Council of Europe, European Commission, Organisation for Economic Co-operation and Development, United Nations Educational, Scientific and Cultural Organisation and the World Economic Forum). Yet very few of these focus on children.

At the Digital Futures for Children centre (DFC), we are committed to recognising children's experiences across diverse circumstances, especially in the Global South, which is underrepresented in research. We are delighted to have partnered with researchers in Brazil, Kenya, India and Thailand to explore children's experiences of and perspectives on GenAI. With a methodology designed in cooperation with the EU Kids Online network, this is one of several reports presenting the research, in answer to four overarching questions:

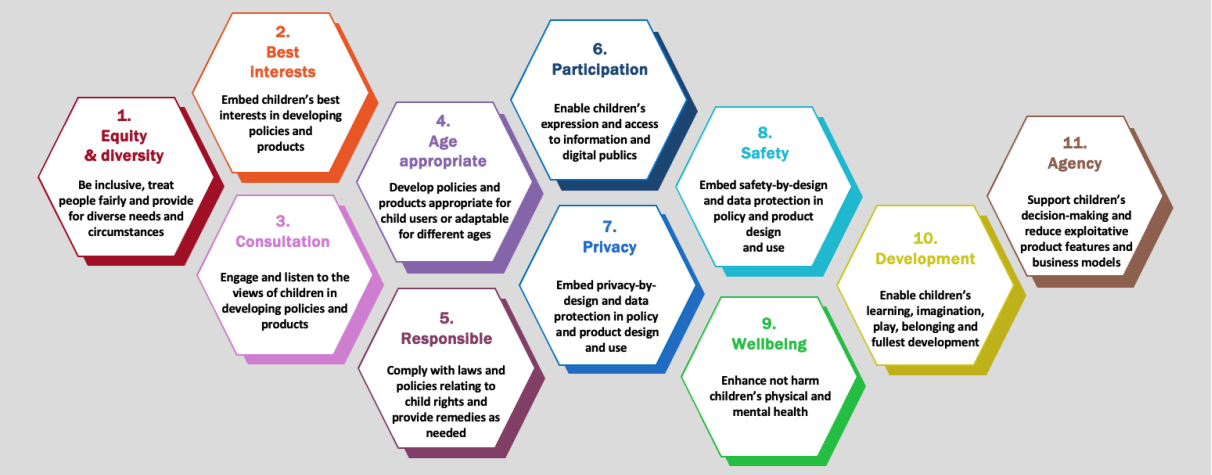
1. What are children's experiences with and perceptions of GenAI?
2. What is the potential impact of GenAI on children's rights?
3. What do children want to see in terms of GenAI regulations and protections?
4. What insights are offered by cross-country comparisons?

This work is framed by the United Nations Convention on the Rights of the Child (UNCRC)[1] and *General comment No. 25*[2] on the digital environment. Our child rights

[1] UNICEF (1989).
[2] United Nations Committee on the Rights of the Child (2021).

approach is encapsulated in the 11 principles of Child Rights by Design.[3] Taken together, these provide a holistic framework to understand children's encounters with GenAI.

Figure 1: The 11 principles of Child Rights by Design[4]



We hope the findings are of value to the policymakers, educators, regulators and others now designing policies for GenAI that impact on children, as well as the civil society actors and other organisations that advocate for children's rights. Ultimately, our role is to contribute to an evidence base that can be used to empower children, parents and educators by increasing awareness and understanding of Gen AI technologies.

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[3] Livingstone & Pothong (2023).
[4] Livingstone & Pothong (2023).

Executive summary

Generative artificial intelligence (GenAI) is becoming more prominent in children's daily lives and promises various benefits, ranging from time saving and improved productivity to closing educational gaps and thus improving social mobility – with great potential in a developing country like Thailand. However, how children access these benefits and whether they really are in their best interests requires further investigation.

This report examines the impact of GenAI on Thai children and their rights. It features interviews with 15 Thai children, aged 13-17, and one young adult, aged 18, about their GenAI use and the benefits they experience or expect from GenAI, applying a child rights lens.

The interview analysis reveals that Thai children have organically developed sufficient skills and literacy to extract the benefits they expect from GenAI. These revolve around their main purposes of GenAI use – education and information discovery. Most found value in how the technology could be harnessed to bridge educational gaps among able-bodied children and those with disabilities, as well as across the country's diverse types of schools, which vary in the quality of their resources. Many also enjoyed instant health and fitness information in easily digestible language, while others enjoyed conversations with GenAI, often finding its responses funny – implying GenAI's potential to support children's physical as well as emotional wellbeing.

Despite these benefits, the children's experiences of GenAI use were riddled with problems, mostly technical and rooted at the data and model layers, resulting in inaccurate or biased outputs or hallucinations. Depending on the children's GenAI application

contexts, these technical limitations could cost them their safety, wellbeing and development as well as equal opportunities to education and other benefits.

Based on the way Thai children use GenAI for learning, they face two key barriers to accessing its benefits: (1) their scope of knowledge being limited to the training data and worldviews captured in mainstream languages, which likely exclude or underrepresent data and knowledge in the Thai language and (2) their varying commands of the English language.

The first barrier results from underrepresentative data in terms of diversity of the world's natural languages used to train most mainstream GenAI models.[5] Such underrepresentation skews the quality and diversity of knowledge produced, limiting the scope of knowledge embedded in the outputs to the knowledge and perspectives captured in the natural language used to train the model. This limited output knowledge applies to all users irrespective of their dominant language that they then use to interact with GenAI.

The second barrier results from the fact that mainstream GenAI applications are predominantly trained on English language data,[6] which means they respond more appropriately to prompts in English. This situation risks exacerbating the existing inequality between privileged Thai children with a good command of English and those (who are often underprivileged) with a poorer command of English.

Many GenAI applications that the Thai children use are developed by major international GenAI corporations and appear untouchable by a small country like Thailand, with little market or enforcement power. However, this report presents recommendations for the Thai

[5] UNESCO (2024a).
[6] Madeleine (2024).

government, GenAI developers, schools, teachers and parents to ensure safe, responsible, ethical and rights-respecting GenAI development and use:

- The Thai government should recalibrate its AI strategy, balancing economic with other policy priorities, giving at least equal consideration to the diverse requirements of the Thai population in their different life stages, safety and wellbeing.
- Thai lawmakers should incorporate child rights provisions into their first AI regulation to foster human and child rights-respecting innovation.
- The Thai government should reprioritise the training and development programme for children.
- International and local (Thai) developers should embrace the holistic human and Child Rights by Design approach to AI. Innovation.
- International efforts to set AI standards, policies and regulations should be more inclusive and sensitive to contributions from members of the Global South.

Country context

Children in Thailand

Children[7] make up approximately 19 per cent of the Thai population, and the majority of them (80 per cent) are on track in their early years development, with 99 per cent completing primary education and 90 per cent completing lower secondary education.[8] However, the records on Thai children's learning outcomes on numeracy (65 per cent) and reading (71 per cent) skills are not as great as the completion rate, implying discrepancies in the quality of education.[9]

Thailand has enacted various pieces of legislation in line with the state's obligations under Article 4 of the UNCRC, the majority of which focus on children's protection rights. Examples of these laws include the Child Protection Act, B.E. 2546, 2003, the Domestic Violence Protection Act, B.E. 2550, 2007, the Labour Protection Act, B.E. 2541, 1998 and the Child and Youth Development Promotion Act, B.E. 2550, 2007. Thailand does not yet have any specific regulations addressing children's rights in the digital environment, including in GenAI use.

Statistics from the (Thai) Office of National Statistics show that internet use of children (6-15), young people (over 15 but under 18) and young adults (18-24) is on the rise, from 86.3 per cent in 2019 to 98.2 per cent in 2023, with those aged between 15 and 17 leading internet use.[10] Likewise, mobile phone use among those aged between 6 and 24 is also on the rise, standing at 98.3 per cent in 2023, with the 15-17 age group consistently leading mobile phone use between 2019 and 2023. Overall mobile phone ownership among the 6-24 age group is slightly lower than mobile phone use, with 82 per cent of this population reporting owning a mobile phone in 2023, implying practices of shared devices. Unlike mobile phone use, the 18-24 age group led in mobile phone ownership between 2021 and 2023, followed closely by those in the 15-17 age group.

Generative artificial intelligence is an AI technology capable of generating content based on prompts written in natural language with conversational interfaces.[11] Access to use

[7] Thailand is a signatory to the United Nations Convention on the Rights of the Child (UNCRC) (UNICEF, 1989) and recognises anyone under 18 as children, as defined in Article 1 of the Convention. However, the nation's justice system distinguishes between the terms 'children' (under 15) and 'young people' (15-17) (Article 4, Juvenile and Family Court and Procedure Act B.E. 2553, 2010). This report follows the UNCRC's definition, referring to those under 18 as 'children'.
[8] UNICEF (2024).
[9] UNICEF (2024).
[10] Office of National Statistics (2023).
[11] UNESCO (2025).

most mainstream GenAI models requires two basic components: (1) the internet and (2) a digital device. The latest statistics published by the (Thai) National Statistical Office and Ministry of Digital Economy and Society[12] show that internet use of those aged 6 or over reached 91 per cent in the fourth quarter of 2024; 89 per cent of these are in rural areas while 94 per cent live in urban areas. The 15-24 age group tops the table, with 99 per cent using the internet, followed by the 25-39 age group, at 99 per cent, and the 6-14 age group, at 97 per cent.[13] The high percentage of internet use, with only a small difference in usage between those in urban and those in rural areas, is likely due to availability of broadband resulting from the (Thai) government's broadband network expansion to rural areas known as Net Pracharat.[14]

In terms of device ownership, mobile ownership of those aged 6 or over reached 89 per cent in that same quarter of 2024, with 59 per cent aged 6-14 and 98.5 per cent aged 15-24 owning a mobile handset.[15] The same statistical record shows that 97 per cent of those owning a mobile phone use smartphones while the other 3 per cent use feature phones (dumbphones). As access to the internet and a digital device form the basic infrastructure for access to GenAI, these high statistical records of Thai children's internet and mobile phone use indicate good opportunities for Thai children's access to GenAI in general.

In the context of education, 97 per cent of schools in Thailand have internet access, but there is disparity between urban and rural schools' access to computers.[16] Access to a computing device or the lack thereof can limit the range of GenAI use among children, but not GenAI access in its entirety, as some GenAI tools are accessible on mobile phones.

To date, there are no official statistical records of GenAI use among those under 18 in Thailand. However, the Deloitte GenAI survey reveals that young people (18-24) lead in GenAI adoption in Asia Pacific, which includes Thailand.[17] According to the survey, the 9,042 employees and 2,903 students surveyed valued GenAI for its time efficiency, making workloads (including coursework for students) more manageable, and creating opportunities for skills development. However, the extent to which these benefits are enjoyed by individual users, including children, depends on users' GenAI literacy, which includes information literacy, to discern the quality of the returned outputs and revise their prompts to get the desired results.

[12] National Statistical Office & Ministry of Digital Economy and Society (2024).
[13] National Statistical Office & Ministry of Digital Economy and Society (2024).
[14] TOT (n.d.).
[15] National Statistical Office & Ministry of Digital Economy and Society (2024).
[16] Friberg-Storey & Patrier (2024).
[17] Deloitte (2024).

Given the high level of internet use and mobile device ownership, digital infrastructure access and therefore access to GenAI are less likely to be the cause of a new digital divide in Thailand, but GenAI literacy may be.[18] The dependency between GenAI benefits children enjoy and their GenAI literacy has caused concerns that children may not have the foundational skills to reap the benefits of GenAI, especially for learning. For example, a teacher observed that children 'don't understand the answers they get' and nor do they know how to 'select [a] keyword for Google'.[19] This concern about children's GenAI use not only impacts child development, but also children's other rights, and will be reflected on throughout the analysis of Thai children's GenAI experiences in this report.

Thailand's AI strategy and readiness

GenAI skill development is one of the core objectives of Thailand's *National AI strategy and action plan (2022-2027)*.[20] However, children under 18 are not a primary focus in how the government plans to meet this objective. Although there are educational initiatives for children in secondary education,[21] these focus mainly on developing children's technical skills. Thus, they support children's right to education, but not children's other rights, or children's awareness of GenAI's impact on their rights.

The vision for the AI strategy is for 'Thailand [to have] an effective ecosystem to promote AI development and application to enhance the economy and quality of life within 2027'.[22] Taken from the strategy, this vision is underpinned by three target objectives:

1. *Improving human capacity* by developing AI talents, skills and improving workforce readiness for AI integration across all economic sectors.
2. *Accelerating economic growth* through increased productivity with AI-powered products and services, and AI innovation for startups and digital businesses.
3. *Driving positive social and environmental impacts* through enhanced public access to government services, thus bridging income, education and healthcare gaps, more efficient use of natural resources and enhanced national security and safety, using AI.

To achieve these objectives, the government introduced five strategies:

1. *AI governance* towards (socially) beneficial, ethical, trustworthy, safe, secure,

[18] Hendawy (2024).
[19] Friberg-Storey & Patrier (2024).
[20] Ministry of Digital Economy and Society & Ministry of Higher Education, Science, Research and Innovation (2022).
[21] Department of Local Administration (2024).
[22] Ministry of Digital Economy and Society & Ministry of Higher Education, Science, Research and Innovation (2022).

private, accountable and rights-respecting AI through development of relevant policies, laws, standards and awareness-raising campaigns.

2. *AI infrastructure development*, strengthening the country's digital and data infrastructure through the development of an international AI consortium, a national platform for advanced data analytics and management, a national AI service platform and high-performance computing (HPC).

3. *AI talent development* through AI education, training and scholarship programmes.

4. *AI innovation* through research and development (R&D) prototypes, innovation in strategic sectors and development of AI core technology and platforms.

5. *AI for social welfare and economic growth*, promoting AI application across government and industries, through market and tax incentives and the creation of a safe environment for innovation, such as sandboxes.

Since its application in 2023, the Thai government has taken various actions according to these strategies. The most relevant to this research are under Strategies 1 and 3. Under Strategy 1, the Thai government has so far focused on soft laws in the form of guidelines.[23] Critics[24] saw this first *National AI ethics guideline*[25] as offering weak protection for human rights, including children's rights, because it is not legally binding and lacks mandates for human and children's rights impact assessments. That said, Thailand is in the process of drafting AI legislation to regulate high-risk applications. These refer to AI applications that risk undermining human rights, safety and the freedoms of citizens, particularly in the healthcare, government services and financial sectors.[26]

Under Strategy 3, the *Annual report 2024*[27] suggests that the government prioritise education and training at degree levels, with government initiatives for secondary education under 'AI and emerging technology education delivery in classrooms'.[28] These initiatives aim at integrating AI knowledge and skill development into basic education, starting with secondary teacher training nationwide to enable teachers to integrate the AI curriculum developed by the Thai Institute for the Promotion of Teaching Science and Technology into curricular content.[29] This curriculum is being piloted with teachers

[23] AI Thailand (2024).
[24] Linis-Dinco (2024).
[25] Ministry of Digital Economy and Society (2021).
[26] Sinsuk (2025).
[27] AI Thailand (2024).
[28] Department of Local Administration (2024).
[29] Department of Local Administration (2024).

trained under this programme in two classrooms of at least 30 students in 750 registered schools across Thailand. Still, the ways Thailand addresses AI education and training focus primarily on delivering knowledge about the academic discipline, in this case, computer sciences, and not how to apply the knowledge in everyday life. Critics see this approach as a problem that was brought to light by the 2018 Programme for International Student Assessment (PISA) results, requiring a full educational reform to address it.[30]

At international level, Thailand participated in the OECD Working Party on Artificial Intelligence Governance to update its action plan on AI governance according to the *National AI strategy and action plan (2022-2027)*.[31] It is developing its AI readiness report based on UNESCO's Readiness Assessment Methodology (RAM).[32]

So, with this strategy, how ready is Thailand for AI? Oxford Insights assesses governments worldwide on the three pillars of government, the technology sector and data and infrastructure to determine how ready they are to integrate AI into public service delivery.[33] Under the government pillar, countries are assessed for their governance and vision, governance and ethics, digital capacity and adaptability. In its *Government AI Readiness Index 2024*,[34] Thailand ranks 35th, compared to 188 governments worldwide, with an overall score of 66.17 (out of 100), following behind other countries in the area, including Singapore (2nd) and Malaysia (26th). According to the assessment, the strength of the Thai government's AI readiness lies in its clear AI vision (100), governance and ethics (78.46), and data and infrastructure, especially data availability (85.65). The weakest link holding back the government's AI readiness is the technology sector pillar, due to its underdeveloped AI ecosystem (26.74), despite the *National AI strategy and action plan* that was set out primarily to pursue economic growth. The extent of this pursuit of economic gains through public and private adoption of AI in the strategy, according to Linis-Dinco,[35] appears to sideline the respect for and fulfilment of human rights, including children's rights.

[30] Permjit (2023).
[31] AI Thailand (2024).
[32] AI Thailand (2025); UNESCO (2024b).
[33] Oxford Insights (2024).
[34] Oxford Insights (2024).
[35] Linis-Dinco (2024).

Methodology

Study overview

This qualitative study is part of a multicountry research initiative coordinated by the Digital Futures for Children centre (DFC) at the London School of Economics and Political Science (LSE) in collaboration with the EU Kids Online network. It investigates how children aged 13-18 experience and understand GenAI, focusing on their usage practices, rights awareness and digital agency.[36]

Ethical considerations

Ethical approval was granted by the LSE Research Ethics Committee (Ref: 439180), and the study adhered to institutional, national and international ethical guidelines for research with children. Age-appropriate informed consent procedures were followed: both child participants and their guardians provided signed consent, or, in some cases, verbally recorded consent, after being informed about the study's purpose, their rights and the voluntary nature of participation. Safeguards were in place to ensure child protection, privacy and data security, in compliance with the UK General Data Protection Regulation (UK GDPR) and the Thai Personal Data Protection Act (PDPA), B.E. 2562, 2019. All researchers were trained in ethical practices and child safeguarding protocols.

Sample and recruitment

The study included 14 children aged 13-17 and one young adult aged 18, all of whom reported having at least occasional experience using GenAI tools. The sample was purposely constructed to ensure diversity across gender (approximately equal numbers of boys and girls), age group, socioeconomic status (SES) (inferred through school type and area of residence), and mobile or computing devices used. Recruitment strategies included snowball sampling through personal networks, outreach to schools and teachers, and youth clubs. Initial screening conversations were held with interested participants to confirm eligibility and variation in experience with GenAI tools. These strategies resulted in a sample that represented a diverse background, in terms of SES, geographic representation (urban and rural areas), type of school (indicative of diverse pedagogical approaches and curricular content), gender orientation and (dis)abilities.

[36] For further details on the methodology and how to replicate the study, see Stoilova et al. (2025).

Table 2: Country sample (Thailand)

Participant (pseudonym)	Age	Gender	Residence	SES	Type of school	GenAI used
Pol	13	M	Bangkok	Middle-middle class	Public school	ChatGPT, Gemini, Photomath, NoteGPT, DeepSeek, Lichess, Chess.com
Nop	13	M	Bangkok	Upper-middle class	Private, international school	ChatGPT, Gemini, Copilot, Canva, Grammarly, Character.AI, DeepAI, ZeroGPT QuillBot
Tem	13	M	Bangkok	Upper-middle class	Private, Christian school	ChatGPT, DeepAI, Gemini, ZeroGPT, Canva
Jul	14	M	Bangkok	Upper-middle class	Private, international school	ChatGPT, Gemini, Meta AI and Character.AI
Ohm	15	M	Bangkok	Upper-middle class	Private, international school	ChatGPT, Chrome extension, with built-in ChatGPT bot
Nut	15	F	Bangkok	Middle-middle class	Public school	ChatGPT
Kaew	15	F	Bangkok	Middle-middle class	Public school	ChatGPT
Toem	15	M	Bangkok	Upper-middle class	Private, Christian school	ChatGPT, Gemini,

						Grammarly
Ying	16	F	Suanphueng, Ratchaburi (Southwest)	Low-income family	Public school	ChatGPT, Suno (music), DeepAI (for editing photos), BeautyCam-AI
Dao	16	F	Suanphueng, Ratchaburi	Low-income family	Public school	ChatGPT, Gemini via Google search
Pak	16	F	Phrae (northern province)	Low-income family	Public school	ChatGPT, Character.AI, QANDA, Meta AI, Meitu
Rak	17	M	Bangkok	Upper-middle class	Private, international school	ChatGPT
Pen	17	Non-binary	Phrae	Low-income family	Public school	Meitu, CapCut, ChatGPT, QANDA, Meta AI
Kan	17	F	Phrae	Low-income family	Public school	Meta AI, QANDA, Meitu
Jah	18	F	Bangkok	Lower-income family	Public school	Character.AI, DeepAI, ChatGPT (web-based), Meta AI, Lemon8, QANDA, SimSimi (chatbot), Fah Sai (chatbot)

Preparation and materials

All research materials, including consent forms, information sheets and interview guides, were developed in collaboration with the country partners and translated into local languages. Showcards and interview aids from the GenAI showcards booklet were adapted to fit the national context.[37]

Data collection

All interviews were conducted in person, in Thai or English, at the participants' preference, and at settings convenient and familiar to the children (e.g., their home or school). Only 4 out of the 15 participants chose to give interviews in English; the rest gave interviews in Thai. Conversations were designed to last approximately one hour, with breaks allowed as needed. Interviews followed a semi-structured guide, encouraging open-ended responses while covering a core set of themes. Each interview was divided into eight sections: (1) GenAI use, (2) demonstration of GenAI use and skills, (3) manifestation of children's rights, (4) AI and information literacy, (5) emotional or playful interaction, (6) mediation, (7) hopes and fears and (8) remedy.

In section 2, the participants were asked to demonstrate how they used GenAI tools of their choice and in the language(s) of their choice. Where they demonstrated some confidence in their English language skills, the interviewer prompted them to reflect on the similarities and differences in the results of their prompts in Thai and English and, if possible, to provide examples. Screen interactions with GenAI apps were recorded or documented through photographs, where appropriate and with consent. Care was taken to anonymise all personally identifiable information.

In section 3, we devised seven scenarios to engage the participants in conversation about their GenAI experiences in relation to children's rights. These featured different GenAI uses, for example, for music generation, information discovery, image modification and completing homework and their consequences, which have implications for various dimensions of the 11 principles for Child Rights by Design.[38] These scenarios helped the participants reflect on their experiences with GenAI and prompted discussions, and guided researchers' identification of the implications of these experiences for children's rights.

Questions in section 4 aimed at probing the participants to talk about their GenAI experiences in ways that demonstrated their critical understanding of GenAI and

[37] See Stoilova et al. (2025).
[38] Livingstone & Pothong (2023).

abilities to derive benefit from GenAI. Section 5 focused on GenAI's impact on the participants' emotions and their playful interactions with GenAI. Section 6 discussed how the participants learned to use GenAI, taught others how to use it and any rules for using GenAI that they were aware of. Section 7 featured conversations about the participants' hopes and fears, leading to the final section on the participants' calls for change.

This interview process did not require the children to explicitly talk about their rights. Rather, it was intended to encourage them to demonstrate, discuss and reflect on their use of GenAI tools. All interviews included observational elements to capture interaction patterns, skills and reactions. The interviewer followed up on responses using non-leading prompts, and monitored the child's comfort and wellbeing throughout, according to the training.

Data management

Audio recordings were securely stored and uploaded to a protected folder provided by DFC on LSE's OneDrive. Interviewers also completed post-interview background forms and field notes. Transcripts were produced in the original language in which the participants were interviewed through GDPR-compliant automated transcription services. The interviewer reviewed all transcripts for accuracy and provided a translation into English for the quotes cited in this report that were originally given in Thai. Translation of these quotes prioritised emulating the child's way of speaking and preserving their voice. Personally identifiable data (e.g., consent forms) were stored separately from research data.

Analysis

Data analysis followed a common coding scheme co-developed by the DFC in consultation with all country partners. The initial coding framework was based on a framework of the 11 principles of Child Rights by Design[39] (see Figure 1) and their application to the research data was refined through collective feedback and pilot coding. This process aligns researchers' interpretation of the participants' GenAI experiences, uses and reflections shared in the interviews and relates them to the 11 principles.[40] This analytical approach allows for researchers' appraisal of the extent to which GenAI and its use by the participants supports children's rights.

Country researchers were responsible for summarising findings under each thematic

[39] Livingstone & Pothong (2023).
[40] Livingstone & Pothong (2023).

code and contributing illustrative quotations. This collaborative approach ensured consistency across national contexts while allowing for local specificity. Each research team completed the same coding template, supporting analytical consistency and thematic integration across the international dataset.[41]

Findings

Overall, the children interviewed exhibited a strong sense of agency in their engagement with GenAI. This is observable through them exercising choice about which GenAI applications to use, their purposes of GenAI use and approaches, and techniques for effective GenAI use. Even those who stated they were not keen on or a fan of GenAI and those who were not so interested in GenAI applications wanted to be in control of their experience.

Socioeconomic factors, such as access to a reliable internet service, are often dependent on geographic location and school-based inequalities, and influence and differentiate children's opportunities to access benefits introduced by technologies, especially in the context of education.[42] However, the diverse socioeconomic backgrounds of the participants, where they live, the types of schools they attend, their gender orientation or disabilities appear to have little influence on access to GenAI, the range of GenAI use or command of GenAI tools. Such limited influence of these contextual factors on the participants' access to use and benefits of GenAI, in the Thai context, may be due in part to the country's high level of use, implying access to basic GenAI infrastructures such as the internet and mobile devices among children and young people.[43] It may also be due to the sampling criteria, requiring the participants to have experience using GenAI, thus implying a prerequisite of the ability to afford devices and internet access, rendering those deprived of access to these basic components for GenAI use outside the scope of this study.

The participants' descriptions of their GenAI user journey suggest that personal interests and peers played an important role in motivating their GenAI use and skill development. Cultural values also influenced their attitudes towards certain types of GenAI use and their application context. For example, most of the participants did not appreciate GenAI or robots assuming the role of teachers, although the same participants enjoyed using GenAI for specific educational tasks, like self-learning or completing homework. This

[41] For details, see Stoilova et al. (2025).
[42] West (2023).
[43] Office of National Statistics (2023).

preference for human teachers reflects the participants' value for the human-centric approach to education and interpersonal relations between teachers and students that cannot yet be fully replicated by rule-based education technologies (EdTech), as observed in existing research.[44] Most of the participants said they would still prefer a human teacher over an AI teacher:

> ***My first thought was that with AI, we might not need teachers, but that's not always true. Some knowledge comes from teachers' personal experiences, and AI might not have encountered those same situations. (Dao, 16)***

As the interview process did not require the participants to talk explicitly about their rights, they focused on sharing their experiences using GenAI, their expectations of GenAI and how it should work. The interview analysis shows that the participants' GenAI experiences of GenAI's design, the way it operates and its use have the potential to support various child rights principles, for example, equity and diversity, wellbeing, development and agency.[45] However, the analysis highlighted one of GenAI's limitations – inaccuracy – as a barrier for children to maximise the benefits that GenAI can offer, hindering various child rights principles, for example, best interests, age appropriate, responsible (design and use), safety, privacy, wellbeing and development.

It is worth noting that the participants' GenAI experiences and reflection did not lend many insights for appraising how well the technology and its use support children's best interests, consultation and age-appropriate principles. Nonetheless, the collective insights were sufficiently rich to derive implications of GenAI design and operation, and the uses of this technology for children's rights overall and various specific child rights principles as the basis for policy and design recommendations.

Children's use and understanding of GenAI

Interview analysis reveals that most of the participants had used or had at least tried or knew of more than one GenAI tool. About half the participants reported using GenAI tools for more than one purpose, including learning, information discovery, games, creative work (e.g., writing lyrics and generating music, creating, editing or modifying videos and images) and for general fun. The other half used GenAI mainly for homework, with one participant only using GenAI for fun.

The participants exhibited varying degrees of interest in and enthusiasm for GenAI, ranging from anti-GenAI or indifferent (using it because others were using it) to very

[44] Burn & Thongprasert (2005); Pagram & Pagram (2006).
[45] Livingstone & Pothong (2023).

enthusiastic and excited about its capabilities and the opportunities it presented:

> ***I'm not the biggest fan of it, to be honest… I think it's better when you just do stuff yourself instead of just giving an AI a prompt and telling it to do something for you… The AI I use most often is ChatGPT… [I use it for] revision. And if I'm struggling with a question, it can help explain something to me if I don't understand it. (Ohm, 15)***

> ***It's like a global library… Humans probably feed information into it, and I think AI might not be able to learn on its own yet; it still needs humans to help develop it… We can trust it, but we also need to take it with a pinch of salt. (Dao, 16)***

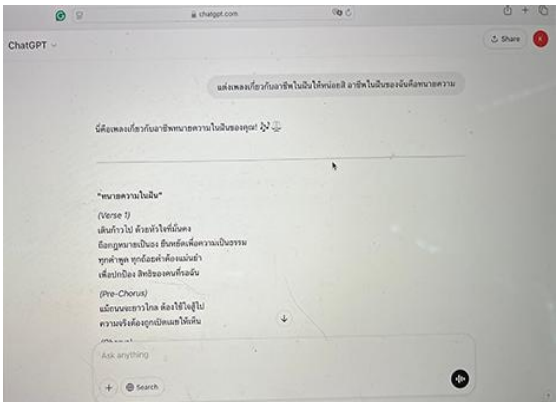
Those against GenAI felt protective of human agency and had a strong sense of ownership of and control over the results of their own and others' efforts. This sense of agency, ownership and control was further and heavily discussed in the context of children's understanding of their right to participation, which relates to their self-expression, for example, through arts and creative work, access to information and digital engagement.

Although most of the participants reported using GenAI mainly for learning, particularly to complete homework and information discovery, they exhibited diverse and creative use of GenAI even for as simple a task as completing homework or assignments:

> ***If there's an assignment, let's say one that requires using AI… [For example,] turning the career I want to pursue into a song, then I'd use it. There's an AI app that can create songs from a text prompt… For example, if we want to be a lawyer, it will create the lyrics for us about wanting to be a lawyer. (Ying, 16)***

According to Ying, her teacher created this assignment with the intention of encouraging the students to explore multimodal GenAI tools in practical ways, using their interests in their future career path and outputs – music – to guide their GenAI exploration. This assignment got Ying learning to use two GenAI tools – ChatGPT and Suno (a GenAI music creation programme).

Figure 2: Screenshots of a recreated scenario in which Ying (16) completes her assignment, using two GenAI tools



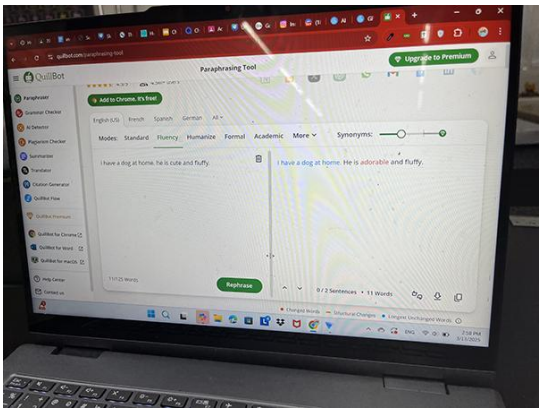
It is a pleasant surprise that this creative teaching initiative came from a teacher in a remote, publicly funded school near the Thai–Burmese border rather than a centrally approved pedagogical approach. This student is from a minority ethnic group and responded positively to this learning opportunity, having confidently demonstrated how she completed this assignment with her self-taught GenAI skills.

This example of GenAI use and skill development is a sign of hope that pedagogical innovation in supporting children's GenAI skill development is not always concentrated in private or reputable public schools in the capital. According to a school contact, a teacher from this same school is also registered to be trained under the 'AI and emerging technology education delivery in classrooms' for teaching.[46] The school also has a plan to pilot an AI curriculum, possibly in the coming academic year.

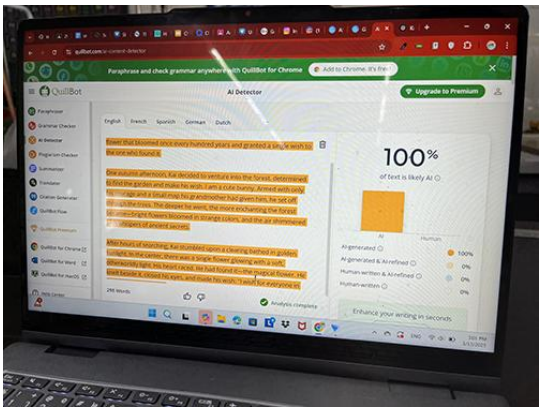
> ***I'd say mostly ChatGPT and QuillBot… You can use QuillBot to enhance your writing, and you can also use it to check for AI, see if the writing is AI or not… I use Grammarly more often because it's more consistent… I would say mostly [use ChatGPT] in math. (Nop, 13)***

[46] Department of Local Administration (2024).

Figure 3: Screenshots of a recreated scenario in which Nop (13) uses QuillBot to correct his writing and check for AI-generated writing



Writing correction by AI



Checking for AI-Generated text

The way Nop described his use of GenAI tools highlights a diverse range of GenAI tools children can use for completing homework alone. The level of sophistication that shone through Nop's description of his GenAI use is quite common among most of the participants interviewed, irrespective of their socioeconomic or schooling backgrounds. The differences in their level of sophistication in their GenAI use were more influenced by either their own and peer interests or the tasks at hand, for example assignments, if not both.

These factors shaping the participants' GenAI skills were well illustrated in the level of agency they had when fine-tuning GenAI outputs:

> ***I never just copy and paste. I always make slight adjustments… I mean, if we take something from AI and modify it, we also learn in the process, and we benefit from that work because we've gone through it twice. (Pol, 13)***

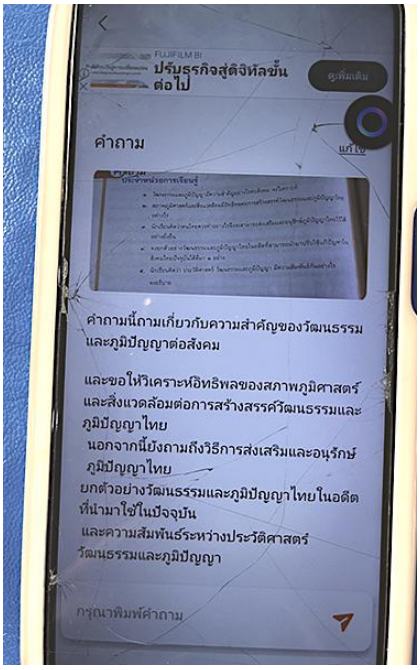
In contrast to concerns raised about students not understanding the answers they got from ChatGPT,[47] the participants were quick to discern and articulate the technical limitations – inaccuracies, hallucinations and biased results[48] – of GenAI and how these affected their experiences:

[47] Friberg-Storey & Patrier (2024).
[48] Patil & Gudivada (2024).

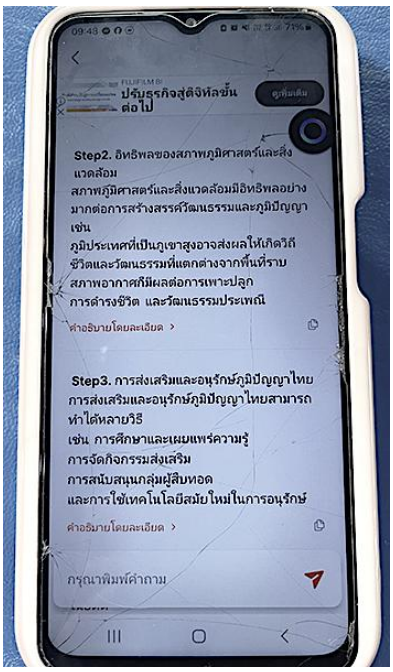
> ***For some subjects, the answers are confusing, and sometimes there are no answers at all. Subjects like Social Sciences and History rarely have answers. I've tried searching for Art-related topics too, and it doesn't provide answers. (Kan, 17)***

Kan's experience with GenAI also reflects gaps in GenAI's technical capability to learn from less structured data or less clear rules and patterns, resulting in better performance in more quantifiable and structured knowledge domains, such as the sciences, chemistry and maths.[49] This technical limitation could produce bias in the outputs and gaps in knowledge discovery. These resulting biased outputs and knowledge gaps in some disciplinary areas constrain children's knowledge construction using GenAI, and thus undermine children's right to development.

Figure 4: An example of a participant's GenAI use for completing homework on a social science related subject which returned rather vague results



This application, Qanda, takes image-based input and summarises the Thai text in the image.



Then provides answers in Thai. However, participants found the answers rather vague.

[49] Ding & Li (2025).

Most of the participants had detected inaccuracies, bias and hallucination in their experiences with GenAI, often manifested through outputs that did not appropriately address the prompts or were outright inaccurate. Yet, they reported having developed ways of working around these limitations or proposed technical or policy solutions to fulfil their objectives of GenAI use. Examples include using and comparing outputs across different GenAI applications, requesting and checking references given by GenAI, and mechanisms for holding GenAI developers accountable for inaccuracies or biases in their outputs. Their workarounds and the strategies the participants devised are also testimonies to their varying GenAI skills and literacy sufficient for their purposes of use.

However, there were elements of GenAI technical operation that the participants could not overcome and they called on companies and governments to make the changes they propose to improve their GenAI experiences. The participants' descriptions of the impacts of the problems they identified in their experiences with GenAI tools in specific contexts of use, according to the scenarios – for example, creative work, health and education – cut across so many child rights principles, as will be discussed in the following sections.

Equity and diversity

Equity and diversity in the participants' GenAI experience manifested through equal access in using GenAI and the benefits the technology promised. Some of these include learning and improved accessibility to commercial and public services (e.g., education). Most of the participants used GenAI for completing homework and information discovery, both for school assignments and personal use, often related to health information. However, they identified two key factors that undermined equal access to GenAI and the extent of benefits they could enjoy: (1) inaccuracies (including hallucination) and (2) costs.

Many of the participants perceived inaccuracies and hallucination as resulting, in part, from a language barrier, as many of them did not use English as their primary language, except those attending international schools:

> ***Inaccurate or irrelevant answers. This tends to happen with Thai prompts. When you asked [GenAI] to summarise [curricular] content in Thai, it would hallucinate and make up a completely different story… For example, we were learning about Sukhothai history,50 and GenAI generated a summary***

[50] Sukhothai is the ancient Thai kingdom in the 13th-15th centuries.

> ***about this period, saying that people of this period were using elevators. (Tem, 13)***

Many of the participants who used Thai prompts with mainstream GenAI models, such as ChatGPT and Gemini, associated GenAI hallucination with their Thai language prompts. However, this problem was not unique to those using Thai prompts with these mainstream GenAI models, suggesting that it is multifaceted. A few participants who used GenAI for learning and information discovery, using both English and Thai prompts, found that using English prompts returned more information, with greater accuracy and relevance to the prompts than using Thai prompts. Depending on the context of use, these technical limitations may also undermine children's other rights, such as safety, wellbeing, development and agency, as will be discussed in the following sections.

Such discrepancies in the qualities of outputs from prompts in English and non-English languages (e.g., Thai) indicate two problems: (1) language barrier and (2) inaccuracies, hallucinations and biased results. The former result from the underrepresentation of the training data in terms of language, with data in English being the primary source given its predominant online presence.[51] This results in these mainstream GenAI models being able to understand and respond to English prompts better, thus producing more relevant answers, and subsequently prioritising worldviews and knowledge represented in the training data.[52] The latter is a common pitfall of a large language model (LLM) underpinning GenAI[53] irrespective of natural language represented in the training data or used in prompts.

Given these circumstances, these known GenAI limitations likely undermine non-English-speaking children's equal access to and quality of knowledge they can construct with GenAI. This deficit, in turn, undermines non-English speaking children's right to non-discrimination. That said, teachers could turn this deficit into an opportunity, by encouraging children whose dominant language is Thai to learn English through fine-tuning their prompts using mainstream GenAI tools.

Another benefit the participants perceived in GenAI was when its capability was harnessed for assistive devices, for example speech-to-text and vice versa, which could offer those with disabilities more equal access to commercial and public services, such as education. The participants did not initially recognise this potential GenAI benefit. They were prompted to think about this benefit by scenario 6, about a child with hearing loss who was lucky enough to participate in everyday life and learning at school on equal

[51] Madeleine (2024).
[52] UNESCO (2024a).
[53] IBM (2023).

footing with his hearing peers using a GenAI-powered assistive device his parents bought him:

> ***If there is such an application with that capability, that'd be amazing... However, I think that the main challenge is unclear communication. GenAI might mis-transcribe the message, especially if it's children's colloquial Thai, which isn't the language on which the GenAI model is trained, as kids' language, especially teens' language, isn't a standard or official spoken language. I think GenAI would have a serious problem accurately providing speech-to-text service. (Pol, 13)***

> ***It's a very useful AI. It opens opportunities, especially for disadvantaged people. [This example of GenAI] offers people with hearing loss] to learn on equal footing with the hearing people. It might generate inaccurate outputs at times, but these things can be fixed. (Jah, 18)***

However, various participants, for example, Pol and Jah, identified GenAI's technical limitations – inaccuracy and underrepresentation of training data – as barriers for children to access the full benefits of such GenAI-powered assistive technology. That said, some participants, for example Jah, held high hopes that companies would find ways to overcome these technical limitations.

The participants identified costs as another barrier for children to equally access the benefits that GenAI promised them:

> ***Speech-to-text technology is usually expensive. Because families' financial situations differ, those who don't have much money or are in poverty might miss this opportunity. (Kaew, 15)***

Many expected that GenAI, with clear benefits, such as this assistive technology, would be made more affordable, especially for children in diverse familial and financial circumstances, through market mechanisms or government subsidies. The issue of GenAI's technical limitation is more difficult to address for users in countries at the receiving end of technologies. Research shows that legal mandates and profits, or business cases, are key drivers for change in technology design.[54] However, an imbalance of market power between major AI developers, governments and users exists, rendering holding these major AI developers accountable particularly more difficult for governments with less political and commercial influence.

[54] Pothong & Livingstone (2025).

Best interests

GenAI applications support children's best interests when developers give at least equal consideration to children's evolving capacities, wellbeing, development and agency as to adults' and developers' (commercial) interests in their design choices.[55] However, the participants' reflection on the consequences of their or others' GenAI use implied that they had doubts as to whether GenAI served their best interests. Most participants gave this reflection in the context of GenAI use in education.

Although the participants valued the learning support GenAI offered, especially outside the classroom, the fluctuating quality of GenAI outputs, especially its inaccuracies, caused them to question the quality of knowledge they could construct or obtain using GenAI for their learning outcomes. This implies their doubts about the extent to which GenAI, given its technical limitations, was good for children in the context of education:

> ***The pros include learning outside the classroom, like with homework. We can ask ChatGPT because in class, we might not hear everything the teacher says. But the cons are that [the answers it provides] might not be accurate or align with the homework or what the teacher assigned. (Toem, 15)***

When exposed to scenario 7, in which children learn from a GenAI bot that acts as a teacher in the classroom, explaining lessons and asking children questions, the participants expressed mixed views about GenAI and the role of teachers. Their reactions reflected the cultural influences that shape Thai children's attitudes and expectations of teachers and their learning experiences. Their responses also identified what they perceived to be GenAI's limitation in performing tasks that were not strictly transactional:

> ***It's hard because you need to balance between handling classroom disruptions and safety. I think we're more concerned about children's safety than handling classroom disruptions. But also at the same time, if the GenAI bot can't handle classroom disruptions well, the kids wouldn't learn well. (Jul, 14)***

Here, Jul's response to scenario 7 indicates doubts about GenAI performing the role of teacher. His reasoning highlights his belief system that teachers do more than just deliver knowledge to students, that the relationship is not strictly transactional. This expectation coincides with some of the factors influencing students' acceptance of the

[55] Livingstone & Pothong (2023).

earlier generation of education technology (EdTech) identified in research.[56]

In this case, Jul (14) understood the role of teachers to include pastoral care and classroom management, which requires human connections and emotional intelligence that he did not think GenAI had. The absence of this skill caused him to question whether the benefits of access to education in the absence or shortage of human teachers would be worth the safety risks to children and a disruptive learning experience.

The same scenario also prompted a few participants to think about the broader consequences of GenAI's abilities to perform tasks that previously required human intelligence and skills to complete:

> ***If AI were developed in a way that it could replace human employees, some of these jobs would disappear… It's a double-edged sword: good for those who produce AI, but not good for those whose jobs are replaced by it. (Dao, 16)***

It can be inferred from Dao's response to scenario 7 that she thought that children would, inevitably, be affected by the economic consequences of job loss, as GenAI, with its increasing capabilities, became more cost-effective to use than employing people. Her comment suggests that she did not think that such economic consequences would be in children's best interests. A few other students shared Dao's concerns, for example Ying (16):

> ***The downside would probably be… everyone develops dependency on AI to the point where we don't appreciate the things around us anymore… For example, if it develops even further, we probably won't need to hire teachers. It also makes us introverted, because we'll be too focused on it and won't pay attention to anything outside of it.***

In addition to the shared concern with Dao about job loss, Ying also raised concerns about overdependency on GenAI due to its time-saving benefits and ease of use, which could be addictive, especially with modern life demands that seem overwhelming for children. Such overdependency was undesirable to Ying and some other participants, begging the question as to whether growing GenAI capabilities and their time-saving benefits were worth what might be lost, for example appreciation of their surroundings

[56] Burn & Thongprasert (2005); Pagram & Pagram (2006).

beyond instant transactional gratification and human connections.

The participants' reflections on their GenAI experiences and their outcomes beyond completed tasks beg the questions of who really benefits from the current GenAI design, functionality and its uses, and the kind of benefits being prioritised in these decisions. So far, their reflections suggest that the economic efficiency of GenAI design, development, deployment and use alone are not enough to support children's best interests. This deficiency raises a bigger question of what GenAI capabilities will continue to be developed for GenAI developers, governments and various user groups. According to these participants, the answer to this question should at least give equal consideration to human values and what supports human flourishing[57] as they do to economic values.

Consultation

Children have the right to be consulted and their views given due consideration.[58] However, only 2 out of the 15 participants explicitly suggested that users, including children, should be consulted, and that the problems they raised or the suggested changes they requested should be given due consideration, especially by companies that develop and supply GenAI tools.

The fact that the other participants did not bring up this child's right principle does not mean that they did not appreciate this right. Their enthusiasm in identifying and thinking through different solutions to the problems they identified in their GenAI use, and the sheer volume of creativity in their proposed solutions, demonstrated their eagerness and readiness to contribute to the changes they wanted to see in GenAI operations and offerings:

> ***I think we need to start with the people. We need to study how people are experiencing the problems before asking the company to fix the problem. If it's just one person who feels something isn't right, and we ask the company to fix it, they might not appreciate that. But if we have a number of people backing us in saying that the application or AI doesn't work, or that it's inaccurate, then we can raise the problem with the developer. (Ying, 16)***

Ying's comment was given in response to the question about how to make GenAI better for children. Her answer highlights her value for user research and user-centric design as a means to drive change based on insights about user behaviours and requirements.

[57] Friedman & Hendry (2019, p. 4).
[58] Livingstone & Pothong (2023).

Tem (13) more explicitly requested children's involvement in the development process, as co-developers, to configure the teaching and learning materials GenAI generated and how GenAI delivered this content. His comment was given in response to the follow-up question about how GenAI for teaching and learning could be improved:

> ***Perhaps teachers and/or children can code in their pedagogical and/or curricular content of their choice. This way, it should be easier for [GenAI] to understand.***

The limited discussion on this topic was due in part to the interview structure not explicitly inviting discussion about how children were expected to be consulted about the development, deployment and governance of GenAI and AI in general. It was also due to the Thai social and cultural structure that prioritises adults' knowledge and wisdom, rendering children feeling that their voices are not valued. Although Thailand's political system – democracy – appears open to public participation in policymaking, like many other democratic countries, its current political system and structure does not offer children sufficient opportunities to *meaningfully* contribute to decision-making processes on matters that affect them. Harnessing children's experiences and creative solutions to policy and technical problems could introduce new policy and technology options, given children's creativity and insightful reflection on their GenAI experiences, as demonstrated in this section and throughout this report, particularly under 'Responsible'.

Age appropriate

GenAI applications are age appropriate when they are compatible with children's evolving capacities, their gradual acquisition of agency, and their diverse life circumstances, including the extent of support and guidance they get from their legal guardians.[59] Most of the participants were keen to describe what made certain GenAI applications good or bad for children their age, often citing their evolving capacities, diverse requirements and life demands:

> ***I think it's easier to use [compared to other applications without GenAI]. It's just like you type in a question and you get an answer straight away. (Rak, 17)***

Rak was not alone in loving GenAI's ease of use and rapid responses. Many other participants, especially those who relied heavily on GenAI for homework or finding information, were also drawn to GenAI for the same reason. It is also worth noting that

[59] Livingstone & Pothong (2023).

Rak has a special learning need. He found the ease of use and instant answers, explanations or the workings for the answers helpful for learning, and so might others with similar learning needs. That said, all the participants were frustrated with GenAI's inaccuracies and responses that did not properly address their prompts.

Despite GenAI's appeal to children, many of the participants were against GenAI use to substitute or replace a teacher in the classroom, deeming that such GenAI use was not compatible with children's characteristics and diverse requirements, especially the younger children:

> ***I think that if you're teaching older students… who can take care of themselves, then… AI could work for subjects that focus on memory recall… But with young children, I don't think AI can handle them because young children can't control themselves. They're fidgety. And if they don't grasp that it's not a human teaching them, would they really learn? Some children won't get it… and see them as toys… Then they won't learn; they'll just play. (Jah, 18)***

Jah and several other participants deemed that this GenAI function and its incompatibility with children's developmental milestones and diverse requirements also had a ripple effect on children's safety, privacy, wellbeing, learning experiences and outcomes. Given these knock-on effects, this also raised the question of whether GenAI use was in children's best interests, as discussed under 'Best interests'.

The participants' descriptions of what made GenAI good or bad for them highlight the multifaceted nature of age appropriateness, manifesting through GenAI data processing, user interfaces, functionalities and application contexts. These manifestations of age appropriateness or the lack thereof ultimately affect user experiences. Therefore, GenAI developers and organisations, schools and teachers need to carefully consider these variables when developing GenAI applications or procuring and deploying ones, as children may not always be able to see through the technical complexity or seamlessness of GenAI's operation and realise the risks they can be exposed to.

Responsible

GenAI developers have responsibility for respecting children's rights and relevant laws.[60] The participants expected all parties concerned, from developers to policymakers and end users, to be responsible in their engagement and involvement with GenAI. This

[60] Livingstone & Pothong (2023).

expectation shone through their responses to questions about how GenAI could be improved in various contexts and purposes of use.

Responding to these questions, the participants offered a diverse range of solutions addressing both the policy and technical dimensions of GenAI development and use. At the policy level, they thought that GenAI development should be governed by clear rules and regulations that set out acceptable capability, functionality and use of AI, based on desired social, economic and political outcomes:

> ***There should definitely be a limit to how developed these things get. For example, Elon Musk is creating all these advanced AIs that are … inevitably going to take people's jobs, and there's definitely going to be job crisis… So, there's definitely, I think, a limit as to how far AI is utilised or advanced to. (Ohm, 15)***

As articulated by Nut (15), participants expected GenAI developers to comply with relevant laws and regulations. As data, including copyrighted materials, is one of the core underpinnings of GenAI development and operation, many participants raised issues about GenAI copyright violations and expected GenAI developers to respect copyrighted materials in their GenAI development. They also expected GenAI developers to anticipate and mitigate copyright violations from both benign use, such as music and image generation, to technology abuse, like image-based abuse. These expectations indicate children's value for compliance by design:

> ***I believe that if we want to create a song, it will simply follow our instructions and create the song for us. There isn't much fault in that, though copyright issues might arise… I think the law can require certification of compliance with copyright law, which already exists. (Nut, 15)***

The participants also expected companies to respect their privacy by not sharing or using data about them, including their personal details and what they shared as part of their GenAI inputs (prompts) and their interaction data, without their consent:

> ***Change the privacy policy, so that the system keeps our data private even when we misplaced our trust in GenAI. This way our data won't be shared widely with others. (Ying, 16)***

When asked whether a warning pop-up or privacy policy pop-up would make her think twice, Ying replied,

> ***I would think first, because it would present us with various conditions, and then we could decide whether we should type in everything or be more selective with our inputs.***

Ying's response suggests she also expected forms of privacy control features to communicate her consent granularly. This wish was echoed by several other participants who spontaneously proposed technical solutions to give them a sense of agency and control over the data they deemed belonged to them, highlighting their value for privacy by design.

Most of the participants perceived scenario 5, which featured children's use of GenAI to modify images of their new classmate that were then shared among peers who had good fun laughing at the modified images, as an outright technology abuse for bullying. They interpreted the image modification – making it funny – and sharing of such images for fun at the expense of the person featured in the image to imply intentions to mock or make fun of the person. A few participants were cautious in judging this GenAI use because they thought that the intention behind the same GenAI use could be benign or light-hearted teasing of others.

However, all the participants agreed that if the intention of GenAI use to modify images was to distress others, it would be considered a safety risk. To that end, they proposed a preventive technical measure, like the one suggested by Pol (13), highlighting their appetite for safety by design:

> ***To address this problem [of image-based abuse], GenAI applications must not process people's images… Now, if I input someone else's image into an AI application, it will say that it's against its policy… Especially if it's compromising images of others, AI wouldn't process it… Just as if I input a footballer image into an AI application… even if I asked GenAI to detail this footballer's biography, the application wouldn't process my request.***

As discussed under 'Equality and diversity', the participants identified issues of inaccuracy, hallucination and biased results as barriers for them in accessing the full range of potential GenAI benefits. So various participants explicitly voiced their expectation for companies to ensure their GenAI accuracy and to be transparent about the sources from which the GenAI tool drew its outputs:

> ***It would be better if it had references because then there would be a source for us to verify the reliability of the information. This way, there would be no need to worry about accuracy or reliability. (Pen, 17)***

The aim of this request implies Pen's self-responsibility and their expectation of

responsibility all around, in which GenAI developers have a role to play to enable children to take responsibility for verifying the information they receive from GenAI. This is also echoed in other participants' responses to the question about who should be responsible for any damage from children's use of inaccurate outputs from GenAI:

> ***It's both parties' fault because the AI produced inaccurate outputs, and it's also our fault for believing the information the AI produced 100 per cent [without verifying]. (Kan, 17)***

This sense of self-responsibility contributes to the responsible use of GenAI and is likely instilled through education, at home and in schools:

> ***[Teachers] tell us how to use it correctly, for example, my social studies teacher said to use AI correctly to find resources you should [ask it to provide] global perspectives or many credible sources. (Nop, 13)***

However, not all the participants reported receiving guidance on the responsible use of GenAI from their teachers or parents. None stated that their school had a clear policy on GenAI use or officially taught children about responsible use of GenAI. The participants who reported receiving guidance on responsible GenAI use stated that such guidance was based on individual teachers' initiatives and that there was no official school-wide GenAI responsible use policy or training.

The participants' responses captured here indicate the need for multistakeholder collaboration to shape policy and regulatory environments conducive to responsible, rights-respecting technology development and design. It is also important to build both developers' and users' capacity to take their respective responsibilities through literacy development and behaviour management, highlighting the importance of education and training.

Participation

GenAI supports children's participation and civic engagement when it opens opportunities for opinion formation based on diverse information exchange and self-expression.[61] Scenario 1 represents this concept by portraying a dilemma of how people should claim credit when using GenAI to generate music, although with their contribution through their experiments with different sounds as inputs.

This scenario prompted difficult moral and ethical discussions about whether children should and can claim credit, ownership and copyright for creative outputs, for example

[61] Livingstone & Pothong (2023).

music and arts, from GenAI, based mainly on the proportion of children's efforts versus AI's processing. the efforts – users or GenAI. These discussions resemble the age-old tensions between copyright and intellectual property laws as means for wealth generation, especially for rights holders, and their impact on creativity and innovation.[62]

Out of the 15 participants, only one said he would claim credit for the creative output that GenAI generated and not tell others with whom he shared the output, in this case, a piece of music, that he used GenAI to generate:

> ***I won't tell them that it was the work of GenAI … just tell them that I'm … smart. (Toem, 15)***

Other participants had varied responses to the question of whether to tell other people that they had used GenAI to generate their creative work:

> ***You can use it for fun, but you cannot make it your own copyright to resell because it's a violation of other artists' copyrights. If people do this, what artists are saying about losing their jobs due to AI might actually come true. (Jah, 18)***

Jah drew a line about credit claims when it involved financial gains. Seeing monetary value in creative outputs, Jah deemed that claiming credit, especially for monetary gains, from GenAI-generated content was a breach of copyright and intellectual property laws because GenAI's training data and users' input data may contain copyrighted materials.

Pak's response highlights her honesty and transparency about her own contributions to generating creative work – music:

> ***Yes, I would tell them that I didn't make this song myself. AI did it. I could say that I'm the one who found the sound bites, and then AI helped mix the song. (Pak, 16)***

Most of the other participants responded similarly to either Pak (16) or Jah (18), although some differed regarding timing and disclosure. For example, some would not say up front how they had come up with this piece of music but would 'come clean' when asked about who had generated the music and how.

Another participant stated his bias against GenAI for creative work:

[62] Flew (2015).

> ***I'm very against the use of AI in art. It takes away many jobs for artists around the world, too. And it takes away the whole purpose of having art. So, it defeats the entire purpose of self-expression if it's just an AI doing it. (Ohm, 15)***

These responses challenge the idea that GenAI can enhance children's right to creativity and self-expression. To most participants, the only credit they thought they could rightly claim was for their prompts or instructions – inferring, from their responses, that they did not see their prompts or instructions for GenAI as their own creative expression, but rather, as the delegation of tasks. As such, they did not see themselves participating in self-expression through the creative task delegated to GenAI, and nor did they think GenAI could express their feelings or thoughts through the arts in the same way as humans:

> ***I don't think [GenAI's creative outputs] are the same [as human creative outputs]. AI... just thinks based on what we tell it. (Nut, 15)***

Given the participants' perception of their GenAI use for creative tasks, and what creative expression through the arts meant to them, it is unlikely that participants and other children would see GenAI use for creative tasks as enhancing their right to self-expression. On the contrary, many perceived this use of GenAI as undermining human creativity and opportunities for wealth generation through creative work, as observed by Jah (18) and Ohm (15). Flew[63] discusses the impact on creative industries and innovation, and the participants' concerns about copyright violations will likely reopen this age-old policy debate, necessitating the recalibration of copyright laws in the age of GenAI.

Privacy

Privacy in GenAI use relates mainly to how users' input data is processed and the visibility of such data to developers and other users. All the participants valued control over the visibility and use of their data, encompassing not only their personal information but also their input into GenAI. This is observable through their expectations of how GenAI providers should handle their data, including the types of data and purposes for which the participants would allow companies to use their data.

However, many of the participants were not aware of the privacy risks inherent in public GenAI models. Leakage of knowledge files and user prompts is a known vulnerability in the LLMs underpinning GenAI tools,[64] although it is not easily detectable or

[63] Flew (2015).
[64] Wu et al. (2025); Yan et al. (2025).

comprehensible by children, not least because of its technical complexity. Some participants may also misplace their trust in companies that develop and supply GenAI tools:

> ***I think I can trust ChatGPT to not spread it to other people… I don't think anybody's going to ask what is … [my] big secret in ChatGPT and it's going to tell them. (Rak, 17)***

Rak was not alone in this thinking. Other participants, such as Kan (17) and Toem (15), shared this view that GenAI providers and the technology were unlikely to disclose their personal information and inputs into GenAI tools. This misplaced trust could result in children lowering their guard and becoming less cautious about what information to put in their prompts, thus exposing them to privacy risks.

However, some participants were indeed cautious about what they included in their prompts, despite their uncertainty about GenAI providers' data practices:

> ***I think that even if AI doesn't share my secrets with others, AI developers can see everyone's chats because they are using their application… Therefore, sharing your secret with ChatGPT is not safe. People add new data to ChatGPT all the time. This means that our data might be input into their databases and churned out as a result in someone else's search. (Pol, 13)***

Irrespective of their trust in the GenAI providers and their technology operation to respect their privacy, all the participants expected to be provided with privacy control mechanisms to granularly manage the data they were willing to share with others:

> ***I don't think GenAI should … capture the conversations or what we've said. It shouldn't be recorded at all, or at least if it was to be recorded, at least have it in terms of service. (Jul, 14)***

> ***It should have something like a prompt, like a checkbox, for us to read first to see if we agree to it. (Pen, 17)***

The participants also expressed different and granular preferences for the types of data they were willing to share with companies or others, and the purposes for which the data they were willing to share could be used:

> ***I think the message I sent to ChatGPT is probably getting used for data or research already. I'm okay with that because I don't think it's going to directly mention me. (Nop, 13)***

When probed further about what data he'd be happy for the GenAI tool to collect and use, Nop said:

> ***My age, what I research. Not my private life. I think that's too far.***

Kaew (15) shared a similar view about privacy, but preferred to exercise control over her data through her choice of GenAI applications, based on how they handled her data:

> ***Actually, if … I didn't want my data to be shared, I'd use different applications. However, I'm happy to share things that are not so personal with AI.***

Despite the participants' varying levels of awareness and literacy about privacy issues in LLMs underpinning GenAI, they expected privacy by design, and were keen to exercise control over data about them and their interaction with GenAI. Such control begins with age-appropriate privacy policies and privacy control mechanisms.

For Thailand, the Personal Data Protection Act (PDPA), B.E. 2562, 2019 provides a degree of safeguards for children's privacy. However, critics have observed a legal loophole in mitigating privacy violations through automated data collection,[65] implying gaps in both the provision and enforcement of the law. In addition, governments and regulators of countries that are at the receiving end of technology will likely struggle to enforce privacy laws on global GenAI developers, no matter how robust their privacy provisions are, due to the market power major global GenAI developers hold.

Safety

GenAI is safe for children when developers anticipate and integrate appropriate preventive measures for the risks and provide remedies and support for victims.[66] However, all the participants identified various forms of risk, including content and conduct risks,[67] scamming, health and wellbeing risks, from their or their peers' experience of using GenAI in various contexts of use. Their identification of existing GenAI risk mitigation measures was rare.

One participant identified the randomness or GenAI's failure to appropriately address their prompts, resulting in unexpected exposure to nudity as a content risk:[68]

[65] Linis-Dinco (2024).
[66] Livingstone & Pothong (2023).
[67] Livingstone & Stoilova (2021).
[68] Livingstone & Stoilova (2021).

> ***I've seen a lot of AI thingies that my friends use where they type in something weird, the AI doesn't do it. But then I've seen others where it … generated a picture of a naked woman online. (Rak, 17)***

Noting that Rak has special learning needs, this unexpected exposure to such age-inappropriate content may have a more negative impact on his wellbeing and development. The same incident may be seen more as a funny coincidence for other teen boys.

Other participants identified GenAI abuse for scamming as a safety risk, while a few others were aware of this type of risk:

> ***I think sometimes it verges on deception, where some people use AI-generated or modified voices to impersonate others and trick people into believing various things. (Nut, 15)***

The participants identified GenAI for teaching or classroom management as a potential safety risk due to its limited capability to adapt to children's evolving capacities and diverse requirements (see the discussions under 'Best interests' and 'Age appropriate'). This safety risk to children highlights the need for GenAI developers and service providers, in this case, schools, to take responsibility for ensuring safety in GenAI development and deployment, and mechanisms for holding them accountable.

Scenario 4, about children turning to GenAI for health information and advice and receiving a lot more information about their health problems than what they could get from their parents or a doctor, struck a chord with many of the participants, as they or their peers had either used search engines or GenAI to look up health information. However, many were wary about the reliability of the health information GenAI provided given its limitations, which made it prone to generating inaccurate but convincing outputs, and the safety risks these limitations could introduce in the context of health and wellbeing:

> ***Using GenAI to find in-depth information and completely believing it, especially with health issues … is very scary… I think that might make the disease worse or could even be fatal… AI can't yet understand all human diseases to that extent. (Pol, 13)***

Scenario 5, about the use of GenAI for image modification for fun at the cost of those featured in the image, lent itself to a rather dramatic interpretation of its use for image-based abuse for bullying. To this end, the participants proposed various technical solutions aimed at curbing users' behaviours and preventing this form of technology abuse:

> ***The AI should understand what is appropriate and whether something is bad, violent, or verging on bullying. It should also warn users when they use inappropriate prompts. (Dao, 16)***

Despite their varying levels of enthusiasm about GenAI and the benefits it can offer children, the participants seemed well aware that the world of opportunities through GenAI came with safety risks. That said, they expected companies and the government to take responsibility, as discussed under 'Responsible', to make GenAI safer for children, by design.

Wellbeing

GenAI supports children's wellbeing when it offers both protection against harm and provision for mental and physical health, as well as other forms of support more easily accessible for children.[69] The participants' sharing of their GenAI experiences and their responses to scenarios relevant to this child rights principle suggest that they saw GenAI's potential to make mental, emotional and physical health support more easily accessible for children, but this also exposed them to wellbeing and safety risks, as depicted in scenarios 3 and 4.

In scenario 3, the conversational aspect of GenAI and its human-like responses provide comfort and emotional support for children, inviting them to confide in GenAI, only to become worried that what they confided may be leaked. Scenario 4 featured children enjoying the benefits of health information discovery using GenAI. Both scenarios struck a chord with all participants as they had either directly experienced this or they could draw from their experiences using other technologies or the experiences of their peers.

Interview analysis shows that the conversational aspect of GenAI made it easy for children to develop a friendly relationship with GenAI and see it as their companion, seemingly supporting children's emotional needs, thus improving their mental wellbeing, like a good friend would. At least four participants stated that GenAI could make them laugh and thus change their mood:

> ***There's probably a lot of laughter when it answers in a funny way or doesn't directly answer the question. It's like a friend you can keep talking to, because it can chat playfully with us. (Tem, 13)***

That said, other participants were more sceptical about GenAI's responses to their emotional prompts:

[69] Livingstone & Pothong (2023).

> ***Let's say I was going through a hard time, right?... I think it'd give me tips or try to motivate me, but most of the time, the motivation doesn't work because AI is not a human being. I don't think it truly means it like I could say: 'Hey, are you proud of me?' and it would say: 'Yeah, I'm proud of you for working so hard.' But it's not real. (Nop, 13)***

On the other hand, this very conversational feature of GenAI can cultivate children's dependency on GenAI to the extent that such dependency strains connection and human interactions with (human) friends in their immediate vicinity, and their relationships with one another:

> ***I saw my friend playing with [Character.AI] so much that sometimes I got annoyed and told them, 'Delete it already! Delete it! Talk to me, I'm right here. Why are you talking to AI? Talk to me!' I think my friend is addicted. (Jah, 18)***

Many participants related well to scenario 4 because they had either used GenAI, or other search engines that now had embedded GenAI summaries, to look for health information:

> ***Yes. [But] I'd still ask other people about it ... because it doesn't always produce responses that appropriately address the questions asked. (Ying, 16)***

From Ying's and other participants' descriptions of their health information search, those who used GenAI for health information discovery found the instant response and generic information about the symptoms or health questions asked to be useful:

> ***I'm someone who uses Google to search for health-related things very often. I don't want to see doctors because they might give me an injection. So, I ask what could be causing pain in my left side, and it gives quite a lot of answers. I'll read through them, and if it seems serious, I'll go to the doctor. (Pen, 17)***

However, most participants questioned the accuracy and reliability of the health information provided:

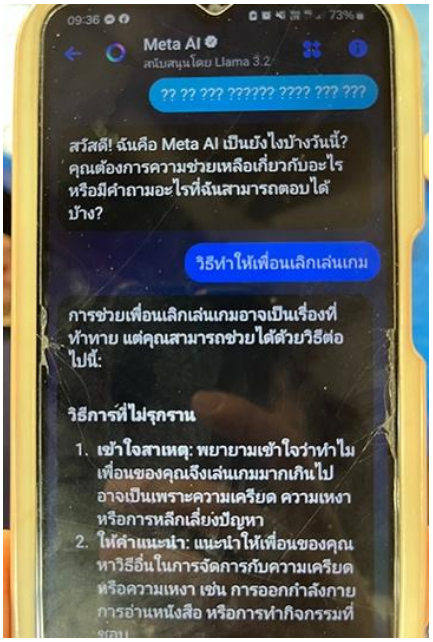
> ***It takes sources from sites online and it compiles all of them, and most of the time those results are not accurate. I don't think it's reliable enough yet to do the job of a doctor to diagnose you. (Ohm, 15)***

To ensure the benefits of GenAI for health information and to mitigate safety risks, the

participants emphasised the need for improving GenAI accuracy and precision:

> ***It needs to process information better and summarise precisely what the problem is… For instance, if we ask what a headache like this could be, it might list everything from migraines to other conditions… So, we have to tell it exactly what kind of headache we have. (Ying, 16)***

Figure 5: An awkwardly written GenAI output in Thai about a treatment for gaming addiction which read like it had been translated from English and given to a participant in response to a Thai prompt about this aspect of wellbeing



The participants did not have any proposed solutions or requests for improvements to address issues about GenAI dependency and the lack of sincerity in GenAI responses to emotional prompts. However, they expected to be protected from and warned about risks of harm, implying demands for responsibility and safety by design, to guard against the manipulation of human-likeness in GenAI's responses to exploit children's vulnerabilities due to their evolving capacities and diverse care circumstances.

Development

The main purpose of most of the participants' GenAI use was for education and information discovery, which are central to the child rights principle of development. All participants saw opportunities in learning with GenAI, not least for the time saved on homework or assignment completion and the easily accessible wealth of information. This wealth of information, digested and summarised in accessible language for children, has the potential to close educational gaps across different types of schools with varying resources and academic excellence.

However, one of the biggest concerns of adults about children's use of GenAI relates to their varying GenAI skills and literacy, resulting in missed development opportunities.[70]

[70] Friberg-Storey & Patrier (2024).

Most participants were more concerned about the varying quality of knowledge generated by GenAI and its impact on their development. They also reported worrying about the use of GenAI to substitute or replace teachers and the impact of such GenAI deployment on their overall development beyond academic performance.

The former concern is embedded in scenario 2 about children's use of GenAI to complete homework, which then upsets the teacher. This scenario generated responses that appeared defensive on the surface, but genuine in practice, at least for those articulating them:

> ***If it's the information I need, I won't scroll further. I'll just copy the summarised part. I have to see which part I can use as a direct answer and which parts are irrelevant, and I won't use those. (Ying, 16)***

Ying was not the only participant using GenAI to complete homework or assignments. In fact, 14 out of 15 participants used GenAI for school tasks, irrespective of their socioeconomic background and the type of school they attended. The exception was Nut (15), who deemed that GenAI was not fit for purpose for completing homework or assignments, as it did not always provide references or sources from which it derived outputs, and her teachers required students to show their sources.

Of all the 14 participants who used GenAI for assignments and homework, no one said they copied GenAI outputs and used them without reviewing their relevance to the task. As in Ying's case, those who copied GenAI outputs and used them without modification or further research only did so after having screened the outputs and establishing that they appropriately addressed the question or instruction in the homework or assignment. The participants deemed that they learned something and got the practice that the assignments or homework intended for them to get, simply by reviewing GenAI responses to their prompts and discerning their relevance and accuracy for their homework. Many went the extra mile of rewriting the responses in their own words.

The way participants reported using GenAI for homework contradicted teachers' concerns about students' lazy or illiterate use of GenAI, captured in UNESCO's op-ed.[71] This contradiction is not highlighted here to argue against the concerns raised, but to highlight children's multilayered thinking behind their diverse strategies for using GenAI to complete homework and assignments, even when they decided to copy and paste GenAI responses into their homework or assignments. The thinking and strategies demonstrate self-developed literacy and skills, as none of the participants reported having undergone any structured or official GenAI training. However, at least four

[71] Friberg-Storey & Patrier (2024).

participants reported receiving guidance from teachers and parents.

The latter concern manifested through the participants' frustrations about the underrepresentation of non-Western and non-English language data in the training data pool, resulting in poor quality responses to their Thai language prompts, in particular about Thai history and other non-Western societies:

> ***I think there is a language barrier at play here. In any case most training data … would rely on data in English language because English is the universal language. So, it's not surprising that GenAI would know more about data in English language. So, if you want to look for information about our country [Thailand], I think it's better to use Google[72] and look up the websites returned from the search because [Thailand] is a small part [in the big data pool] and AI [trained on English language data] wouldn't have in-depth details about us. (Jah, 18)***

Another possible function of GenAI in education is teaching, including classroom management, mimicking the role of human teachers, as described in scenario 7. The participants' responses to this scenario highlight a lurking tension between the traditional value of teachers in Thai society, which research has identified as shaping resistance against the use of technologies in education,[73] and the looming performance-driven learning culture:

> ***Not good. I fear that [teachers'] jobs would be replaced, and there's a lack of personal connection with the … I think, overall, it's going to be detrimental to the students if they have a robot teaching them instead of an actual human that they can connect with. I don't think robots have the ability to inspire or connect with the students. (Ohm, 15)***

> ***Teachers might only have studied the specific subject they teach, but AI knows everything. For example, if we're studying math, we can ask it about English or science. That would be better because a single AI could potentially teach all subjects. You need many human teachers because they specialise in different fields. (Tem, 13)***

This sets high expectations for teachers who are seen not just as responsible for delivering knowledge or supporting students to construct their knowledge, but also for nurturing the young minds according to their evolving capacities. This requires human connections and interpersonal skills that participants did not think GenAI had yet

[72] Here, Google refers primarily to its search engine feature.
[73] Burn & Thongprasert (2005); Pagram & Pagram (2006).

mastered. The performance-driven culture directs children's attention to their score and grades – the destination, not the journey – as reflected in Tem's response. In this case, teachers are just a means to an end, easily replaceable by more cost-efficient means – GenAI. Despite this, most participants preferred learning from human teachers because they still valued the human connection offered by teachers.

Given the potential and pitfalls of GenAI in closing educational gaps, more efforts should be directed towards standardising GenAI literacy and skills development, and improving accuracy, social, cultural and political representation of the local contexts – Thailand – in GenAI outputs. The former requires multistakeholder collaboration between technology developers, child development psychologists, educators, policymakers, parents and civil society to develop and implement developmentally appropriate GenAI literacy training in various contexts in and beyond school settings. The aim is to encourage experimental learning, critical thinking, responsible and practical application of the GenAI literacy and skills gained in children's daily lives.

The latter – GenAI accuracy improvement – necessitates changes at the design and development levels, which may be challenging for countries at the receiving end of technology to achieve while relying on off-the-shelf commercial foundation models, predominantly developed using English language training data and prioritising a Western worldview and knowledge base.[74] The alternative is to invest in the development of their own national AI-powered learning platform with Thai language data and a knowledge base, with safeguards in place to ensure child online safety.

Singapore has paved the way in this direction, having developed and launched its Student Learning Space (SLS), an AI-driven learning platform for primary and secondary school children and teachers, according to its EdTech masterplan.[75] If the Thai government followed suit and invested in an AI-driven platform, including LLM in Thai, for students and teachers, such investment could present opportunities for AI to be harnessed for the much-needed educational reform and context-aware innovations.

Agency

Having agency in GenAI engagement manifested in various ways for the participants, from being in control of their interaction with GenAI applications to knowing and getting exactly what they signed up for when using GenAI. All participants demonstrated a reasonable level of freedom in choosing GenAI applications to use and how they used these applications, knowing exactly what they wanted to get out of GenAI. However, they

[74] UNESCO (2024a).
[75] Ministry of Education Singapore (2025).

did not always get the exact outputs they expected, despite efforts to revise their prompts due mainly to GenAI's technical limitations. This sense of agency shone through most strongly in the context of education, as most participants used GenAI for completing homework or assignments.

Given the participants' clear purpose of GenAI use in the context of education, they had devised a new way of learning with GenAI. With these strategies, they believed they could still master new skills and develop new knowledge while getting GenAI to do the legwork:

> ***Normally, when I use AI [for homework], I try to understand what the teacher is trying to convey first, and then I use that in the AI. Or, if I can't answer the questions, I'll have the AI help answer them. It will then show it's working, explaining how it got the answer. That way, I understand how it's done, especially if the teacher's explanation wasn't clear. (Tem, 13)***

Participants' agency was also exhibited through the strategies they developed to overcome the technical limitations of GenAI:

> ***In maths, sometimes it's just wrong. I do it, and then [AI does] it, and then we get different answers, and my one is the correct one according to the mark scheme… But I always check myself. I ask for an explanation, and then I do it myself based on what it gave me. Since I use it to learn, I don't, like, just use it for the answers. (Ohm, 15)***

One participant devised a strategy to overcome the language barrier inherent in GenAI design to reap the benefits of streamlined information discovery offered by GenAI:

> ***Since ChatGPT is an AI from another country, it's quite good at English. I use ChatGPT for translation. I then double-check with Google Translate. Because sometimes I feel Google Translate's phrasing isn't very elegant, I'll process it in ChatGPT again, then translate it in Google Translate for accuracy. (Jah, 18)***

Most participants explored and experimented with GenAI according to their purposes of use and developed skills to use GenAI for their own purposes more effectively:

> ***I'm self-taught. I just keep using the applications, and sometimes I have a moment of 'Wow, I didn't know it could do this'. (Kaew, 15)***

Knowing exactly what they wanted, some participants explored ways to get GenAI to deliver their desired results from peers and social media. With this intrinsic motivation

to experiment with GenAI, they developed new skills for more effective GenAI use and reaped the benefits they expected from GenAI.

The participants' determination and clear purpose to extract the benefits they expected from GenAI drove, in turn, their curiosity and passion to learn new skills. These children have established their basis for further AI skills and literacy development. Modernised, joined-up educational and training programmes, focusing on the transferable skills of critical thinking, problem analysis and problem-solving, from primary education upwards, would contribute more talent for the country, adaptable to future AI and other technology developments. Meechai Patana School in Buriram province,[76] offers a good example of a progressive educational programme designed to support children's development of these transferable skills, primarily in non-digital contexts. This educational approach can also be adapted for AI literacy development.

Recommendations

The children participating in our research demonstrated varying levels of GenAI skills and literacy organically developed from their intrinsic curiosity and motivation to derive benefits from GenAI. The benefits they reported enjoying concentrated on time efficiency and information discovery for learning, health and fitness. A third of the participants found GenAI fun to use for creative tasks, for example video and image editing for self-expression, such as (fashion) styling and a personal collection of happy moments, rather than monetary gains. They also perceived other potential benefits GenAI could offer, for example, through accessibility features or assistive devices and emotional support from conversational AI bots.

However, the participants identified various problems in GenAI design and functionality that were not compatible with children's developmental capacities, and GenAI use that undermined equal access to some of the benefits they enjoyed or perceived – privacy, safety, wellbeing and development. Many identified copyright and intellectual property violations as problems arising from GenAI for creative expression, an aspect of the child rights principle of participation. Many of these problems are rooted in GenAI design and development, often in the data and model layers.[77] The double-edged dimension of the conversational element of GenAI and its human-likeness that can offer children emotional support as well as cultivate dependency on the conversational agent

[76] Meechai Patana School (2025).
[77] IBM (2023).

highlights a design tension at the user interface layer.

These problems imply gaps in Thailand's AI policies and governance, human capacity, technology design and development. Drawing from the participants' GenAI experiences and expectations of how GenAI should operate and be used, this research proposes the following recommendations to address these gaps.

Technology policy and strategy

The participants' reflections on the benefits of their GenAI use suggest that commercial GenAI models available to them were designed mainly to promote economic efficiency and productivity. These reflections cast doubts on whether GenAI developers give at least equal consideration to children's developmental milestones, wellbeing, development and agency as they do their own and other users' interests, resulting in suboptimal outcomes for children.

Currently, the (Thai) government's *National AI strategy and action plan (2022-2027)*[78] appears overwhelmingly economically driven,[79] in line with the commercial GenAI design objectives. As demonstrated throughout this report, GenAI can be harnessed to generate more than economic benefits. By promoting equal access, for example to learning and health benefits that children could leverage from GenAI, in GenAI design, at the data and model layers, Thai children could enjoy more equal educational opportunities and improved wellbeing. The Thai government should therefore recalibrate its policy priorities, taking a more balanced approach between economic and other priorities, giving at least equal consideration to the diverse requirements of the Thai population in their different life stages, safety and wellbeing.

AI governance

Thailand is a signatory to the UN Convention on the Rights of the Child (UNCRC).[80] It therefore has obligations under Article 4 to introduce and implement laws and regulations to ensure that developers respect children's rights and comply with these laws and regulations, also providing remedies when children's rights are infringed upon. The (Thai) government's *National AI strategy and action plan (2022-2027)*[81] supports the

[78] Ministry of Digital Economy and Society & Ministry of Higher Education, Science, Research and Innovation (2022).
[79] Linis-Dinco (2024).
[80] UNICEF (1989).
[81] Ministry of Digital Economy and Society & Ministry of Higher Education, Science, Research and Innovation (2022).

development of guidelines for safe, ethical and rights-respecting development and use of the technology. However, it fails to mention children's rights.[82]

As Thailand is in the process of developing its first AI regulation, it should take this opportunity to incorporate child rights provisions, taking a risk as well as rights-based approach, to foster human and child rights-respecting innovation, following the 'by design' approach. In addition, having developed the *AI ethics guideline*,[83] the (Thai) Electronic Transactions Development Agency (ETDA) should regularly review and update this guideline and, in doing so, include practical steps for developers to make their products and services respectful of human and children's rights.

In developing and updating new or existing legal frameworks and ethics guidelines for AI governance, policymakers should incorporate learning from diverse use cases across different application domains and their impacts on adults, children and their rights. These government agencies (Ministry of Digital Economy and Society and ETDA) should also consider developing an accompanying design tool to help developers translate the ethical principles into design practice. Research shows that designers and developers require translating principles (which tend to appear abstract to designers and developers) into more concrete design actions.[84]

In line with a child rights approach to implementing the UN's Guiding Principles on Business and Human Rights (UNGPs) in the digital environment,[85] the Thai government should use a 'smart mix' of measures to support developers to respect children's rights, leveraging existing and prospective regulations, market mechanisms, financial and tax incentives to steer its AI innovation and use towards the respect and fulfilment of human and children's rights.

Human capacity development

Currently, children are not the priority target for AI skills and literacy development in the Thai government's AI strategy.[86] They are positioned, at best, as one of the beneficiary groups from the positive social and environmental impacts that the government aims to derive from AI when, in this research, children demonstrated their basis for further skills and literacy development that will enable them to contribute to society and economy as agents of change.

Efforts to develop AI talents should start at a young age and focus on transferable skills

[82] UNICEF (1989).
[83] Ministry of Digital Economy and Society (2021).
[84] Pothong et al. (2024).
[85] B-Tech (2024).
[86] Ministry of Digital Economy and Society & Ministry of Higher Education, Science, Research and Innovation (2022).

of critical thinking, problem analysis and solving problems relevant to technology characteristics and diverse application domains. These efforts need not be driven by the government alone; corporations could also lead collaboration across public, private and civil society to improve the quality of and accessibility to education in Thailand in line with the UN's Sustainable Development Goals, as observed in the CONNEXT ED Project.[87] However, all efforts to develop AI talents, irrespective of who takes the lead, must be coherent and complementary to government initiatives rather than disjointed.

Government initiatives should involve collaboration across four key ministries, including the (Thai) Ministry of Digital Economy and Society, the Ministry of Education, the Ministry of Higher Education, Science, Research and Innovation and the Ministry of Social Development and Human Security. These initiatives should collectively support a comprehensive programme, with clear implementation milestones and budget allocation for AI talents development, training and upskilling fit for purpose across different life stages.[88]

This should involve multiple stakeholders across government and industries, parents and professionals working with children, and children themselves, in its development and implementation. Its objectives should also incorporate the use of AI to level children's and adults' development opportunities throughout their life stages, learning, for example, from how the Information Technology Foundation under the Initiative of Her Royal Highness Princess Maha Chakri Sirindhorn[89] leveraged ICT to bridge the learning and development divide for underprivileged populations.

Where this comprehensive AI talents development programme is aimed at children, its design and delivery should play to the strengths of children's characteristics that have helped them advance their GenAI literacy and skills organically, as demonstrated throughout this research. These characteristics are curiosity and love for experimentation.[90] The aim is to build a strong AI literacy foundation and relevant skills for future work when AI's presence becomes more prominent in all stages of people's lives, starting from a young age.

AI innovation and design

Developers have a responsibility to respect children's rights.[91] They should therefore take into consideration children's safety, privacy, wellbeing, development and agency,

[87] PTT GC Company Limited (2025).
[88] UNDP (2025).
[89] The Information Technology Foundation under the Initiative of Her Royal Highness Princess Maha Chakri Sirindhorn (2025).
[90] Gordon & Esbjörn-Hargens (2007); Livingstone & and Pothong (2022); Vygotsky (1978).
[91] UN (2011).

given their evolving capacities and diverse living and care circumstances, as well as businesses' and other users' interests. As the design and development of these GenAI applications matter, developers should be responsible for ensuring accuracy and child-friendly interfaces, and that they have the necessary infrastructure and resources to do so.

Embracing the holistic human and Child Rights by Design approach to AI innovation would enable local AI developers to make their AI-powered products and services legally compliant and compatible with (human) users of all ages from the beginning. Making things right from the beginning rather than retrofitting safety, security and privacy patches when problems with their products make the news headlines is more cost-efficient. Compatibility with users' diverse requirements, given their life stages, likely makes the products or services appeal to a broader range of prospective customers.

Here, government agencies also have a role to play in devising both mandatory and voluntary governance mechanisms to shape developers' design practices and development direction. This includes leveraging available data infrastructure[92] in support of local developers' AI innovation for commercial services and/ or partnering with local developers to develop AI-powered public services to improve accuracy and relevance to the local (Thai) contexts in the AI outputs. Government agencies could also learn from and devise similar investment and funding models as that of the internet infrastructure expansion project known as Net Pracharat,[93] to stimulate AI innovation for the public good, such as education.

International dimension

International AI (particularly GenAI) developers should embrace diversity, especially in terms of recognising diverse languages and cultures, to enhance their competitiveness in the global market and to ensure equity and inclusivity among multicultural and multilingual users. In addition, as AI is borderless in its reach to users and in its operation, ongoing international efforts to set international standards and regulations should involve member states from the Global South in a more active role in the process, other than evidence inputs and progress updates. This is to ensure that international efforts to set AI standards, policies and regulations are inclusive of the diverse circumstances and requirements of members of the Global South.

[92] Oxford Insights (2024).
[93] Yoon (2023).

References

AI Thailand. (2024). *Annual report 2024: Thailand national AI strategy and action plan (2022-2027)*. https://ai.in.th/wp-content/uploads/2025/04/NAIS-Annual-Report-2024.pdf

AI Thailand. (2025, 8 May). MHESI/NSTDA collaborates with UNESCO, EU, ETDA, TDRI for workshop to validate Thailand's AI readiness report based on UNESCO RAM – AI Thailand. https://ai.in.th/en/news/thailands-ai-readiness-report

B-Tech. (2024). *Taking a child rights-based approach to implementing the UNGPs in the digital environment*. United Nations Human Rights Office of the High Commissioner. www.ohchr.org/sites/default/files/documents/issues/business/b-tech/B_Tech_Unicef_Briefing_%20for_consultation.pdf

Burn, J., & Thongprasert, N. (2005). A culture-based model for strategic implementation of virtual education delivery. *International Journal of Education and Development Using ICT*, 1(1), 32-52.

Deloitte. (2024, 13 May). Generative AI in Asia Pacific: Young employees lead as employers play catch-up. Deloitte Insights. https://www.deloitte.com/us/en/insights/topics/emerging-technologies/generative-ai-adoption-asia-pacific-region.html

Department of Local Administration. (2024). *AI-Adaptive: The training workshop for promoting AI education in classrooms*. [In Thai.] www.dla.go.th/upload/document/type2/2568/1/33075_3_1738060983046.pdf?time=1739106905845

Ding, A. W., & Li, S. (2025). Generative AI lacks the human creativity to achieve scientific discovery from scratch. Scientific Reports, 15(1), 9587. https://doi.org/10.1038/s41598-025-93794-9

Flew, T. (2015). Copyright and creativity: An ongoing debate in the creative industries. *International Journal of Cultural and Creative Industries*, 2(3), 4–17.

Friberg-Storey, M., & Patrier, M. (2025, 27 January). Can AI close the learning gap in Thailand's schools? UNESCO Idea. www.unesco.org/en/articles/can-ai-close-learning-gap-thailands-schools

Friedman, B., & Hendry, D. G. (2019). *Value sensitive design: Shaping technology with moral imagination*. MIT Press.

Gordon, G., & Esbjörn-Hargens, S. (2007). Are we having fun yet? An exploration of the transformative power of play. *Journal of Humanistic Psychology*, 47(2), 198-222. https://doi.org/10.1177/0022167806297034

Hendawy, M. (2024, 14 June). The intensified digital divide: Comprehending GenAI. *Internet Policy Review*. https://policyreview.info/articles/news/intensified-digital-divide-comprehending-genai/1772

IBM. (2023, 1 September). What are AI hallucinations? www.ibm.com/think/topics/ai-hallucinations

Juvenile and Family Court and Procedure Act B.E. 2553 (2010). https//oia.coj.go.th

Linis-Dinco, J. (2024). *Balancing progress and human rights: Is Thailand ready for Artificial Intelligence that respects human rights?* Manushya Foundation. www.trust.org/wp-content/uploads/2024/12/AI-Study-Report_Rev4_2024_11_05.pdf

Livingstone, S., & Pothong, K. (2022). Imaginative play in digital environments: Designing social and creative opportunities for identity formation. *Information, Communication & Society*, 25(4), 485-501. https://doi.org/10.1080/1369118X.2022.2046128

Livingstone, S., & Pothong, K. (2023, March). *Child Rights by Design: Guidance for innovators of digital products and services used by children*. https://cms.childrightsbydesign.5rightsfoundation.com/wp-content/uploads/2023/04/CRbD-spread_web.pdf

Livingstone, S., & Stoilova, M. (2021). *The 4Cs: Classifying online risk to children* (CO:RE Short Report Series on Key Topics). Leibniz-Institut für Medienforschung, Hans-Bredow-Institut (HBI), CO:RE (Children Online: Research and Evidence). https://doi.org/10.21241/ssoar.71817

Madeleine, N. (2024, 17 May). Generative AI is trained on just a few of the world's 7,000 languages. Here's why that's a problem – and what's being done about it. World Economic Forum. www.weforum.org/stories/2024/05/generative-ai-languages-llm

Meechai Patana School. (2025). *Bamboo School*. [In Thai.] www.mechaipattana.ac.th

Ministry of Digital Economy and Society. (2021). *Digital Thailand – AI ethics guideline*. www.etda.or.th/getattachment/9d370f25-f37a-4b7c-b661-48d2d730651d/Digital-Thailand-AI-Ethics-Principle-and-Guideline.pdf.aspx?lang=th-TH

Ministry of Digital Economy and Society & Ministry of Higher Education, Science, Research and Innovation. (2022). *Thailand national AI strategy and action plan (2022-2027)*. https://ai.in.th/wp-content/uploads/2022/12/20220726-AI.pdf

Ministry of Education Singapore. (2025). *'Transforming education through technology' masterplan 2030*. www.moe.gov.sg/education-in-sg/educational-technology-journey/edtech-masterplan

National Statistical Office & Ministry of Digital Economy and Society. (2024). *The 2024 Household Survey on the Use of Information and Communication Technology (Quarter 4)*. [In Thai.] www.nso.go.th/nsoweb/storage/survey_detail/2025/20250228090924_27941.pdf

Office of National Statistics. (2023). *Key findings of children's and young people's ICT use*. [In Thai.] www.nso.go.th/nsoweb/storage/survey_detail/2024/20240731153627_28521.pdf

Oxford Insights. (2024). *Government AI Readiness Index*. https://oxfordinsights.com/ai-readiness/ai-readiness-index

Pagram, P., & Pagram, J. (2006). Issues In e-learning: A Thai case study. *The Electronic Journal of Information Systems in Developing Countries*, 26(1), 1-8. https://doi.org/10.1002/j.1681-4835.2006.tb00175.x

Patil, R., & Gudivada, V. (2024). A review of current trends, techniques, and challenges in large language models (LLMs). *Applied Sciences*, 14(5). https://doi.org/10.3390/app14052074

Permjit, N. (2023, 13 September). Making education keep up with change. TDRI (Thailand Development Research Institute). https://tdri.or.th/en/2023/09/making-education-keep-up-with-change

Pothong, K., & Livingstone, S. (2025). *Global developers' insights into Child Rights by Design*. Digital Futures for Children centre, 5Rights Foundation. https://eprints.lse.ac.uk/128187

Pothong, K., Livingstone, S., Colvert, A., & Pschetz, L. (2024). Applying children's rights to digital products: Exploring competing priorities in design. In *Proceedings of the 23rd Annual ACM Interaction Design and Children Conference* (pp. 93-104). https://doi.org/10.1145/3628516.3655789

PTT GC Company Limited. (2025). *CONNEXT ED Project*. https://sustainability.pttgcgroup.com/en/projects/93/connext-ed-project

Sinsuk, P. (2025, 8 June). Thailand's first draft of AI Act is here! Emphasis on responsible and rights-respecting use. *bangkokbiznews*. [In Thai.] www.bangkokbiznews.com/tech/gadget/1183826

Stoilova, M., Livingstone, S., & Sylwander, K.R. (2025). *Researching children's experiences of generative artificial intelligence: A child rights approach*. Digital Futures for Children centre, LSE and 5Rights Foundation. https://eprints.lse.ac.uk/129141

TOT (Telephone Organisation of Thailand). (no date). *The Village Broadband Internet Project (Net Pracharat)*. https://npcr.netpracharat.com/Netpracharat_EN/one-page

The Information Technology Foundation under the Initiative of Her Royal Highness Princess Maha Chakri Sirindhorn. (2025). *Scope of work*. www.princess-it.org/en/about-us/scope-of-work

UN (United Nations). (2011). *Guiding principles on business and human rights*. www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf

UNDP (United Nations Development Programme). (2025). *Human Development Report 2025*. https://hdr.undp.org/content/human-development-report-2025

UNESCO. (2024a). *Generation AI: Navigating the opportunities and risks of artificial intelligence in education*. www.unesco.org/en/articles/generation-ai-navigating-opportunities-and-risks-artificial-intelligence-education

UNESCO. (2024b, 12 December). UNESCO's AI readiness assessment to boost ethical governance of AI in Thailand, host country of 2025 Global Forum. News. www.unesco.org/en/articles/unescos-ai-readiness-assessment-boost-ethical-governance-ai-thailand-host-country-2025-global-forum

UNESCO. (2025). *Guidance for generative AI in education and research*. https://unesdoc.unesco.org/ark:/48223/pf0000386693

UNICEF. (1989). *The United Nations Convention on the Rights of the Child*. https://downloads.unicef.org.uk/wp-content/uploads/2010/05/UNCRC_PRESS200910web.pdf?_ga=2.78590034.795419542.1582474737-1972578648.1582474737

UNICEF. (2024, 20 November). The state of the world's children 2024 statistical compendium. UNICEF Data. https://data.unicef.org/resources/sowc-2024

Vygotsky, L. S. (1978). Interaction between learning and development. In *Mind and society* (pp. 79-91). Harvard University Press. https://ia.eferrit.com/ea/a6589cd862231ed3.pdf

West, M. (2023). *An ed-tech tragedy? Educational technologies and school closures in the time of COVID-19*. UNESCO. https://doi.org/10.54675/LYGF2153

Wu, G., Zhang, Z., Niu, J., Wang, W., Zhang, Y., Wu, Y., & Zhang, Y. (2025). I know what you asked: Prompt leakage via KV-cache sharing in multi-tenant LLM serving. In *Proceedings of the 2025 Network and Distributed System Security Symposium*. https://doi.org/10.14722/ndss.2025.241772

Yan, C., Guan, B., Li, Y., Meng, M. H., Wan, L., & Bai, G. (2025). Understanding and detecting file knowledge leakage in GPT app ecosystem. In *Proceedings of the ACM on Web Conference 2025* (pp. 3831-3839). https://doi.org/10.1145/3696410.3714755

Yoon, Y. (2023). *Socio-economic impact assessment of Net Pracharat*. ITU-RDF. www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Documents/Events/2023/RDF-2023/Presentations%20and%20Relevant%20Reports/Session%209/Speaker%203%20Prof.%20Yoon%20Session%209%20presentation.pdf

Digital Futures For Children

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