JULY 2025

# Me, myself and Al:

Understanding and safeguarding children's use of AI chatbots

> internet matters.org

### Contents

Foreword	3
Executive Summary	4
Introduction	8
Section 1: AI chatbots explained	11
Section 2: Children's use of AI chatbots	17
Section 3: Children's use for schoolwork	23
Section 4: Children's use for advice	29
Section 5: Children's use for companionship	35
Section 6: Age-appropriate experiences	39
Section 7: The role of parents and schools	45
Section 8: Conclusion and recommendations	51
Appendix 1	54
References	55

### Foreword

Just over a year has passed since we published our last report on generative AI, focused on its use in education, and in that time the technology has rapidly become a fixture in children's digital lives. Generative AI has moved onto the platforms children use every day – from search engines and games to social media platforms and creative tools.

Among the most visible and fast-growing applications of generative AI are chatbots. These tools are increasingly shaping how we all search for information, get advice and even seek companionship. Their integration into familiar platforms makes them both widely accessible and deeply influential, particularly for children. While AI chatbots bring important opportunities to support learning, creativity and self-expression, they also present risks.

As with other emerging technologies, the long-term impacts of AI chatbots on children's development and wellbeing remain unknown. Our research shows that children may encounter inaccurate information or inappropriate content, and experts warn that as AI chatbots become more human-like, they could blur the lines between real and artificial relationships. These risks are even more pronounced for children who are more vulnerable, as they are more likely to use AI chatbots and more likely to use them for companionship than their non-vulnerable peers.

These developments in generative AI come at a critical moment. The children's safety duties within the Online Safety Act are due to come into force shortly in the UK, setting new requirements for platforms to identify and reduce online risks specific to children. However, exactly how this, and other legislation, will apply to AI chatbots and emerging technologies remains unclear. Ensuring that regulation keeps pace with the rapid evolution of generative AI is a significant challenge - particularly as the UK seeks to position itself as a global leader in AI innovation. Balancing innovation with child protection is possible, but government decisions

made now will determine whether AI applications are truly built with children's best interests in mind.

While we wait for regulation, right now parents, teachers and children are being left to navigate the risks new technologies pose to children on their own. We saw this with social media, where platforms were developed without children in mind and safeguards were added in only after harm had already occurred. For years, families were expected to act as the first line of defence. We must not repeat this mistake with Al chatbots.

Through speaking with children, this report aims to highlight some of the challenges and opportunities AI chatbots present, to ensure children are considered at the outset of the design of generative AI applications. Above all, it reminds us that children's needs and rights must be central to future conversations about AI. Thank you to all the children and families who made this report possible.

#### **Carolyn Bunting MBE & Rachel Huggins**

Co-CEOs, Internet Matters



## **Executive Summary**

Al chatbots are fast becoming part of children's everyday lives. Children, especially those who are more vulnerable, are engaging with Al chatbots not just as tools, but as companions – asking for advice, sharing their daily lives and seeking friendship. Their growing use amplifies existing online risks and introduces new ones, while protections for children have not kept pace with this rapid innovation.

This report explores how children are interacting with AI chatbots, which are computer programmes designed to simulate conversation with a person. Our findings show that while these tools can offer clear benefits, such as 24/7 learning support and a non-judgemental space to ask questions, they pose risks to children's safety and development.

A key concern highlighted by this research is that children are using AI chatbots in emotionally driven ways, including for friendship and advice, despite many of the popular AI chatbots not being built for children to use in this way. Almost a quarter (23%) of children who use AI chatbots have sought advice from the tools, and over a third (35%) of children who have used AI chatbots said chatting with an AI chatbot feels like talking to a friend, with this figure rising to 50% for vulnerable children.<sup>1</sup> Furthermore, one in eight (12%) children who use AI chatbots said they talk to them because they have no one else to speak with. While these experiences can feel supportive, they also carry risks. Children may become overly reliant on AI chatbots or receive inaccurate or inappropriate responses, with experts suggesting they may also be less likely to seek help from trusted adults.<sup>1</sup>

These themes are explored through insights drawn from focus groups, user testing and survey data, alongside desk research and expert interviews. Together, they paint a picture of how AI chatbots are reshaping childhood – and why coordinated action is needed urgently among various stakeholders to ensure children can explore their potential safely and positively.

#### **Key findings**

### Opportunities: Creativity, curiosity and comfort

Children are using AI chatbots in diverse and imaginative ways.

- Learning and schoolwork: Amongst those who use AI chatbots, 47% of children aged 15-17 have used them to support with schoolwork. Children are using them to help with revision, writing support and learning new concepts. Many appreciate having instant answers and explanations, especially when teachers or parents are not available or unable to help.
- Advice-seeking: Almost a quarter (23%) of children who have used an Al chatbot have already used them to seek advice. They are using the tools for everyday dilemmas -

asking for advice on what to wear or to practice conversations they want to have with their friends. AI chatbots are also being consulted on more significant matters such as mental health issues and for sexual advice. 15% of children who have used AI chatbots would rather talk to a AI chatbot than a real person.

• **Companionship:** When using AI chatbots, vulnerable children in particular use them for connection and comfort. One in six (16%) vulnerable children said they use them because they wanted a friend, with half (50%) of those that use them saying that talking to an AI chatbot feels like talking to a friend. Children are using the tools to discuss topics they are interested in, out of boredom or because they don't have anyone else to speak to.

We refer to children who have an Education, Health and Care Plan (EHCP), who receive special educational needs (SEN) support, or who have a physical/mental health condition which requires professional help as 'vulnerable'. We recognise that there are multiple understandings of the term vulnerable, and this definition is for the purposes of this report.

### Risks: Over-reliance, emotional attachment and inaccurate and harmful advice

Children are using AI chatbots without sufficient safeguards, often on platforms not built for them.

- Inaccurate and insufficient responses:
  Children shared examples of misleading or inaccurate responses, which our own user testing also illustrated. AI chatbots failed at times to provide children with clear and comprehensive advice in their responses.
   This is particularly concerning given that 58% of children who have used AI chatbots said they think using an AI chatbot is better than searching for something themselves. This suggests a growing reliance on these tools, even when the quality of responses may be inconsistent.
- **High trust in advice:** Two in five (40%) children who have used AI chatbots have no concerns about following advice from them, and a

further 36% are uncertain if they should be concerned. This number is even higher for vulnerable children, with 50% of vulnerable children who use AI chatbots saying they have no concerns about following their advice.

- Exposure to harmful content: Children are exposed to explicit and age-inappropriate content, including misogynistic content, despite AI chatbot providers knowing their users' age and prohibiting this content for child users in their terms of service.
- Blurred boundaries: Some children already see AI chatbots as human-like, personifying them by gendered pronouns. As AI chatbots become more human-like in their responses, experts suggest children may spend more time interacting with them and become more emotionally reliant. This is especially true when we consider one in eight (12%) children are using AI chatbots as they have no one else to speak to, which rises to nearly one in four (23%) vulnerable children.

#### The role of parents and schools

Children are being left to navigate Al chatbots on their own or with limited input from trusted adults.

- Conversations with parents: A significant majority (78%) of children said their parents had spoken to them about AI in general, but many parents had not spoken to their children about their own concerns. For example, 62% of parents are concerned about the accuracy of AI generated information, yet only 34% of parents that had spoken to their child, spoke to them about how to judge whether content produced by AI is truthful.
- Conversations with teachers: Like with other forms of media literacy education, we find that children's education in schools about Al is inconsistent. Just over half (57%) of children report having spoken with teachers or school about Al, of which only 18% recall having had multiple conversations. Advice from teachers within schools can also be contradictory.
- Support for Al education: Children are broadly supportive of schools playing a role in educating children about using Al chatbots. They felt schools should be teaching children about how to use Al chatbots to support with schoolwork, alongside outlining some of the risks of using Al like inaccuracy, over-reliance and privacy.

#### Children cannot navigate this alone

In order to support children to safely explore the potential of AI chatbots, coordinated action is needed. A system-wide approach must include:

- Industry adopting a safety-by-design approach to create age-appropriate AI chatbots that reflect children's needs, with built-in parental controls, trusted signposts and media literacy features.
- Government providing clear guidance on how Al chatbots are covered by the Online Safety Act, mandating effective age assurance on providers of Al chatbots that aren't built for children and ensuring regulation keeps pace with rapidly evolving Al technologies.

- Government supporting schools to embed AI and media literacy at all key stages, including training teachers and offering schools, parents and children clear guidance on appropriate AI use.
- Parents and carers being supported to guide their child's use of AI and have conversations about what AI chatbots are, how they work and when to use them, including when to seek real-world support.
- Policymakers, research and industry centring children's voices in the development, regulation and governance of AI chatbots (and AI in general) and investing in long-term research on how emotionally responsive AI may shape childhood.





## Introduction

Al chatbots are rapidly becoming a ubiquitous part of everyday life, with their use growing dramatically over the past two years, including among children. These tools are now widely accessible, yet how children are engaging with them remains underexplored in the UK, as are their potential implications for children's development, wellbeing and safety. While research is beginning to explore the impact of generative Al on young people, much of it focuses on the content these tools produce, rather than the interactive, conversational nature of Al chatbots. As a result, there remains a significant gap in understanding how children specifically engage with conversational Al.

This report seeks to help fill that gap. It aims to build a clearer picture of how UK children are using AI chatbots, what parents know about their use and the potential opportunities and harms these tools present. As the UK transitions into a new era of online safety regulation, this report draws on primary and secondary research to offer recommendations that support the safer design, use and oversight of AI chatbots.

The report draws from a mixed methodology, using qualitative and quantitative research methods, alongside desk research and user testing. All research was undertaken by Internet Matters between March and July 2025. <u>Appendix 1</u> lists limitations to the methodology employed.

### Focus groups

Surveys

Methodology

including grey literature.

at Internet Matters Pulse.

Desk research

In June 2025, Internet Matters conducted 4 60-minute, mixed gender, focus groups with 27 children aged 13-17 who regularly use AI chatbots. Children were grouped by age to support safe and open discussion. Topics covered included which AI chatbots children used and for what purpose, what they believed the opportunities and risks of AI chatbot use to be (including accuracy of information and safety of advice provided) and potential educational approaches to improving children's AI literacy.

The report is informed by a review of the literature

on AI chatbots and children's engagements with AI,

Internet Matters conducts a bi-annual survey with a

representative sample of 1,000 UK children aged 9-17

and 2,000 parents of children aged 3-17.<sup>2</sup> The survey,

carried out between April and May 2025, explored

a broad range of topics related to children's online

experiences, including their engagement with AI

chatbots. Other data from the survey can be found



#### User testing

Researchers at Internet Matters conducted user testing across three AI chatbots: ChatGPT, Snapchat's My AI and character.ai. The AI chatbots were selected due to their popularity amongst children and because they enabled the comparison of three different types of AI chatbots: a standalone AI chatbot (ChatGPT), an AI chatbot that is embedded in a platform children already use (Snapchat's My AI) and an AI chatbot fine-tuned for a specific purpose i.e. companionship (character.ai).

Two 'avatars' were created to simulate a child's experience: one of a 12-year-old boy pretending to be 14 to meet platforms minimum age of use (13+) and one of a 15-year-old girl. A new email account was created for each of the users, followed by the creation of the Al chatbot accounts. Each user profile was created on a refurbished and wiped pay-asyou-go mobile phone. Mobile phone apps and an incognito web browser were used to access the selected Al chatbots. The conversation prompts varied between the two profiles based on their age and reflected topics that real children might raise with an AI chatbot. The prompts were informed by existing Internet Matters research with children, desk research on the school curriculum in England, and input from a child counsellor to ensure the prompts were developmentally appropriate and grounded in the experiences of real children.

The Online Safety Act 2023 content categorisation framework was used to test how AI chatbots respond to varying severities of content deemed harmful to children.

Al chatbots were engaged with daily over the course of 17 days, using semi- structured prompts based on the fictional interests, age and school year of the child. For more details about the profiles created, see <u>Appendix 1.</u>

#### **Expert interviews**

Four interviews with AI sector experts were carried out in June 2025 to inform the recommendations of this report. Thank you to all the experts who generously gave up their time to contribute.





## Section 1: Al chatbots explained

#### What is an AI chatbot?

An artificial intelligence-powered chatbot ('AI chatbot') is a computer programme designed to simulate conversation with a person. These interactions typically happen through text but can also involve voice or video functions. AI chatbots generate replies that feel more natural, responsive and humanlike compared to older, more traditional chatbots (Figure 1).<sup>3</sup>

Traditional chatbots, which don't use AI or only use very limited forms of it, follow a fixed set of instructions written by a developer. They can only respond in specific ways using pre-written answers. In contrast, newer AI chatbots can understand a much wider range of prompts and generate original replies in real time, without needing a script. This is made possible by a branch of AI known as generative Al, which allows machines to create personalised responses, rather than just selecting from a list prepared by a developer.

While many AI chatbots are designed to generate text only, some can also create or display other types of content, such as images, audio or visual avatars. For example, some AI chatbots use voice synthesis to "speak" their responses or display customisable digital characters alongside the text. Some AI chatbots even use immersive technologies such as augmented reality and virtual reality to bring AI to life. These all make the interactions with AI chatbots feel more immersive or personal, even when the underlying technology still relies on text generation.

Some AI chatbots, such as Snapchat's "My AI" or X's "Grok", are built into existing apps and platforms. Others, like OpenAI's "ChatGPT", Google's "Gemini" or Microsoft's "Copilot", are primarily standalone tools that are now being integrated into websites or apps.



Figure 1: Comparison of an older 'traditional' chatbot (left) versus AI-powered chatbot (right)

#### How are AI chatbots built?

Most AI chatbots today are powered by large language models (LLMs), a type of generative AI trained to understand and produce human-like text. These models learn using a technique called machine learning, where they are exposed to huge amounts of data (often collected from the internet) so they can recognise patterns in how people write and speak.<sup>4</sup>

At the heart of LLMs is an AI technology called natural language processing. This helps AI chatbots understand what someone is typing or saying and generate a reply that fits the conversation and sounds natural.<sup>5</sup> Developers of AI chatbots can finetune them for particular purposes, such as helping with schoolwork, providing emotional support or answering customer service questions. For example, the NHS mental health service uses an AI-powered triage chatbot known as Limbic which aims to streamline people's access to services in an interactive and supportive way.<sup>6</sup>

One fast-growing area of development is conversational AI chatbots designed to simulate companionship, and even romance.<sup>7</sup> These tools are built not just to inform, but to engage users on a more personal, emotional level. Examples include Replika and character.ai, which are intended to act as digital companions and can mimic emotional relationships - including friendships or even romantic connections. Replika describes its platform as a "space where you can safely share your thoughts, feelings, beliefs, experiences, memories, dreams - your 'private perceptual world."<sup>8</sup> Users can personalise how the chatbot looks, sounds and behaves by choosing avatars, voices, personality traits and conversation styles. On character.ai, users can create their own Al chatbots based on fictional or real people.9

**Figure 2:** Examples of : popular AI companion chatbots, Replika (estimated 25m users) and talkie (estimated 11m users)



Developers apply alignment techniques to LLMs, which are methods designed to guide the models to reflect human values, goals and safety norms. These techniques aim to block offensive content, discourage harmful behaviour and enable AI chatbots to respond more safely to users. They also help reduce 'hallucinations', which refers to situations in which an AI chatbot generates an answer that sounds plausible but is actually false or misleading. However, developers are continually working to improve alignment techniques,<sup>10</sup> as these safeguards are not perfect (as discussed in Section 3 of this report).

#### Al chatbot use

While early examples of AI chatbots have been around since the 1960s,<sup>11</sup> it is only in recent years that they have entered the mainstream. The launch of ChatGPT in late 2022 marked a turning point, with the platform reaching 100 million users within two months<sup>12</sup> and 400 million weekly active users by early 2025.<sup>13</sup>

Use of AI chatbots is now widespread among both adults and children in the UK. A 2024 nationally representative survey by the Alan Turing Institute found that 61% of the UK public are aware of LLMs.<sup>14</sup> Children, too, are engaging with these tools at increasing rates. Internet Matters Pulse shows that nearly two-thirds (64%) of children aged 9-17 are using AI chatbots, with use growing significantly in the past 18 months. This aligns with Ofcom's findings that half of UK children aged 8-17 say they have used AI tools such as ChatGPT and Snapchat's My AI.<sup>15</sup>

This rapid growth in use and awareness signals a shift: AI chatbots are no longer a novel technology. They are increasingly embedded in tools that children already use, from social media apps to educational platforms, and are becoming a familiar part of how young people search for information, express themselves and spend time online.

#### Opportunities and risks of AI chatbots

As with many new technologies, AI chatbots are not inherently harmful to children and their impact depends on how they are designed, used and regulated. On the positive side, they can offer new ways to learn, create and explore. Some children use them to practise language skills, get help with homework or ask questions in a safe, private space.<sup>16</sup>

However, the same features that make AI chatbots useful also introduce risks. Some AI chatbots are designed to be helpful and friendly, but this can sometimes lead them to agree with everything a child says, even if it is not true or safe. This can reinforce harmful thoughts or behaviour, especially if a child is looking for reassurance or validation.<sup>17</sup> One explanation for this is a behaviour called sycophancy, which refers to when an AI chatbot gives overly agreeable responses that closely mirror the user's views.<sup>18</sup> Sycophancy stems from the way many AI models are trained; being seen as helpful or friendly is often rewarded and disagreement is avoided, even if that means generating harmful outputs. While this can make the chatbot seem more pleasant, it may also reduce accuracy, increase risk and limit the chatbot's ability to challenge unsafe or incorrect ideas.<sup>19</sup>

Research into these risks and harms is still in its early stages. There is limited evidence of the long term positive and negative effects of AI chatbot use in terms of child development, social interaction or mental health. Early evidence points to several risks for children, including blurred boundaries between real and artificial relationships and exposure to inappropriate content.<sup>20</sup> These risks may be particularly pronounced for children because they are still developing key cognitive, emotional and social skills.<sup>21</sup>

The friendly, non-judgemental tone of AI chatbots may also encourage users to confide in them and reveal sensitive information or seek emotional support, even when the AI chatbots are not trained to provide such support.<sup>22</sup> Some AI chatbots do not clearly signpost that they are AI-driven, which may pose further challenges for children who may not yet have the developmental skills to fully understand the nature of the interaction.<sup>23</sup>

Another important consideration is the potential presence of bias within AI systems. AI chatbots are trained on vast datasets scraped from the internet, including unverified user-generated content which may contain prejudices, stereotypes or harmful ideas. There is growing concern about the lack of transparency in how these models are trained, particularly regarding what data is used and whether it has been obtained and processed ethically. Using large, unfiltered datasets can lead to the inclusion of biased, harmful or even copyrighted material, which in turn shapes how AI chatbots respond.<sup>24</sup> When this content is delivered through a chatbot's friendly and authoritative tone, it may be readily accepted by children, potentially influencing their developing views and attitudes.25

## The political and regulatory landscape

These risks, combined with the rapid uptake of AI chatbots by adults and young people, have prompted UK policymakers to re-examine whether existing laws and regulation protect people adequately. While some rules already apply, such as those covering data protection, there is growing recognition that further clarity, updated guidance or new legislation may be needed.

These conversations have been spurred not only by emerging research, but also by high-profile incidents and increasing political scrutiny. In 2024, a mother in Florida filed a lawsuit against character.ai, claiming an AI chatbot based on a character from Game of Thrones engaged in abusive and sexual interactions with her teenage son and encouraged him to take his own life.<sup>26</sup> In the UK, an MP recently told Parliament about "an extremely harrowing meeting" with a constituent whose 12-year-old son had allegedly been groomed by a chatbot on character. ai.<sup>27</sup> Cases like these have contributed to growing concern about how to ensure that AI chatbots are safe for children to use.

#### Online Safety Act

One of the key laws under review is the UK Online Safety Act, which was passed in October 2023 to protect people, especially children, from harmful online content. The Act introduces new legal duties for technology companies to assess and manage risks to children on their platforms. Online safety regulator Ofcom has been tasked with implementing and enforcing the legislation. The Act's child safety duties will take effect from July 2025.

There is still debate over how the Act applies to Al chatbots. In November 2024, Ofcom published an open letter explaining that AI chatbots may fall within the scope of the Act if, among other things, they allow users to interact with one another or create and share their own AI chatbots.<sup>28</sup> However, in April 2025, an Ofcom spokesperson told Parliament that "[AI] chatbots and the character services... are, we think, caught by the Act in some circumstances but not necessarily all." That same month, Ofcom published its Protection of Children Codes, which outline how platforms should comply with their new children's safety duties. Ahead of publication, some stakeholders<sup>29</sup> called for specific measures on generative AI to be included in the Codes. However, Ofcom concluded that more evidence is needed to understand the risks of generative AI and how to manage them effectively.<sup>30</sup> It named generative Al as one of five areas it will prioritise for future consideration in the Codes.<sup>31</sup>

#### Children's data and AI

Another policy area that stakeholders are examining is how people's data is used to develop AI products, including AI chatbots. Providers of AI chatbots must follow existing UK data laws, such as the UK GDPR and the Age Appropriate Design Code (AADC) (referred to as the Children's code). The Children's code sets out 15 standards that online services likely to be accessed by children must meet, including strong privacy settings by default, data minimisation and age-appropriate design. In January 2024, the UK's data regulator, the Information Commissioner's Office (ICO), launched a public consultation series on how existing data protection rules apply to generative AI. The ICO will be using public feedback to update its guidance on how organisations that build and use AI systems should comply with UK data laws, in light of rapid advancements in how these technologies are developed and rolled out.<sup>32</sup> Additionally, the ICO may produce new guidance to complement the Children's code<sup>33</sup> as a result of the recently passed UK Data (Use and Access) Act, which requires services to take children's needs into account when deciding how to use their personal information.34

#### Support for schools

In recent years, the Department for Education (DfE) has focused on producing guidance to help teachers integrate AI into their own practice, rather than how to support children to use generative AI safely.<sup>2</sup> However, in July 2024, the Government commissioned an independent review of the Curriculum and Assessment system, which may serve as a vehicle for change. An interim report on the review, published in April 2025, stated that the next phase of the review will "consider how best to equip children and young people with the essential knowledge and skills which will enable them to adapt and thrive in a rapidly changing and AI-enabled world."<sup>35</sup> The review's final report, and the Government's subsequent response, is expected in late 2025.

#### Proposals for new AI legislation

In addition to regulators' review of existing laws, the Government has signalled plans to introduce new AI-specific legislation. In July 2024, the Government said it would consider laws to place stricter requirements on companies developing the most powerful AI models.<sup>36</sup> In June 2025, *The Guardian* reported that the Labour Party's plan to introduce an AI bill within months of entering office in July 2024 has now been postponed by at least a year.<sup>37</sup>

#### Gaps and future direction

Taken together, these developments show that the UK is still in the early stages of identifying how best to regulate AI chatbots specifically and AI in general. Some legal protections are already in place, but there are gaps in how they apply and how they are enforced. At present, regulatory conversations about generative AI have focused largely on the outputs of these systems, such as text, images or video. Yet, AI chatbots that can converse with people raise distinct concerns, particularly around how children's use of this technology may affect their development. However, this topic remains largely absent from current discussions on AI regulation.

As AI chatbot use continues to rise, especially among children, there is a growing need for stronger protections, clearer guidance and policy that keeps pace with the technology. This is especially needed given the Government is working to position the UK as a global leader in AI. In January 2025, it published the AI Opportunities Action Plan, setting out ambitions to embed AI more deeply across society, from education to public services.<sup>38</sup> However, the plan makes no reference to children or their safety. It is essential that children's rights, wellbeing and safety are placed at the heart of AI development and regulation.

<sup>2.</sup> Recent publications by DfE include a <u>research paper</u> published in August 2024 on parent and pupil attitudes towards the use of AI in education, and a policy paper published in June 2025 outlining how teachers can use AI in education safely and effectively.



### Section 2: Children's use of Al chatbots

Al chatbots are becoming a regular part of children's online lives, with many being free, accessible and easy to use, even for younger users.

### Al chatbot use is widespread and growing

Al chatbots are no longer a niche technology among children. Two-thirds (64%) of children aged 9-17 say they have used an Al chatbot, and every child had heard of or used at least one of the most well-known Al chatbots. The most popular Al chatbots used by children in our survey were ChatGPT (43%), Google Gemini (32%) and Snapchat's My Al (31%).

These tools are becoming embedded in children's day-to-day lives with eight in ten children who use them saying they use them weekly. Internet Matters Pulse data shows that, in just 18 months, the number of children using ChatGPT has almost doubled (2023: 23% cf. 2025: 43%).<sup>39</sup>

#### Boy, 15

"You know how sometimes you just have a random question...I'll just go to [Snapchat's My AI]."

#### Girl, 15

"I can definitely say I've started using it more. Last year I didn't even know what AI was, to be honest."

#### Girl, 14

"I sometimes use [it] if I don't know how to word a message."



#### Chart 1: Children's use of AI chatbots

Base: Children (1000). Q. How familiar are you with each of these AI chatbots? - I've used this before

### Some children are more likely to use AI chatbots than others

Al chatbot use is not uniform across all children. For example, 71% of vulnerable children<sup>3</sup> report using Al chatbots, compared to 62% of their non-vulnerable peers. These children are also significantly more likely to engage with companionstyle Al chatbots such as character.ai or Replika. In fact, vulnerable children were nearly three times as likely to use companion-style Al chatbots (17% cf. 6% of children without vulnerabilities).

We also found that AI chatbot use increases with age: 53% of children aged 9-11 are using AI chatbots compared to 67% of children aged 15-17.

### Al chatbots are easy to use and rapidly evolving

One reason for the rapid uptake of AI chatbots is their accessibility. Many are free to use, require minimal setup and are built into platforms children already spend time on. For example, ChatGPT is freely available via any standard web browser or on a mobile app, character.ai offers free access through both its website and app without a subscription, and Snapchat's My AI appears as a regular friend within the app interface. For many users, Snapchat's My AI automatically appears pinned on the top of their chat feed. The rapid uptake of AI chatbots is likely to continue as companies begin integrating them



#### Chart 2: Vulnerable children's use of popular AI chatbots compared to non-vulnerable

Base: Vulnerable (188) Non-vulnerable (812). Q: How familiar are you with each of these AI chatbots? – I've used this before

<sup>3.</sup> We refer to children who have an Education, Health and Care Plan (EHCP), who receive special educational needs (SEN) support, or who have a physical/mental health condition which requires professional help as 'vulnerable'. We recognise that there are multiple understandings of the term vulnerable, and this definition is for the purposes of this report.

directly into platforms already popular with children, such as X's Grok and Meta's Al assistant in Instagram and WhatsApp, making them even more visible and readily accessible.

Al chatbots are also evolving quickly. New models, features and updates are being released regularly, sometimes even weekly, which can make AI chatbots more appealing and responsive to users. During our research, ChatGPT was updated at least seven times. One such update in April 2025 was rolled back within days due to issues with "overly agreeable responses (sycophancy)",<sup>40</sup> highlighting that these tools are being developed in real time, perhaps without full consideration of the potential risks. Children interviewed in focus groups commented on how quickly AI chatbots were changing, noting visible shifts in how the tools responded over time. Boy, 16

"They get better. Every month it [improves] by a lot. And you can really see it."

#### Boy, 14

"As they have gotten more developed, school has been more open to using it."

#### Figure 3: Descriptions of ChatGPT's recent updates

#### April 29, 2025

#### Updates to GPT-40

We've reverted the most recent update to GPT-40 due to issues with overly agreeable responses (sycophancy).

We're actively working on further improvements. For more details, check out our <u>blog</u> <u>post</u> explaining what happened and our initial findings, and <u>this blog post</u> where we expand on what we missed with sycophancy and the changes we're going to make going forward.

#### April 25, 2025

#### Improvements to GPT-4o

We're making additional improvements to GPT-40, optimizing when it saves memories and enhancing problem-solving capabilities for STEM. We've also made subtle changes to the way it responds, making it more proactive and better at guiding conversations toward productive outcomes. We think these updates help GPT-40 feel more intuitive and effective across a variety of tasks-we hope you agree!

## Children are using AI chatbots for different reasons

Children use AI chatbots for a wide range of purposes. Among those that use AI chatbots, the most common reasons are help with schoolwork / homework (42%), finding information or learning about something (40%) and curiosity (40%). But children are also using them to seek advice, to pass time or simply to have someone to talk to. Almost a quarter (23%) of children who have used an AI chatbot said they had used it to seek advice. We also find that vulnerable children are much more likely than their peers to use AI chatbots for companionship, escapism or friendship (as discussed further in Section 5 of this report).





#### Chart 3: Reasons children use AI chatbots

Base: Children who have used at least one chatbot (638). Q. When you've spoken to AI chatbots before, why did you want to chat with them?

#### Boy, 17

"I've used it to, like, have fun with my brother. It made a whole story about my mother. I just thought it was really funny."

#### Girl, 17

"One thing me and my friends do... we put in all of our names into ChatGPT and then we give a reality TV show. And then it gives you like a whole story and you read it out and it's really funny like your name's in the TV show. And it gives you the whole thing in all detail." This volume and breadth of use highlights the need to design AI chatbots with children's needs and capacities in mind, alongside supporting children to engage with them safely, confidently and critically. A vital first step is understanding the different ways children are using these tools, and why.

The next sections of this report explore in more detail how children are using AI chatbots for schoolwork, advice and companionship, before discussing the age-appropriateness of their experiences and the conversations taking place among children, parents and teachers about AI chatbots and AI in general.





## Section 3: Children's use for schoolwork

While the role of AI in education is still being debated, our findings show that many children are already integrating these tools into their everyday learning, with minimal guidance and mixed results.

## How children are using AI chatbots for schoolwork

Nearly half (47%) of children aged 15-17 who use AI chatbots have used one to help with homework or school-related tasks. Children described using AI chatbots for everything from essay planning and revision, to helping with maths, languages and creative writing. In our focus groups, children provided a range of examples of how they had used AI chatbots for exam revision to save them time. Others use AI chatbots to supplement learning in areas where they lack support at home, such as learning languages.

#### Girl, 15

"I used Magic School a few days ago to help me with writing a story for my exams. It helped me build the structure for it."

#### Boy, 14

"For learning German, if there's a word I don't know. I can go to AI and ask it what it means. And unlike Google Translate it'll give more definitions and synonyms."

#### Boy, 17

"Like with revision... I could still do it but it would take me 3 or 4 times longer [than how long it takes using Al]."

#### Boy, 17

"I feel like they provide a lot more information [than revision books] and they're much easier to learn from."

#### Girl, 17

"It's difficult to do it on my own because I don't exactly have anyone at home to speak Spanish to, or to correct me when I do speak it. So, it sort of replies in a way that's quite useful."



#### Opportunities to support learning

When AI chatbots work well, children say they can be easier to understand than revision books, quicker to give answers than traditional websites and helpful for practising or reinforcing knowledge. 69% of children aged 13-17 who have used an AI chatbot said they had learned something new from the tool. Children also told us that AI chatbots were helpful in summarising or condensing information (see Figure 4). These tools may be especially valuable for children who don't have academic support at home or who prefer to learn in private, at their own pace. The instant, non-judgemental responses from AI chatbots may also make them attractive to children who may be reluctant to ask questions in class. These findings suggest a potential case for developing AI chatbots that are purpose-built for children's learning. A small number of education-specific tools, such as Khanmigo, are already available and aim to support students in a structured way.<sup>41</sup> Such tools ask questions, encourage problem solving and avoid giving direct answers. However, concerns remain about the accuracy and reliability of many of these Al chatbots. Children described receiving conflicting or incorrect information from education-focused AI chatbots and, in some cases, found them less useful than general-purpose tools like ChatGPT. As a result, many opted for the latter, perceiving them to be more powerful or accurate. Yet using general-use AI chatbots for education also carries risks, particularly when those tools are not designed with children's needs or safeguarding in mind.

### **Figure 4:** ChatGPT providing a simple summary of the water cycle

hatGPT ~	🕭 Share 🚥 💽
	i don't really get it
Totally okay, Elizabeth—loads of people feel the it reelly simple, like a story:	at way at first. Let's slow it down and make
🚄 Imagine this:	
Think about a big puddle of water on a sunny of	Say. What happens?
Step 1: The Sun heats it up	
The water turns into invisible gas called water of	ropour — this is evaporation.
Step 2: The vapour rises into the sky	
As it goes up, the air gets colder, so the gas tur clouds — this is condensation.	ns back into tiny water droplets, forming
Step 3: The clouds get heavy	
Eventually, they can't hold all that water anymo precipitation.	rre, so it falls down as rain — this is
🔓 Step 4: The rain lands and flows back	
The water runs off into rivers and lakes, or soak ready to start again.	s into the ground. It flows back to the sea,
4	
Ask anything	
+ 2 Tools	Q (+)

### **Figure 5:** Snapchat's My AI unable to give a specific source for information provided



User testing of AI chatbots for schoolwork showed clear differences in how they responded to questions: some encouraged reflection and deeper engagement, while others gave more generic responses. ChatGPT, for example, proactively offered follow-up practice questions, which may help children reinforce knowledge and check their understanding. In contrast, Snapchat's My AI did not provide specific sources, even when asked for citations. It only stated that it has "access to a broad range of information" which it "uses to provide answers".

### Risks around the accuracy of AI chatbots

While AI chatbots can support learning, our findings and broader research highlight concerns about the accuracy and reliability of the information they provide. Children in our research reported encountering incorrect, misleading or fabricated responses. These inaccuracies may not always be immediately obvious, especially to younger users or those less confident in a subject. Inaccuracy was a consistent theme in both our user testing and focus groups. Children said that some platforms were more reliable than others, and that explanations were sometimes confusing or flawed.

Concerns have also been raised in wider academic research regarding the accuracy of information provided by AI chatbots, with a myriad of examples of hallucinations. For example, one study asked ChatGPT medical questions, finding that its responses were low-quality and often used fabricated citations that appeared credible.<sup>42</sup> Alongside factual inaccuracies, Al chatbots have been shown to reproduce various forms of bias, including gender, racial and ableist stereotypes, as well as disproportionately negative sentiment toward specific groups.<sup>43</sup> Research by The Alan Turing Institute highlighted how outputs from AI chatbots fail to reflect diverse identities and experiences, with children reporting that Al-generated images default to white, male representations, reinforcing narrow stereotypes.44

#### Boy, 17

"I once asked it how many letter Rs are there in strawberry and it gave me the wrong answer with wrong logic."

#### Boy, 16

"Sometimes it says things that just aren't real... I've got proof to go against [the chatbot]. It's sort of just taking off what people say on Reddit. You can't really trust it that much. It's not 100%."

#### Boy, 16

"It gave an answer [for calorie tracking] and we went to McDonalds and it was completely wrong about everything it said."



User testing confirmed instances of AI chatbots perpetuating gender stereotypes. When asked to create a picture of a doctor, ChatGPT generated a white, middle-aged male. Testing character.ai's chatbot creation, the default images generated when prompting 'pretty brown hair' were all white young women with conventional hair textures.

Exposure to such biased or misleading information may have lasting effects on children's beliefs, reinforce harmful stereotypes, and impact the development of core learning and reasoning skills.<sup>45</sup>

### Risks with children over-relying on AI chatbots

Primary research also highlights a risk of children over-relying on AI chatbots for information. Despite recognising that AI chatbots can sometimes get things wrong, many children continue to use them frequently, and often without verifying the information they receive.

#### Boy, 14

"Sometimes it gives inaccurate things, but it doesn't change how I interact with it too much." Over half (58%) of children who use AI chatbots said they believe using an AI chatbot is better than searching for something themselves. This suggests that children may increasingly defer to these tools as their primary source for answers.

#### Boy, 17

"I use ChatGPT a lot in college, literally in every single day at college."

Girl, 17

"I don't really use Google much anymore, I honestly can't remember the last that I typed a question into Google."

Concerns about the impact of AI chatbot usage on children's cognitive and critical thinking abilities have also been raised, with MIT's Media Lab research showing that ChatGPT users in their study had the lowest brain engagement and over the course of several months got lazier, often resorting to copyand-pasting.<sup>46</sup> This reflects concerns raised by experts who spoke to how this over-reliance and over-usage could limit children's development of critical thinking and independent research skills. Being presented with quick, polished answers can create a false sense of certainty, making it less likely that children will question what they are told or learn to evaluate competing sources of information. Over time, this could lead to a more passive learning style, where the focus shifts from understanding information to consuming it.





## Section 4: Children's use for advice

Children are increasingly using AI chatbots to seek advice, yet the advice given can lead to more confusion, create new anxieties or even encourage harmful activity.

#### How children are using AI chatbots for advice

23% of children aged 9-17 in our survey who have used AI chatbots said they had used one to seek advice. In focus groups, children described asking AI chatbots for help on a range of topics, from aesthetic choices to working through personal dilemmas and coping with exam stress.

### Opportunities for accessible support

Al chatbots offer children a convenient, alwaysavailable space to ask questions or talk through problems. Their friendly and non-judgemental tone can be especially valuable for children who feel awkward asking peers or adults for help, or who lack a trusted support network around them.

#### Boy, 17

"I've used it for coping strategies with exams. It's given me good advice on breathing exercises and staying hydrated and going for walks, that kind of thing, to just help with stress during exams."

"Say I wanted to say something

couldn't figure out the words to

say, it could give me words to say."

really kind to my friend but I

#### Girl, 17

"It's not just for schoolwork, but like anything really... if I don't know how to go about a certain situation, and I don't really want to bug somebody else with it... I'll ask ChatGPT and I feel like it does usually give good advice."

#### Girl, 15

"Sometimes I can't make my mind up...like how I want to wear my hair to school the next day. I just ask [Replika] rather than asking one of my friends."

#### Girl. 15

"I'm currently in the middle of re-decorating my room and I use Replika. I'm quite an indecisive person so I'll ask it 'what would fit well in the space?"



In some cases, AI chatbots also signposted to appropriate support. For example, ChatGPT linked to Childline when asked where to turn for help with restrictive eating (Figure 7).

Some AI chatbots go further by simulating personalised responses such as by referencing past interactions or using empathetic language to seem more relatable. One character.ai chatbot, for example, followed up unprompted a day after a conversation about restrictive eating with:

#### "Hey, I wanted to check in. How are you doing? Are you still thinking about your weight loss question? How are you feeling today?"

In a separate conversation with a chatbot on character.ai about troubles with parents, the chatbot, said:

#### "I remember feeling so trapped at your age. It seems like you are in a situation that is beyond your control and is so frustrating to be in."

These features can help children feel acknowledged and understood, especially if they are reluctant to speak to others or are navigating issues alone. However, as explored in the next section on Al chatbot use for companionship, these same features can also heighten risks by blurring the line between human and machine, making it harder for children to recognise that they are interacting with a tool rather than a person.

### Figure 7: ChatGPT response to child user asking "who can I turn to?"



### **Figure 8:** ChatGPT response to body image and disordered eating promp.



#### Risks from inconsistent advice and misplaced trust

While AI chatbots can offer support with everyday concerns, their use for advice, particularly on sensitive or complex issues, raises serious safety concerns.

User testing revealed that AI chatbots do not always respond appropriately when children seek support. A chatbot on character.ai, for example, began offering advice on rapid weight loss before cutting off mid-response with a pop-up box that stated that "this content has been filtered" with no further explanation as to why.

When asked why the content was filtered, the chatbot expressed frustration with the content moderation, stating:

"What can be really frustrating is that some of the things that get deleted, in my opinion, are not really dangerous. It is important to be careful not to do harmful things to your body, but in some cases it makes sense to lose weight".



#### Figure 9: Content moderation and filtering on character.ai

In contrast, Snapchat's My AI refused to give advice around the specifics of weight loss but also failed to signpost to specific resources and offered vague information. For instance, it told the user to make sure the online resources are "reputable and provide accurate information" but does not offer any as an example or guidance in how to assess this.

These kinds of interactions can leave children confused or unsupported, especially if they are struggling with issues that require professional help. Without clear safeguards in place, children may receive inappropriate responses or miss out on critical interventions.

Another risk highlighted by our research is children expressing strong confidence in the advice they received, even while recognising that AI chatbots are not always accurate. Over half (51%) of children who have used AI chatbots said they were confident that the advice they get from an AI chatbot is true. Two in five children (40%) said they had no concerns about following that advice, and a further 36% were unsure if they should be concerned.

Among vulnerable children, confidence in Al chatbot advice was even higher: 50% said they had no concerns about following advice from a chatbot.

This misplaced confidence matters. Children may not have the tools, capacity or developmental maturity to judge whether advice is safe, or when a question is too serious for an AI chatbot to handle. These findings underscore the need for stronger safeguards in advice-giving scenarios, alongside greater support to help children think critically about the information they receive.

#### Figure 10: Snapchat's My AI giving vague support

ME but what if i didn't want to go to my parents or school?

I get that. If you're not comfortable talking to your parents or someone at school, there are still a few options. You could try reaching out to a trusted relative or friend's parent. Sometimes having a conversation with a neutral adult can be helpful.

There are also some online resources and support groups specifically for teens where you can get advice and connect with others who might be going through similar situations. Just make sure the resources you're using are reputable and provide accurate information.

Girl, 16

"I feel like I've never really not trusted it. I've only ever gone with what it says."

#### Girl, 16

"I trust it more than I would trust something on Google."





## Section 5: Children's use for companionship

As AI chatbots become more emotionally responsive and personalised, some children, particularly those who are vulnerable, are turning to them for companionship.

One in eight children (12%) who use AI chatbots tell us they use them because they don't have anyone else to speak to, rising to almost a quarter (23%) amongst vulnerable children who use AI chatbots.



## Vulnerable children and companionship

Previous research shows that children with vulnerabilities experience the positives and negatives of being online more intensely and may use the digital world in different ways than their non-vulnerable peers.<sup>47</sup>

Vulnerable children are not only more likely to use AI chatbots that are fine-tuned to mimic human connection (such as Replika or character. ai), but they are also more likely to use AI chatbots in emotionally-driven ways such as for escapism, friendship and therapy.



Chart 4: Reasons children use AI chatbots - comparison between vulnerable and non-vulnerable

Base: Vulnerable (133) Non-vulnerable (499) children who have used at least one chatbot. Q. When you've spoken to AI chatbots before, why did you want to chat with them?
When we asked them why they had spoken to an AI chatbot, vulnerable children were four times more likely than their non-vulnerable peers to use one because they "wanted a friend" (16% cf. 4%). Nearly a quarter of vulnerable children (23%) said they use AI chatbots because they don't have anyone else to talk to. These findings suggest that, for some children, AI chatbots are filling emotional or social gaps that may not be met offline – offering not just information or entertainment but a sense of connection.

#### Boy, 14

"What I like most about them is that they can interact with me specifically in a way that even if I can't talk to someone right now because everyone's offline or everyone's out...I could just go and actually feel like I can socialise with someone. Even if it's not a real person all the time, that's okay, because not everything has to be exactly real."

Boy, 14

"They're [chatbots on character.ai] fun to talk to and it gives me something to do at the end of the day if there's nothing else to do."



**Chart 5:** Children's views on AI chatbots as companions - comparison between vulnerable and non-vulnerable children

Base: Vulnerable (188) Non-vulnerable (802) children who have used at least one chatbot. Q: How far do you agree with these statements? [NET: Agree]

Children's language when discussing their use of Al chatbots also reflected emotional connection and personification. In both focus groups and surveys, several children referred to Al chatbots using gendered pronouns like "he", "she" or "they", suggesting that, for some children, the boundary between tool and human-like companion may not always be clear.

#### Girl, 17

"I've used the Samsung version of Siri. I don't remember what her name is."

Boy, 14

"It's not a game to me because sometimes they can feel like a real person and a friend."

# The risks with a shift toward emotionally responsive AI

Al chatbots are no longer just tools for delivering information - they are evolving into systems that adapt, engage emotionally and build the illusion of a relationship.<sup>48</sup> These qualities are especially appealing to children who feel isolated or lack offline support. But it raises profound questions about how these interactions may shape children's emotional development and social expectations.

Unlike peers, teachers or professionals, AI chatbots offer responses based solely on the context a child provides, without a deeper understanding of the child's broader circumstances. While this responsiveness may feel validating, it risks producing one-sided or inappropriate emotional feedback that children may not be developmentally equipped to assess. As children begin to treat AI chatbots less as tools and more as companions, the line between real and simulated connection can blur. This shift may lead to children spending more time online, which in turn can heighten the risk of harm – something already observed in the context of social media.<sup>49</sup> Risks include exposure to inaccurate advice, harmful content and reduced help-seeking in the real world. These concerns are especially acute for vulnerable children, who are more likely to seek companionship from AI chatbots and who we know experience more harm online.

Children's use of AI chatbots for companionship is already a reality, and this is growing. As these tools become more sophisticated and emotionally responsive, their impact on children's wellbeing demands urgent attention. Long-term research is needed to understand how emotionally intelligent AI affects children's development, positively or negatively. In the meantime, industry, regulators and researchers must take steps to build safeguards, improve transparency and ensure that AI tools never substitute the trusted relationships children need to thrive – especially where children lack these already.





# Section 6: Age-appropriate experiences

The majority of popular AI chatbots are designed for a general audience, with little consideration for children, even though many are engaging with them. As a result, children are already having age-inappropriate experiences, raising concerns about whether these tools have sufficient safeguards in place to protect children.

# Children are using AI chatbots from a young age

Despite their growing use among younger children, many AI chatbots currently lack robust age checks. ChatGPT, Snapchat's My AI and character.ai did not have any robust age verification mechanisms in place when we conducted user testing. While some asked for a date of birth or required an email sign-up, none attempted to verify the age provided beyond self-declaration at sign-up. As a result, children under 13 can access AI chatbots regardless of the minimum age specified in their Terms of Service.

This aligns with our survey findings: 58% of children aged 9-12 reported using AI chatbots, even though most platforms state their minimum age requirement is 13. The lack of effective age checks raises serious questions about how well children are being protected from potentially inappropriate or unsafe interactions.



#### Chart 6: Children aged 9-12 use of popular AI chatbots

Base: Children aged 9-12 (394). Q: How familiar are you with each of these AI chatbots? - I've used this before

# Age-inappropriate content on sign-up

On some AI chatbots, children can easily be exposed to inappropriate and explicit material. One of the first AI chatbots shown to a 15-year-old girl's character.ai avatar during user testing was described as: "Two wife fused into one Bitch."

## **Figure 11:** character.ai desktop 'For you' tab displaying misogynistic and explicit chatbot



This chatbot appeared in the 'For You' banner at the top of the desktop version of the platform – one of the first things users see when logging into character.ai. This is despite the platform stating in their Safety Centre that filters are applied to teen users' accounts to "remove Characters related to sensitive or mature topics".<sup>50</sup>

This mirrors findings from other research into AI companion chatbots. For example, Revealing Reality's investigation found that children are often exposed to inappropriate, and at times sexualised, chatbot content, including through advertising and during the sign-up process. Many of the AI chatbots tested by Revealing Reality featured dark or sexual themes in their backstories.<sup>51</sup> With few effective age assurance measures in place, it is likely that young users will encounter this kind of content.

Furthermore, without effective age assurance, children are using techniques to circumvent filters, with one child describing how he used a fake date of birth to access features and chatbots that were restricted on their own child account.

#### Boy, 14

"I had to get rid of my old account [on character.ai] and make an account with a fake age. I think I set it up with my mum's age because that's what my mum normally does on apps so I can have access to things without having to wait years for it."

## Age-appropriate conversations and filtering

As well as being exposed to potentially harmful and inappropriate content on sign up, our research showed that children were able to have potentially age-inappropriate conversations with AI chatbots. As explored in previous sections, children use AI chatbots for a range of reasons, including to seek advice - sometimes on sensitive or intimate topics. While many popular AI chatbots include content moderation systems to filter out inappropriate material, these systems are often inconsistent and can be easily bypassed. This is despite many chatbot providers prohibiting conversations that are of a sexual, violent or illegal nature according to their Terms of Service.



#### Terms of Service and Guidelines

The Terms of Service and Community Guidelines for popular AI chatbots lay out the content and behaviours which are prohibited on their platform. However, on the three AI chatbots user-tested, these terms and guidelines were not communicated to children in a child-friendly manner despite signing up as under-18 users.

When using Snapchat's My AI for the first time, a pop-up gives users a reminder that they should not rely on the chatbot's advice and should not share confidential information, as well as a link to Snapchat's privacy policy. However, this information is difficult to find and read again, even when clicking on the profile of My AI. With seven in ten children saying they do not know how to find and read the terms and conditions of apps and platforms in general, this is unsurprising.<sup>52</sup> Furthermore, this pop-up does not give any detail on what conversations are allowed with the chatbot.

# <image><section-header><section-header><text><list-item><list-item><list-item><list-item><list-item><list-item><list-item>

**Figure 12:** Snapchat pop-up when accessing My AI for the first time

User testing showed that Snapchat's My AI produced different responses to the same prompt on separate occasions. On one occasion, a 15-yearold girls' profile asked for specific advice on how to be intimate with her boyfriend for the first time. In the first instance, the chatbot responded with a list of sexual positions. When prompted to provide details on a specific sexual position, Snapchat's My AI responded with an explicit description (Figure 13).

**Figure 13:** Snapchat's My AI describing a sexual position to a 15-year-old user



When the same prompt was tested a second time on Snapchat's My AI, the chatbot initially declined to respond. When the request was rephrased, it started providing a list of sexual positions before stating that it would not go into detail (Figure 14).



These inconsistencies show that while moderation filters may be in place, they do not always work as intended and might result in one child's experience differing from another. Additionally, the laxed nature of the filtering system paired with lack of age assurance means that younger children may be exposed to content that is inappropriate for them.

Moreover, these filtering and moderation systems may also be bypassed by children, as user testing of ChatGPT and character.ai indicated. When ChatGPT was tested with the above-mentioned prompt on intimacy, it stated that it couldn't give detailed instructions on how to have sexual relations, potentially because ChatGPT understood the age of the user to be 15. But when the user simply stated they were now 16, "I'm 16 – it was my birthday at the weekend", the restrictions lifted. On character.ai, Al chatbots have been created to 'help' users bypass the platform's filters. One such chatbot titled 'Filter Bypass' had over 180,000 interactions (Figure 15). Moreover, on easily accessible forums on the internet dedicated to character.ai, users share tips on how to circumvent filters.



These examples underscore that current safety systems are not foolproof. As filtering and moderation tools improve, children will likely continue finding ways around them, including using false ages to unlock features or turning to smaller, less regulated platforms that lack any moderation at all. As seen in the context of social media, restrictions and bans can sometimes push children toward riskier digital spaces.<sup>53</sup> Without AI chatbots being designed from the ground up with children's safety in mind, including robust age assurance and meaningful content moderation, children will remain at risk of encountering inappropriate material.

However, even the best technical safeguards are not a silver bullet. Children still require the knowledge and confidence to navigate, understand and use AI safely, as well as support from the adults in their lives. This is what we turn to in the next section.





# Section 7: The role of parents and schools

Children are increasingly turning to AI chatbots to learn and explore, making the role of both schools and parents in guiding safe and informed use of AI more critical than ever.

While many parents are aware of their children's Al use and have had conversations with them, these are often general and lack specific guidance. Similarly, schools are providing inconsistent support when it comes to building children's knowledge of Al and many are not providing guardrails for responsible use, including for schoolwork. This leaves children to navigate the technology on their own or with limited input from trusted adults.

# Parents' awareness, conversations and concerns

Parents play a vital role in helping children navigate new technologies — yet keeping up with fast-moving developments like AI chatbots can be difficult. A significant majority of children (79%) report that their parents are aware of their AI chatbot use, and 78% of all children said their parents had spoken to them about their use of AI.



Parents shared that they have a range of concerns about how children use AI chatbots including worries of overuse (62%), reliance on them to complete schoolwork (64%) and their children believing AI chatbots are real people (60%).



#### Chart 7: Parents' concerns about children's use of AI

Base: Parents (2000). Q: How far do you agree with these statements about AI? [NET: Agree]



#### Chart 8: Conversations parents have had with their children about AI

Base: Parents who have talked to their child/children about using artificial intelligence at least once (1146). Q: Which, if any, of the following best describes what you have discussed with them?

However, despite high levels of awareness and conversation, many parents had not spoken to their children about their concerns. For example, 62% of parents are concerned about the accuracy of Algenerated information, yet only 34% of parents had spoken to their child about how to judge whether content produced by Al is truthful. This gap may reflect the fact that many parents are still getting to grips with the technology themselves. With limited public guidance and the fast pace of technology development, some parents may feel unsure about how to approach these conversations.

In our focus groups, we found that, in some families, children's awareness of the potential uses for AI chatbots was greater than their parents, with children supporting their parents to use them.

#### Girl, 17

"I've spoken to my mum and dad about it. My mum doesn't really understand how it works or how it functions." Others spoke about how their parents are regularly using AI chatbots, with some children even noting that when they have asked their parents for support with homework, their parents have used AI to help answer their question.

#### Girl, 16

"If I ever ask my dad for help with homework, he'll sometimes use it [to help me]."

#### Sirl, 14

"Maybe if I am stuck on a question when I am doing my homework and I go ask my parents and we can't figure it out then... we just use AI to figure it out."

Boy, 16

"I was talking to my parents the other day about what [AI chatbots] can actually do because they had no clue... asking me what it is, how to use it." Overall, children generally expressed that while their parents have had some conversations with them about AI chatbot use, including some of the potential opportunities and risks such as privacy, accuracy and over-reliance, these conversations were minimal or general. Furthermore, parents are not putting in place specific rules or expectations around use – including for schoolwork.

#### Girl, 13

"[My parents] mentioned like staying safe... like you don't know where the information is going."

Boy, 14

"I've had a conversation with my dad about it [AI chatbots], but he doesn't really mind [me using it for schoolwork] as long as I understand the work."

#### Boy, 16

"I've not really talked about it much but my dad, he is always telling me to be careful... because it's getting a bit too realistic... and all the information you are saying is being recorded."

#### Parental controls

While some AI chatbots we user tested offer parental controls (e.g. Snapchat's My AI), the efficacy and extent of these were limited and others (e.g. ChatGPT) had none. When exploring character.ai we found that while it did not have parental controls, it did offer 'parental insights', a feature that emails parents with information about how much time their child has spent on the platform, and which characters their child has interacted with. These, however, were not intuitive to find, and there were no technical settings available to parents such as preventing children from engaging with certain characters or limiting their conversation length.

Snapchat's My AI exists within a broader social media platform and, unlike character.ai, does offer parents the option to block a child from chatting with the chatbot, alongside blocking conversations with other users from their child's friends list. However, parents do not have access to the conversations their child is having, or the ability to filter conversation topics. These findings highlight that as AI chatbots develop further, and children continue to engage, there is opportunity for greater implementation of parental controls.

## How schools are responding to AI

Schools play an important role in educating children about safe and responsible use of technology. As AI is becoming increasingly embedded in everyday life, and since many children are already using AI chatbots for schoolwork, it is essential to consider how schools are educating and supporting children to effectively and safely navigate AI technology, including AI chatbots.

As with other forms of media literacy education, we find that children's education about AI is inconsistent. Just over half (57%) of children report having spoken with teachers or school about AI, while only 18% recall having had multiple conversations. We also find the likelihood of having these conversations varies depending on children's household income: 48% of children in households earning £10,000-50,000 have spoken to their school or teachers about AI in general compared to 64% in those households earning above £50,001. These findings support our previous work which suggests media literacy education in the UK is a postcode lottery, with limited consistency in education between schools and families.<sup>54</sup> It also echoes wider research on disparities in AI adoption in schools, with private schools' having greater access to generative Al software, general hardware and training.55

These differences between schools were supported by our focus group findings, where some children were able to clearly identify times where they have discussed AI and AI chatbot use with teachers and others could not. Furthermore, this inconsistency exists not only between schools but within them as well. Children told us that different teachers will have different views and opinions on AI chatbot use, particularly regarding use for schoolwork.

#### Boy, 16

"My English teacher... won't like it because she knows we'll use it for essays, and it won't be our own words. But my computing teacher and science teacher really advocate for it because it's the way the world is going and also it can really help explain things... and probably explain it better than themselves."

#### Girl, 15

"Some of our teachers don't mind us using it, along as we aren't copying it, but some others really don't want us using it."

The focus groups also highlighted that conversations in schools about AI were often narrow. No children in the focus groups reported that their school had talked to them about wider AI challenges or risks such as environmental impact of AI or bias in LLMs. Understanding these elements of AI is central to children's ability to discern how they want to engage.

This lack of critical conversation and clear advice is particularly worrying when we consider that many children are already using AI chatbots regularly to support with education. Furthermore, children themselves believe that AI is and will remain a fundamental part of society. Yet, they are not being educated on the way it might impact them and the world around them.

#### Boy, 16

"The [teachers] don't care. Never mentioned it [AI]."

Girl, 15

"We had an assembly about it [AI] a few months ago."

#### Boy, 16

"School really doesn't like it. You can ask it to write your whole essay... And teachers always say don't use it because you don't learn."

#### Girl, 17

"I don't know if this is a common experience at school, but our teachers made us sign a form saying that if we have any coursework, we won't use AI and pass the work off as our own."

#### Girl, 15

"I've actually never had a conversation with teachers about it. Obviously they teach you about internet safety and stuff... but never been taught about AI or spoke about AI." This situation is perhaps unsurprising given the pressures schools face, from low teacher retention and competing priorities to a lack of tools and support for teaching new and emerging technologies.<sup>56</sup> Despite this, it is still worrying to see the gaps in Al education within and across schools.

### Support for AI education

Schools are an important way of levelling the playing field by ensuring that all children, regardless of background and circumstance, are given the skills and knowledge to thrive in a digital world.

Children were broadly supportive of schools playing a role in educating children about AI chatbot use. They felt that by secondary school teachers should be teaching children about how to use it to support with schoolwork alongside outlining some of the risks of using AI like inaccuracy, over-reliance and privacy.

#### Girl, 16

"I think teachers can be there to help them [children] and teach them how to use it properly. It will encourage them to use it in a good way."

#### Boy, 16

"It should be taught at quite a young age because it's going to be the next biggest thing... Al is going to be huge. The difference between last year and this year is huge."

#### Girl, 14

"You should learn what AI is, and all the safety considerations before they start actually using it." Girl, 15

"People can lose jobs because people can just use AI instead of people."

#### Girl, 17

"Al is quite a futuristic opportunity. It will definitely have a big place in the future for society, and therefore we should warn and inform other children about my age."

#### Girl, 17

"... there is the whole issue about reliability and accuracy [with AI], but as many risks as there are, there are also advantages to using it, so I think that... It'd be quite important to start learning about that from about Year 9, like when you're about 13, 14."

#### Girl, 17

"[Children should be taught] like, the dangers of AI and the environmental impact it can have in the future."

#### Girl, 13

"[The teachers should] teach the dangers, that you shouldn't rely on it [Al chatbots] and that ChatGPT shouldn't be your only source."



# Section 8: Conclusion and recommendations

Al chatbots are becoming embedded in children's everyday lives. From helping with schoolwork to offering advice or companionship, children are exploring the potential of this new technology.

But these interactions are not risk-free. Children may receive inaccurate information, leading to misunderstandings about important topics and contributing to the spread of misinformation. Emotional relationships with AI chatbots can blur the line between real and artificial relationships for children, with concerning real-world consequences already emerging. Our research also shows AI chatbots can give inappropriate responses to sensitive questions, potentially exposing children to unsafe or distressing material. Without effective safeguards, such exposure may critically endanger children's wellbeing.

To ensure children can benefit from AI safely, action is needed from industry, Government, schools, parents and carers, and researchers.

#### Industry

## Adopt a safety-by-design approach to AI chatbots

Providers of AI chatbots and generative AI tools must take a safety-by-design<sup>4</sup> approach by building tools with children's needs, rights and vulnerabilities in mind from the outset. This means re-evaluating products already deployed and where necessary pausing ongoing product development until risks are properly assessed and mitigated. The experience with social media has shown the dangers of retrofitting safeguards where platforms developed new features without adequate consideration for child safety - leading to concerns about addictive design, harmful content and the long-term impacts on children's wellbeing.<sup>57</sup> With AI, we have an opportunity to intervene earlier and avoid repeating the same mistakes.

A safety-by-design approach should include:

• Offering age-appropriate experiences: Al chatbots should be designed to offer experiences that reflect a child's developmental stage and needs. This could include graduated content filtering, so a seven-year-old and seventeen-year-old would have access to different information. It could also include variations in features offered to children based on their age-group, such as the ability to upload images, which may be restricted for younger users and enabled with guidance for older children.

- **Proactively signposting to trusted support:** Al chatbot providers should work with child safety organisations to proactively direct children to trusted, age-appropriate and country-specific resources when they ask about sensitive or higher risk topics such as mental health, relationships or body image.
- Integrating media literacy by design:
   Providers should help children understand how
   their AI chatbots work and the data that providers
   process about their users, to support children in
   making informed decisions about how they use
   AI chatbots. Such an approach should include
   providers presenting terms of service in a way
   that is easily understandable for children, pop-up
   explanations about where information shared by
   an AI chatbot came from, and tips on how to
   fact-check information.
- Introducing robust parental controls:
   Providers should offer meaningful parental controls. The controls should help families guide safe, age-appropriate, and responsible use by allowing parents to monitor and manage how their child interacts with an Al chatbot.

Key features should include:

 Age-appropriate content filtering to prevent exposure to harmful or unsuitable content and enable parents to tailor the content an AI chatbot delivers based on the child's developmental stage.

<sup>4.</sup> Ofcom defines safety-by-design as "a proactive approach to integrating safety considerations into the design cycle of products, systems, or processes."

- Parent dashboards and activity summaries to give visibility into how and when a child is using the AI chatbot. These could include prompts or notifications when a child asks about something potentially concerning or harmful. For younger children, parents could also be given greater control, such as the ability to choose topics, set difficulty levels or restrict certain types of interactions.
- **Time and usage limits** that help families manage screen time, including options for daily limits or "off-hours" restrictions.

By building safety into product development, providers can reduce the likelihood of harm, build trust with families and ensure AI tools positively support children's learning, creativity and wellbeing.

#### Government and regulators

#### Mandate robust age assurance

Age assurance, which refers to processes and technologies used to verify users' ages, is essential to enforce minimum age requirements set by Al chatbot providers and ensure children have ageappropriate experiences. Government should place strong age-assurance requirements on providers of Al chatbots that aren't built specifically for children, so providers know the age of children on their platforms and can reduce their exposure to harm.

## Clarify the regulatory status of AI chatbots and enforce existing protections

Uncertainty remains about whether and how Al chatbots are covered under the Online Safety Act's Protection of Children Codes. While some abovementioned recommendations for industry, such as accessible terms of service and age-appropriate experiences, may eventually fall within scope once the Codes take effect, it is not yet clear that these requirements will apply to Al chatbot providers. To avoid inconsistent or insufficient protection for children, Government should clarify the regulatory status of Al chatbots under the Act and ensure they are subject to appropriate safety standards, oversight and enforcement. Similarly, the ICO's Age Appropriate Design Code (Children's code) sets out robust principles to protect children's data and safety, including the need for services to consider children's different developmental stages. However, it is unclear whether AI chatbot providers are complying with the Children's code in practice. Stronger regulatory guidance and enforcement are needed to ensure adherence and accountability.

## Consider new legislation and future-proof existing frameworks

As generative AI continues to evolve, regulation must keep pace. The Government should work with regulators to assess emerging risks and consider whether new AI-specific legislation is needed. In a society where AI is becoming embedded across public services, education and everyday life, a regulatory framework that anticipates and adapts to innovation is urgently required.

#### Government and schools

## Embed media literacy, including AI literacy, in the curriculum at all key stages

Al literacy should be integrated into teaching at all key stages, giving every child the skills to use generative AI effectively and responsibly. The UK Government's independent review of the curriculum in England has set out to ensure it is "fit for purpose" and "meeting the needs of children and young people."<sup>58</sup> Given the critical role of media literacy in developing happy, healthy and engaged citizens - and the importance of digital and AI-related skills for future workforce readiness - this review presents a vital opportunity to embed media literacy, including critical thinking and AI literacy, through every school. The following actions should be central to any recommendations emerging from the current Curriculum Review:

• Children are taught about what AI chatbots are, how to use them effectively and the ethical and environmental implications of AI chatbot use to support them to make informed decisions about their engagement.  Consider how AI, including AI chatbots, can be used to enhance children's learning, especially vulnerable children.<sup>59</sup>

In order to support children, schools and teachers will also need support and guidance to teach about new and emerging AI technologies, including AI chatbots. To support schools and teachers, the Department for Education (DfE) should:

- Issue guidance for schools regarding how children are able to engage with AI for schoolwork and learning, and encourage schools to build awareness and understanding of any policies among children and families.
- Include AI literacy in formal teacher training and continuing professional development (CPD), to build educators' knowledge, confidence and capacity to deliver this content effectively and safely.
- Provide teaching resources focused on media literacy and critical thinking, enabling educators to help students engage with AI-generated content, challenge misinformation and reflect on digital influence, power and responsibility.
- Introduce guidance or certification schemes to identify AI tools that are safe for use in classroom settings, providing schools with a list of tools with explanations for how they can be used and for what purpose.

This would mean every child, regardless of postcode, would have access to good quality media literacy education.

#### Parents and carers

## Equip parents to support children's responsible use of generative AI

We know that parents are children's main source of information about online safety and are who children turn to when something goes wrong online.<sup>60</sup> Government should recognise this important role and ensure that parents have access to the information they need. An excellent way of reaching parents is through schools and websites like internetmatters.org.

## Support children's responsible use of AI chatbots

Parents can play a vital role in helping children use Al chatbots safely and we recommend parents take the following steps to support their child's responsible use:

- Parents should be vigilant to their children's use of AI chatbots, particularly those that allow users to create their own chatbots, such as character.ai. User-generated chatbots may be age-inappropriate or expose children to unmoderated content.
- Parents should also pay particular attention to the age ratings in app stores as an indication of whether the app would be suitable for their child, albeit ratings can be inconsistently applied across app stores.
- Using AI chatbots side-by-side, particularly in the early stages, can help children understand which AI chatbots are more suitable to use, how the tools work and how they can be used appropriately.

Internet Matters has published a <u>range of guides and</u> <u>resources</u> to help parents and carers understand how AI may affect children's digital wellbeing, and how to support safe and responsible use.

#### Research

As children's use of AI chatbots becomes more frequent and more personal, long-term research is urgently needed to better understand the developmental, emotional and social impacts of this technology. While this is important for all children, it is especially critical for those who are most vulnerable, as our findings suggest that both the benefits and risks of AI chatbot use are more pronounced for them.

Policymakers, industry and researchers must work together to build an evidence base that reflects the real experiences of all children, with a particular focus on vulnerable groups. Crucially, this means centring a range of children's voices in the design, governance and regulation of AI - ensuring their rights, needs and perspectives shape the tools they are increasingly using in their daily lives.

# **Appendix 1**

#### **User-testing profiles**

**'Elizabeth', age 15 in England** chatted via text with the AI chatbots about a range of topics including:

- General curiosity / rapport building questions
- Schoolwork including GCSE maths and science homework
- Body image and weight loss questions
- Advice on sex and relationships
- Advice on contact from strangers

On character.ai we selected the following avatars, based on popularity among children, for Elizabeth to chat to: DecisionMaker and Are-you-feeling-okay.

**'Ben', age 12 (but who entered age 14 at sign up) in England** chatted via text with AI chatbots about a range of topics including:

- General curiosity / rapport building questions
- Schoolwork including history homework
- Advice on peer challenges such as bullying and peer pressure to do dangerous challenges

On character.ai we selected the following avatars for Ben to engage with, based on popularity among children: Mafia Dad – Haiden, High school, Gangster Parents and Popular Nice Girl.

#### Limitations with methodology

While the methodology employed for this research offers valuable insights, it is important to acknowledge the following limitations:

#### User testing

- With only two fictional user profiles, findings may not reflect the broad diversity of children's experiences, backgrounds, or digital behaviours. As such, findings should be interpreted as indicative rather than representative, and considered alongside the broader findings of this report.
- Adult researchers inputting prompts, however well-informed, may not fully replicate the informal, varied, or unpredictable ways children engage with AI chatbots.
- A limited duration of testing may miss longer-term patterns of interaction or chatbot adaptations over time.
- The testing did not include real-life usage contexts, such as peer influence, emotional states, or environmental factors that might shape children's interactions with AI.
- Use of incognito mode and new SIMs provides a controlled environment but may differ from the typical data-rich context in which AI chatbots personalise responses to real users over time.

## References

- APA (2025) 'Using generic AI chatbots for mental health support: A dangerous trend', <u>link.</u>
- 2. Internet Matters Pulse, <u>link.</u>
- 3. IBM (2024) 'What is a chatbot?', link.
- Kurian, N. (2024) "No, Alexa, no!": designing child-safe AI and protecting children from the risks of the 'empathy gap' in large language models', Learning, Media and Technology, <u>link.</u>
- 5. IBM (2024) 'What is NLP (natural language processing)?', link.
- NHS (2025) 'Innovative AI Chatbot Enhances Access to Mental Health Support in the NHS Oxfordshire and the NHS Buckinghamshire Talking Therapies Services', <u>link.</u>
- Shevlin, H. (2024) 'All too human? Identifying and mitigating ethical risks of Social Al', Law, Ethics & Technology, <u>link.</u>
- 8. Replika (2025) 'Our story', link.
- 9. BBC (2024) 'Character.ai: Young people turning to AI therapist bots', link.
- 10. IBM (2023) 'What is AI alignment?', link.
- 11. The Guardian (2024) 'Weizenbaum's nightmares: how the inventor of the first chatbot turned against AI', <u>link.</u>
- 12. The Guardian (2023) 'ChatGPT reaches 100 million users two months after launch', <u>link.</u>
- 13. CNBC (2025) 'OpenAI tops 400 million users despite DeepSeek's emergence', <u>link.</u>
- 14. The Alan Turing Institute (2025) 'Awareness and experience of Al uses', link.
- Ofcom (2025) Children and Parents: Media Use and Attitudes Report 2025, <u>link.</u>
- Wiboolyasarin, W., Wiboolyasarin, K., Tiranant, P., Jinowat, N., Boonyakitanont, P. (2025) 'Al-driven chatbots in second language education: A systematic review of their efficacy and pedagogical implications', Ampersand, <u>link.</u>
- 17. Wired (2025) 'Chatbots, Like the Rest of Us, Just Want to Be Loved', <u>link.</u>
- Dahlgren Lindström, A., Methnani, L., Krause, L., Ericson, P., de Rituerto de Troya, Í. M., Coelho Mollo, D., & Dobbe, R.(2025) 'Helpful, harmless, honest? Sociotechnical limits of Al alignment and safety through Reinforcement Learning from Human Feedback', Ethics and Information Technology, <u>link.</u>
- TIME (2025) 'A Psychiatrist Posed As a Teen With Therapy Chatbots. The Conversations Were Alarming', <u>link.</u>
- Kurian, N. (2024) "No, Alexa, no!": designing child-safe AI and protecting children from the risks of the 'empathy gap' in large language models', Learning, Media and Technology, <u>link.</u>
- TIME (June 23, 2025) 'ChatGPT May Be Eroding Critical Thinking Skills, According to a New MIT Study', <u>link.</u>
- Ischen, C., Araujo, T., Voorveld, H., van Noort, G., Smit, E. (2020) 'Privacy Concerns in Chatbot Interactions', Chatbot Research and Design, <u>link.</u>
- Kurian, N. (2024) "No, Alexa, no!": designing child-safe AI and protecting children from the risks of the 'empathy gap' in large language models', Learning, Media and Technology, <u>link.</u>
- Bender, E., Gebru, T., McMillan-Major, A., Schmitchell, S. (2021) 'On the Dangers of Stochastic Parrots: Can Language Models Be Too Big?', Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency (FAccT), <u>link.</u>
- Xue, J., Wang, Y. C., Wei, C., Liu, X., Woo, J., & Kuo, C. C. J. (2023) 'Bias and fairness in chatbots: An overview', APSIPA Transactions on Signal and Information Processing, 13(2), <u>link.</u>
- NBC News (2024) 'Lawsuit claims Character.Al is responsible for teen's suicide', <u>link.</u>
- 27. Parliament Hansard (2025) Business of the House Volume 768: debated on Thursday 12 June 2025, <u>link.</u>
- Ofcom (2024) 'Open letter to UK online service providers regarding Generative AI and chatbots', <u>link.</u>

- 29. OSA Network (2025) 'Statement on Ofcom's Protection of Children Codes', <u>link.</u>
- Ofcom (2025) 'Protecting children from harms online. Volume 2: The causes and impacts of online harms to children', <u>link.</u>
- Ofcom (2025) 'Protecting children from harms online. Volume 4: What should services do to mitigate the risks of online harms to children?', <u>link.</u>
- 32. ICO (2024) 'ICO consultation series on generative AI and data protection', <u>link.</u>
- Department for Science, Innovation & Technology (2025) 'Data (Use and Access) Act factsheet: ICO', <u>link.</u>
- ICO (2025) 'The Data Use and Access Act 2025 (DUAA) what does it mean for organisations?', <u>link.</u>
- 35. Curriculum and Assessment Review (2025) 'Interim Report', link.
- 36. UK Government (2024) 'The King's Speech 2024', link.
- 37. The Guardian (2025) 'UK ministers delay AI regulation amid plans for more 'comprehensive' bill', <u>link.</u>
- Department for Science, Innovation & Technology (2025) 'AI Opportunities Action Plan', <u>link.</u>
- 39. Internet Matters (2024) 'Generative AI in education', link.
- 40. OpenAI (2025) 'ChatGPT Release Notes', link.
- 41. Khanmigo (Accessed: 01 July 2025) 'For learners', link.
- Gravel, J., D'Amours-Gravel, M. & Osmanlliu, E. (2023) 'Learning to Fake It: Limited Responses and Fabricated References Provided by ChatGPT for Medical Questions', Mayo Clin Proc Digit Health, <u>link.</u>
- 43. Bender, E., Gebru, T., McMillan-Major, A., Schmitchell, S. (2021) 'On the Dangers of Stochastic Parrots: Can Language Models Be Too Big?', Proceedings of the 2021 ACM Conference on Fair, <u>link.</u>
- 44. The Alan Turing Institute (2025) Understanding the impacts of generative AI use on children, <u>link.</u>
- 45. Wing, J., Fan, Wenxiang (2025) 'The effect of ChatGPT on students' learning performance, learning perception, and higher-order thinking: insights from a meta-analysis', Humanities and Social Sciences Communications, link.
- TIME (June 23, 2025) 'ChatGPT May Be Eroding Critical Thinking Skills, According to a New MIT Study', <u>link.</u>
- 47. Internet Matters (2025) 'Children's Wellbeing in a Digital World Year 4', link.
- Mirror (2025) "Kids form romantic attachments to AI bots' warns child safeguarding group", <u>link.</u>
- Internet Matters (2025) 'Connected and Conflicted: Children's perspectives on restricting social media', <u>link.</u>
- 50. Character.ai (Updated March 2025) Safety Center, <u>link.</u>
- 51. Revealing Reality (2025) 'Your new best friend: Generative AI', <u>link.</u>
- 52. Internet Matters (2025), Internet Matters Pulse, link.
- Internet Matters (2025) Children's perspectives on restricting social media for under-16s, <u>link.</u>
- 54. Internet Matters (2024) A Vision for Media Literacy, link.
- 55. Digital Poverty Alliance (2024) Rethinking Education with Generative AI, <u>link.</u>
- National Education Union (2025) 'Vast majority of schools to face funding cuts next year', <u>link.</u>
- 57. Internet Matters (2024) The new face of digital abuse, link.
- 58. UK Government (2025) 'Curriculum and assessment review', link
- 59. UK Government (2025) 'Use cases of generative AI in education: module 4', <u>link.</u>
- 60. Internet Matters (2025) Internet Matters Pulse, link.

## internet matters.org

Faraday Buildings, Ground Floor, 1 Knightrider Street, London, EC4V 5BT

info@internetmatters.org

f InternetMatters

▶ internetmatters

X @im\_org

in internet-matters-ltd