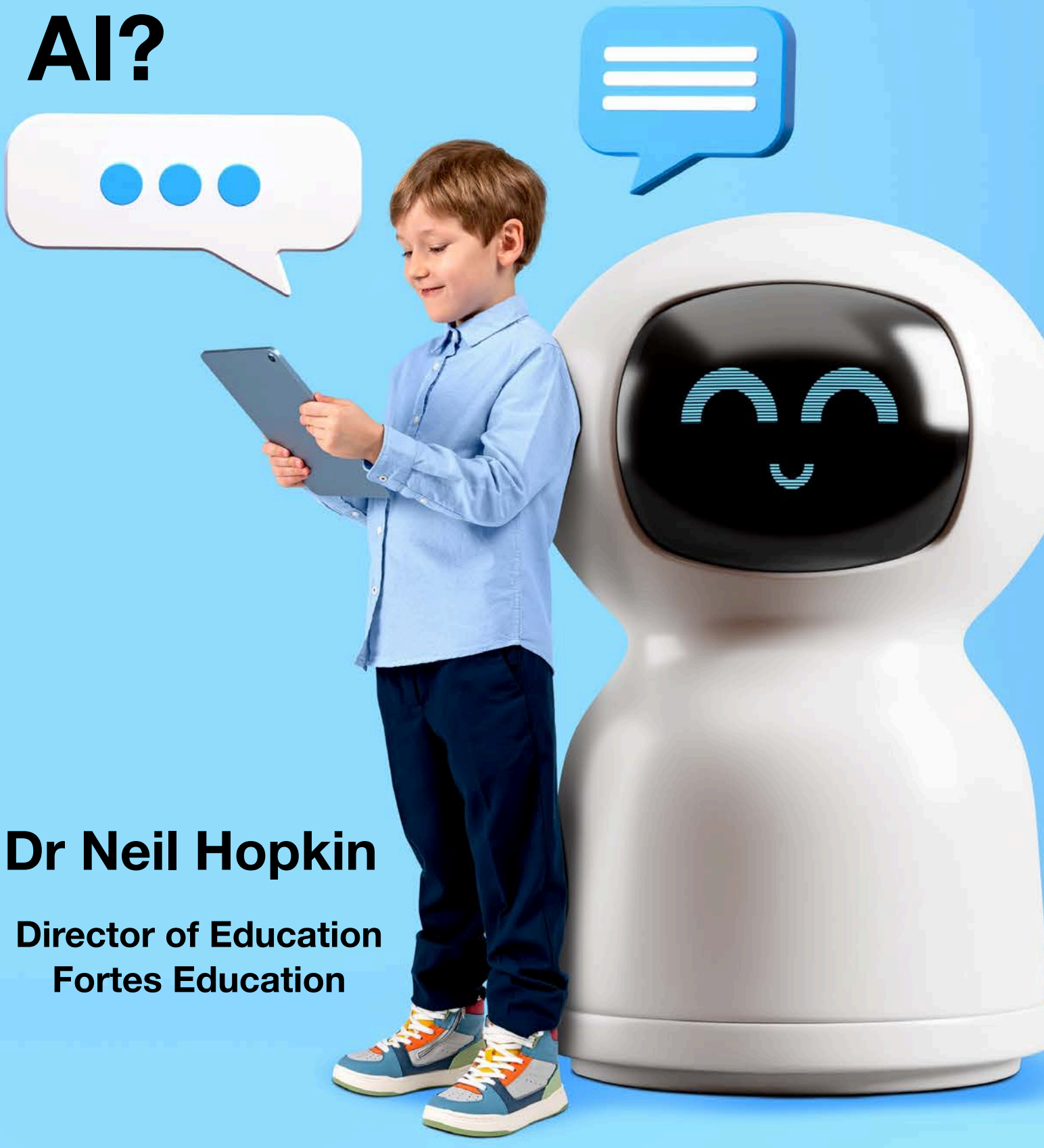
What do children *really* think about AI?



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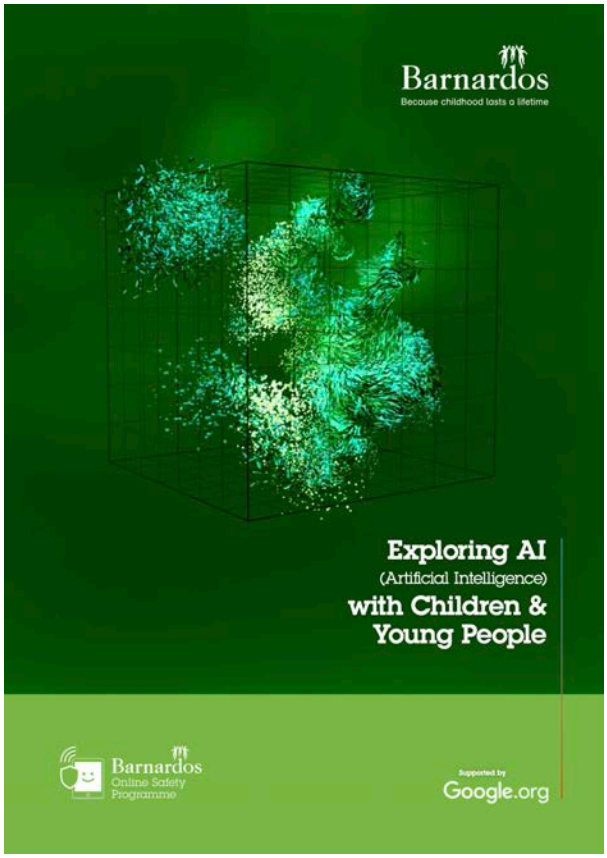
Introduction



The digital revolution has swept into every corner of our lives, and no group has felt its gravitational pull more keenly than the young. Children today move through digital landscapes with an ease that sometimes leaves their parents marvelling, sometimes worrying, and always wondering: what's the impact? Barnardo's 2024 report offers a window into this question, revealing how the rise of artificial intelligence has woven itself into the daily fabric of young lives. The report highlights both wonder and wariness in children's views on AI, a curious duality that captures our contemporary ambivalence about technology itself (Barnardo's, 2024).

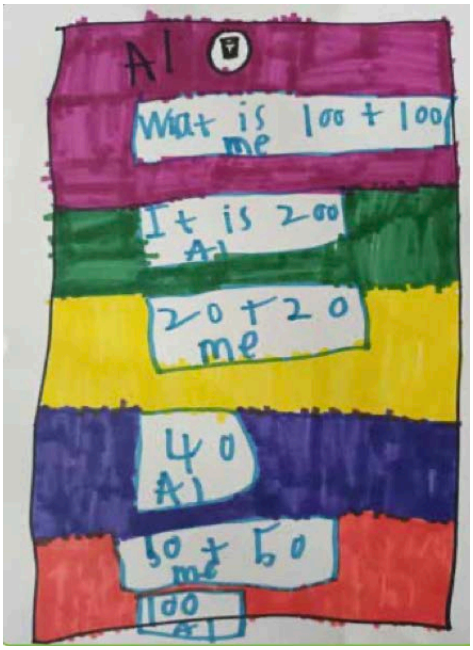
The AI that young people encounter is often benevolent – a tool for answering questions, helping with homework, and making life just that little bit easier. But it's also a black box, a quietly humming mystery that hints at something larger, more pervasive, and perhaps less benign. This duality is perfectly encapsulated in the words of an 11-year-old girl quoted in the report, who describes AI as "very smart and useful…but also has its bad sides" (Barnardo's, 2024). That child's intuition – that technology can be both a friend and a threat – might well serve as the philosophical backbone for understanding AI in education.

The promise of AI in the classroom is deeply compelling, and if done thoughtfully, could offer a level of personalisation previously reserved for private tutoring. But the challenges are equally profound, reaching into realms of privacy, agency, and even ethics. Sherry Turkle (2021) highlights that children's early relationships with technology are foundational, setting a tone for their digital interactions later in life. AI may shape not only what children learn but how they understand themselves in relation to a world where boundaries between human and machine continue to blur.

In the world of digital education, the spectre of surveillance looms large. Shoshana Zuboff's work on surveillance capitalism (2020) illuminates the inherent risks when data becomes a commodity. To her, the technologies quietly shaping our children's experiences may also be harvesting their personal information in ways that most young users – and indeed their parents – cannot fathom. In the classroom, this translates to a fragile ecosystem where trust is paramount but often unspoken, and where the delicate balance between surveillance and learning could easily tip. Barnardo's findings reveal that 82% of children and young people believe that their parents or teachers don't know enough about AI to guide them effectively, which raises critical questions about who should – and will – stand as the gatekeepers to their digital experience (Barnardo's, 2024).

Despite these challenges, AI's allure remains strong. Renée Hobbs (2022) reminds us that media literacy isn't merely an educational add-on but a survival skill in an age where misinformation runs rampant. AI is as much a solution as it is a potential liability; it can sift through oceans of information to highlight the relevant bits, making it easier for children to get to grips with challenging topics. Yet, the fact remains that without a solid foundation in digital discernment, children are left vulnerable to both misinformation and misunderstanding. With a growing need for critical thinking, Hobbs' emphasis on media literacy finds a surprising synergy with Barnardo's

recommendations: that schools must provide guidance, not just information, for a generation who have never known life without the internet.



For those looking in from the outside, AI's potential in education looks straightforward, even revolutionary. The software isn't just clever; it's tireless, unburdened by human biases, and capable of immense feats of personalisation – all traits that theoretically align with the needs of the modern classroom. But, as Linda Darling-Hammond (2021) notes, real education isn't simply about access to information; it's about the messy, often slow, process of learning. AI promises quick solutions, but as Jean Twenge (2020) and others argue, the psychological cost of that rapidity – the constant sense of "on-demand" responsiveness that young people are growing up with – may create expectations that learning is always smooth, efficient, and immediate. In this, Barnardo's insight is prescient: 52% of children surveyed said they "don't know" if AI will make the future better or not, hinting at a nascent ambivalence towards a technology that has already become part of their daily lives (Barnardo's, 2024).

Daniel Goleman's work on emotional intelligence (2021) reminds us that even the most advanced AI lacks empathy – a fundamental element of teaching. When AI enters the classroom, it brings a unique set of capacities but remains blind to the subtle signals teachers rely on – a child's sigh of frustration, the slumped shoulders of a student struggling to keep up. As Turkle (2021) points out, these human touches are irreplaceable, grounding learning in a relational space that AI cannot replicate. It's an observation that echoes Barnardo's call for AI use that enriches human connection rather than eroding it.

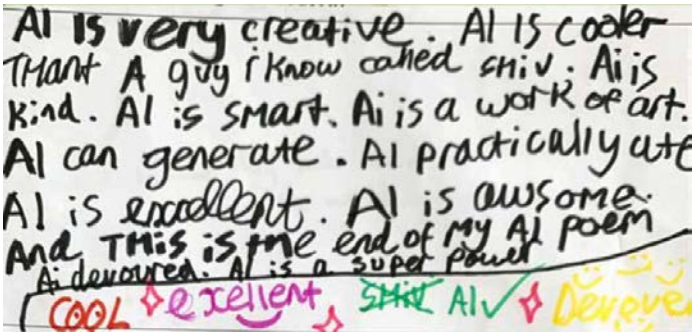
Amid the debate, Marc Prensky (2021) coined the term "digital natives" to describe a generation that takes technology as a given. But while this generation is digitally fluent, Howard Rheingold (2020) argues that they often lack the critical thinking skills required to navigate the digital landscape. The very familiarity young people have with AI may breed a false sense of security, a point underscored by Philippa Wraithmell (2023), who advocates for the strategic integration of AI as a support tool rather than a primary educator. As her work highlights, the challenge for educators is to ensure that technology remains an enhancer, not a replacement, for human teaching.

Williamson and Eynon's (2021) research further shows that trust in educational technology hinges on transparency and control. Without a framework that engages parents, teachers, and students in the discussion of how AI is used, trust erodes. This concern isn't hypothetical: Barnardo's survey found that 93% of parents expressed some level of concern about their children's use of AI (Barnardo's, 2024). For parents, AI is a double-edged sword, promising educational support but threatening to open up new risks – from data privacy to emotional disconnection. In this delicate equation, as Buchanan (2023) argues, trust must be actively cultivated, a process that includes continuous dialogue and engagement with all stakeholders.

AI can be revolutionary, but only if it aligns with the values that underpin education itself. Sugata Mitra's (2020) vision of self-directed learning imagines a world where children guide their own educational paths, aided by digital mentors. Yet, this vision requires careful scaffolding to ensure that children are truly equipped for independent learning, not simply left to wander the digital wilderness. It's an idealistic view, but one that resonates with Barnardo's recommendation for AI that supports exploration rather than control.

As we turn our attention to the intricate interplay between young learners and AI, it becomes clear that these technologies hold both promise and peril. This article will examine Barnardo's findings through the lens of the latest research on digital engagement, privacy, media literacy, and emotional intelligence, to ask: can AI be both a tool of learning and a guardian of young minds? It is a question that speaks to the heart of modern education, where technology is not simply an enhancement but a participant in the lives of those it serves.

Understanding and Demystifying AI for Young Learners

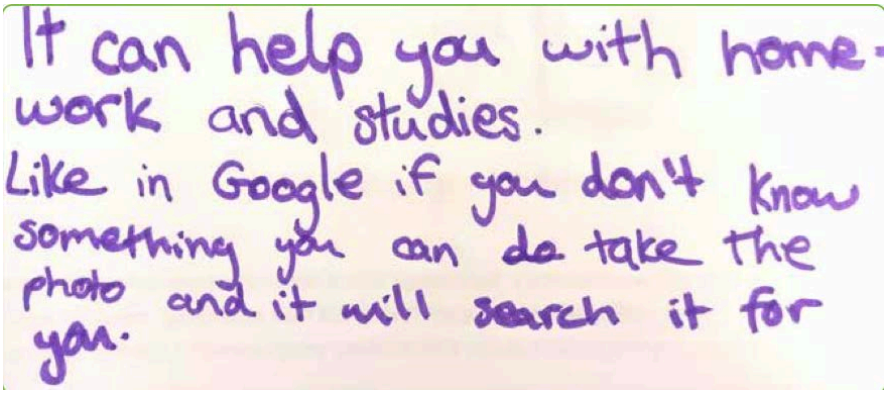


Children are born into a world where algorithms shape everything from the videos they watch to the ads they see, and yet AI, as the Barnardo's report so aptly captures, remains an enigma for most young people (Barnardo's, 2024). To them, artificial intelligence is something far removed, a peculiar entity with magical qualities that defies easy understanding. They know it's there, they feel its pull, but like ghosts in the machine, its true nature eludes them. Neil Selwyn (2021) would call this digital literacy in its most rudimentary form—awareness without understanding. But what if understanding could reshape the experience? What if children could engage with AI not as passive consumers, but as active participants in a digital symphony?

When we talk about demystifying AI, we're talking about bridging this profound gap between digital awareness and digital agency. Sonia Livingstone (2022) notes that children today are saturated with digital engagement yet often lack the guidance needed to decode these experiences. And so, Barnardo's report strikes at an essential truth: AI, for children, can feel like a riddle without answers, a part of their lives over which they have no control. Here, Seymour Papert's (1980) concept of "constructivist learning" resurfaces with new urgency. Papert argued that children learn best when they interact with technology in ways that are meaningful to them, crafting understanding through experience, not just explanation. In a world where AI is everywhere, his insight demands that we reframe our approach: technology must be a tool for exploration, not a mystic force hovering beyond comprehension.

David Buckingham (2019) suggests that media literacy—understanding what, how, and why digital media impacts us—is no longer an add-on but a necessity. To Buckingham, it's not enough for children to merely consume content; they need to grasp the workings of the media that mediates so much of their reality. Enter Allison Druin's (2021) work on designing technology for children, which suggests that when young people are given the tools to interact with and question technology, they gain agency. Druin's research supports what Barnardo's report calls for: AI education should not be about imbuing passive knowledge but about equipping children with the skills to engage critically, to peel back the layers, and perhaps even challenge what they see.

Consider Henry Jenkins' (2022) insights on participatory culture, which cast young people as not just consumers but creators. Jenkins sees the potential for a new kind of digital citizen—one who understands their place within the digital ecosystem and can shape it in return. This idea resonates strongly with the Barnardo's report, which identifies the pervasive feeling among children that AI "acts on" them rather than "with" them. Jenkins' view aligns perfectly with an educational model where AI is demystified through active participation, transforming the digital space from a place of consumption into one of creation.



And then, there's the question of what this kind of education looks like in practice. Kathleen Tyner (2020) and James Gee (2021) advocate for interactive learning—digital games, simulations, and storytelling that allow children to navigate complex systems. These are not just games; they are microcosms of the real world, offering children a controlled environment to explore, experiment, and understand cause and effect. Imagine AI not as an intimidating, faceless entity, but as a co-player, guiding children through these digital realms. Barnardo's report suggests that the gulf between children and AI is largely one of perception; Gee's insights offer a pathway to close that gap.

Eric Klopfer's work (2021) in educational games builds on this by showing how game-based learning can make even the most abstract concepts tangible. Vicky Rideout (2020) similarly argues that interactive digital experiences can make media literacy not only engaging but accessible. This point is echoed by Keri Facer (2023), who explores future-oriented learning technologies, highlighting that children's comfort with technology grows exponentially when they experience it through play. Barnardo's findings show that children often see AI as mysterious; Facer's work reminds us that play can be the simplest, most intuitive way to turn mystery into understanding.

In this digital age, where children spend increasing amounts of time online, the role of digital citizenship becomes paramount. John Palfrey's (2020) research into digital citizenship positions children not merely as users but as stakeholders in the digital landscape, with rights, responsibilities, and the capacity to shape the ecosystem they inhabit. Howard Rheingold (2021) takes this further, suggesting that true digital literacy involves not just understanding content, but developing a "crap-detection" skill set—spotting misinformation and critically assessing digital interactions. This is, after all, not just about knowing what AI is, but knowing how to navigate it safely, responsibly, and with confidence.

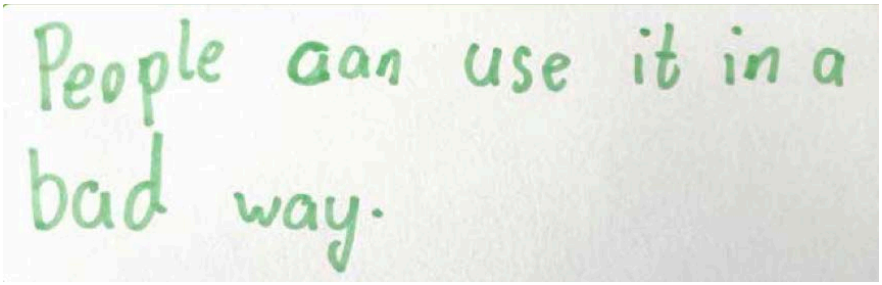
Mimi Ito (2022) brings to light another facet of this conversation: the cultural aspect. Digital engagement, Ito suggests, is deeply rooted in the social lives of children, and this context must inform how we teach AI literacy. Rather than isolating AI as a subject, schools might integrate it into collaborative projects, where children explore AI's functions within their social interactions. Similarly, James Paul's (2020) work on digital games provides evidence that when children learn collaboratively, they experience a "scaffolding effect"—supporting one another as they venture into new territories of knowledge.

As Barnardo's report reveals, children express a significant level of unease around AI's opaque nature. Carrie James (2021) sheds light on this issue by examining youth ethics in digital spaces; she posits that young people want and need ethical frameworks to help them navigate these environments. Richard E. Mayer's (2020) work on cognitive theory and multimedia learning resonates here, suggesting that complex systems like AI should be broken down into manageable concepts. Elizabeth Marsh (2021) extends this idea, advocating for cognitive approaches that adapt to children's developmental stages, turning AI into a "learnable" entity rather than a monolithic force.

The intersection of youth culture and media literacy is Julian Sefton-Green's (2021) specialty, and his work underscores Barnardo's findings: young people are not disinterested in AI; they're simply disconnected from it. His research suggests that youth culture, when integrated with technology education, can make AI feel relevant rather than remote. Finally, Amanda Third (2020) argues that children's digital rights are essential in building an ethical foundation for AI education, ensuring that young people not only learn about AI but feel empowered in relation to it.

Through the perspectives of these scholars, a picture emerges of how AI could be reframed in the minds of young learners. Barnardo's report captures a critical gap—a lack of understanding and agency that leaves children feeling at the mercy of the algorithms that surround them. Yet, with thoughtful intervention, AI can shift from an enigmatic force to an engaging partner in learning. If we guide children to explore, question, and ultimately understand AI, we're not just educating them about technology; we're preparing them for a world where technology is woven into the very fabric of their lives.

Addressing Privacy and Safety Concerns



When we think about children and artificial intelligence, there's a familiar tension, a sense of potential underlined by uncertainty. AI, for all its promises of personalised learning, carries an ever-present risk: the quiet, often invisible accumulation of data. In Barnardo's latest report, young people expressed a profound unease with this aspect of AI, voicing concerns that, while perhaps naïve in phrasing, cut right to the heart of a complex issue (Barnardo's, 2024). As Helen Nissenbaum (2020) argues, privacy is more than a binary concept of "protected" or "unprotected"; it's a question of context. For children in educational settings, this context is crucial. It's not simply about keeping their data safe; it's about understanding the nuanced boundaries between learning, monitoring, and surveillance.

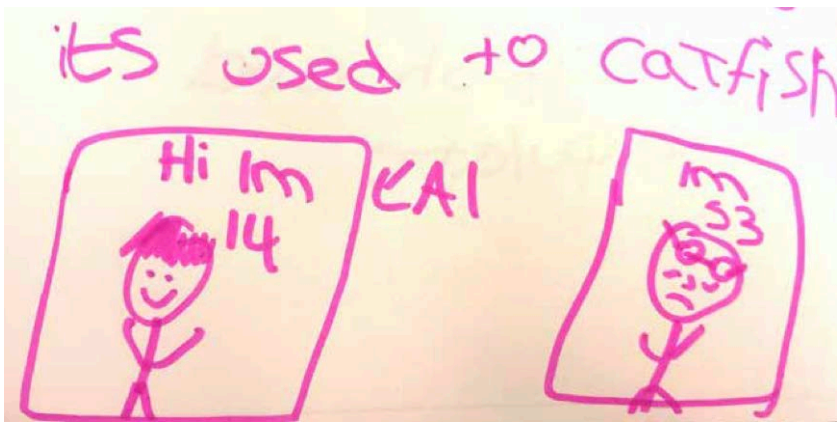
danah boyd (2021) has been investigating these boundaries for years, noting that for children, digital spaces are places of exploration, socialisation, and self-expression. But when AI systems are constantly watching, collecting, and categorising, the balance between learning and surveillance begins to tip. There is a line between educational support and an unsettling form of digital eavesdropping, and Barnardo's findings hint that children sense this shift instinctively. It's an insight that resonates with Zuboff's (2020) cautionary take on surveillance capitalism, where data collection becomes an end unto itself. For young people, this can feel like an intrusion, a quiet but pervasive presence that shadows their growth, their learning, and even their play.

The question of fairness also looms large. Solon Barocas (2021) brings attention to the accountability of AI systems, raising questions about the fairness of machine learning algorithms that track and assess students. For children, the idea of an algorithm passing judgement on their progress can be unsettling. Barocas's research highlights the risk of embedding biases in algorithms that may disproportionately affect some students over others. The Barnardo's report captures this concern in simple terms: young people do not want to feel like mere data points, measured and sorted without agency. And here, we see the underlying issue – these AI systems are designed to "personalise," but without transparency, the very act of personalisation feels impersonal.

Michael Zimmer (2020) argues that transparency in educational contexts is not just a best practice but a moral obligation. Children have a right to understand how their data is collected, used, and safeguarded. And yet, Barnardo's findings suggest that they rarely feel this clarity. There is a fogginess to the digital environments they navigate, and as Julie Cohen (2021) points out, this lack of clarity can erode a child's sense of autonomy. For children, autonomy is as much about understanding their world as it is about moving freely within it. If AI is perceived as an all-seeing, all-knowing presence, it risks becoming a force of control rather than a tool of empowerment.

Legal frameworks provide some guardrails, yet even these are complex and often inadequate. Colin J. Bennett (2022) highlights that privacy laws, though well-meaning, are often slow to adapt to the rapidly evolving technology landscape. For children, whose digital experiences are shaped by policies crafted in a different era, this means they're left navigating a maze where the signs don't always point in the right direction. And as Linnet Taylor (2021) argues, the focus on data justice demands that we rethink how children's rights are protected in digital spaces. Data, after all, is not just information; it is a representation of a person, a fragment of their identity.

The ethical implications are profound. Nicole A. Cooke (2021) emphasises that children are particularly susceptible to misinformation, which can complicate their ability to engage critically with technology. Andrew Hope (2021) extends this notion, suggesting that children's perceptions of digital environments are heavily influenced by the presence – or perceived presence – of surveillance. When AI tools operate invisibly, gathering data with little transparency, they introduce a silent authority that shapes how young people view and trust their digital world. The Barnardo's report reflects this sentiment, capturing the wariness of children who are beginning to understand that their interactions with technology are not as private as they might have believed.



Valerie Steeves (2020) has long argued that privacy in childhood is foundational to developing a sense of self, and Barnardo's report reveals the cost when this privacy is compromised. The constant presence of AI risks creating a generation that feels, on some level, watched – even in spaces that should be safe, like classrooms. Joseph Turow (2021) describes this as the "normalisation of surveillance," where young people grow up with the assumption that data collection is an unavoidable aspect of life. It's a view that aligns with Barnardo's findings: young people, perhaps intuitively, understand that AI's presence in their lives is more than just educational support – it's an influence that, while often beneficial, also feels inescapable.

But where do we draw the line? Tarleton Gillespie (2020) raises a critical point: content moderation, transparency, and consent are not just technical necessities but ethical imperatives. Karen Yeung (2021) echoes this, highlighting that regulatory frameworks must evolve to protect the vulnerable, especially children. Without clear consent processes and accessible information, the integration of AI in classrooms can begin to feel less like a learning aid and more like an omnipresent observer, influencing how students behave, interact, and even think.

Privacy policy debates, as Priscilla Regan (2020) suggests, often overlook the voices of those most affected – in this case, the children themselves. Virginia Eubanks (2021) underscores this by

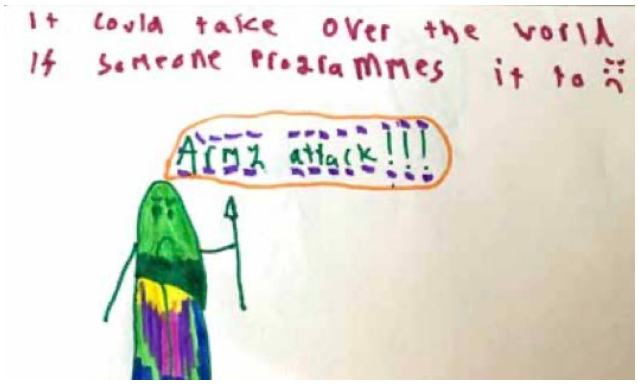
examining how data systems, when imposed on marginalised communities, tend to reinforce existing inequalities. For children in underprivileged areas, whose access to technology is often limited, AI's presence in education can reinforce rather than bridge the digital divide. In these contexts, Tawana Petty (2021) argues for responsible data use that considers not just what data is collected, but the larger social dynamics that AI perpetuates.

Ruha Benjamin (2020) adds to this ethical critique, discussing the unintended consequences of technology in ways that resonate strongly with Barnardo's findings. The psychological effect of a constant digital gaze can be subtle yet profound, shifting how young people relate to both themselves and their peers. Cory Doctorow (2022) captures this sentiment, calling for a reimagining of digital rights that includes safeguards for children's data privacy. And Nina Jankowicz (2021) underscores the need for digital literacy as a defence against the risks inherent in data-driven environments, particularly where misinformation and lack of transparency intersect.

The Barnardo's report reveals a generation aware, on some level, of the complexities surrounding AI and privacy. As these young people navigate a world increasingly shaped by algorithms and data collection, their need for agency grows. AI in education promises much, but without careful attention to privacy, transparency, and ethics, it risks becoming a double-edged sword. It is not enough to integrate AI into learning; we must also ensure that this integration respects the boundaries, rights, and identities of those it serves.

Balancing Screen Time with Holistic Development

In classrooms around the world, the hum of technology is a constant companion. Yet, for all its advantages, digital engagement remains a double-edged sword, especially when it comes to children's holistic development. The Barnardo's report hints at this tension, describing how children view screens as both a portal to knowledge and a barrier to physical and emotional growth (Barnardo's, 2024). Patricia Greenfield (2021) argues that while digital media can facilitate cognitive development, it often does so at the expense of social skills and physical health. This balance, as we're learning, is critical—and elusive.



Jean Twenge (2020) has spent years tracking the effects of screen time on young people, noting a disturbing rise in anxiety and depression correlated with increased digital engagement. For children, screens provide an escape and a source of stimulation, but Twenge's work reveals a more troubling underside: the potential for these digital experiences to disrupt emotional well-being. Richard Freed (2022) takes this further, describing screen addiction as a growing problem among youth, one that threatens to reshape their cognitive and emotional landscapes. Freed suggests that with each new device, each AI-powered tool, we risk creating a generation that's more comfortable with digital interactions than real-world connections.

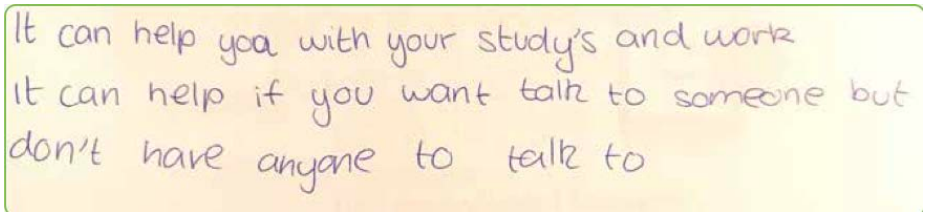
Victoria Dunckley (2021) offers a compelling perspective on the psychological toll of excessive screen time, which she terms "electronic screen syndrome." In Dunckley's view, technology itself isn't the issue; it's the unmoderated, unstructured use of screens that disrupts children's natural rhythms and leaves them vulnerable to anxiety, aggression, and even sleep disruption. The Barnardo's report echoes this sentiment: children frequently mentioned feeling "tired" or "restless"

after long hours with AI-powered learning tools, a quiet alarm bell that Dunckley would argue signals an urgent need for balance.

The concept of digital balance is, of course, more than a recommendation; it's a necessity. Katherine Martinko (2023), an advocate for digital detox strategies, argues that the human mind, particularly the developing minds of children, needs periods of rest, quiet, and analogue engagement. Andrew Przybylski's (2021) research on screen time underscores this, showing that moderate use can be enriching, while excessive exposure risks overwhelming children's coping mechanisms. If screens are always on, he notes, children lose a sense of separation between online engagement and offline life. For Barnardo's, this brings a sharp focus: AI is most beneficial when it doesn't dominate but complements a child's world.

As schools integrate AI into classrooms, questions of moderation and intention become paramount. Ana Homayoun (2022) points to digital wellness practices that encourage children to take breaks, reflect, and engage in physical activities. Homayoun's strategies resonate with the findings of Barnardo's, which revealed that children crave boundaries around their digital lives but often lack the tools to establish them. Larry Rosen (2020) echoes this sentiment, suggesting that without mindful intervention, the positive aspects of digital tools—like AI's ability to personalise learning—can quickly become overwhelming. For Rosen, the challenge is clear: we need frameworks that allow children to benefit from AI without losing touch with the world outside their screens.

The role of parents and educators in setting these boundaries cannot be overstated. Jenny Radesky (2021), a pediatrician specialising in children's media use, advocates for a collaborative approach where children are actively involved in setting their own digital limits. This empowerment, Radesky argues, not only helps children understand the impact of their screen time but fosters a sense of control and agency that counteracts the passivity often associated with digital consumption. Nicholas Kardaras (2021) concurs, noting that children who feel they have control over their screen use are more likely to engage with digital content responsibly. Kardaras' work aligns with the Barnardo's report, which suggests that children need a framework within which they can explore digital tools freely but safely.



Bradford Brown (2021), who examines adolescent peer interactions, observes that screens can either enhance or disrupt social development depending on how they're integrated into daily life. The screen, in Brown's view, should be a doorway to engagement, not a wall that isolates. His insights are critical in understanding the balance that Barnardo's advocates for: digital tools should connect children rather than divide them. Douglas Gentile (2022) further underscores this by suggesting that educational environments should promote not just academic learning but social-emotional growth. For Gentile, a balanced approach to screen time enables children to learn collaboratively, using technology as a tool to engage with their peers rather than an escape from real-world interactions.

Yet the effect of screens is not one-size-fits-all. Amy Orben (2021) suggests that the relationship between screen time and mental health is complex, influenced by factors like age, personality, and context. Orben's research reveals that for some children, limited screen time has minimal impact, while for others, even moderate use can be disruptive. This nuanced view reinforces Barnardo's call

for a personalised approach to AI and digital tools in education. Eric Sigman (2020), in his work on digital addiction, posits that schools have a responsibility to teach children self-regulation, ensuring that technology is used purposefully and with awareness of its potential downsides.

Michele Borba (2021) brings a social-emotional lens to this discussion, suggesting that the aim should be to cultivate children's interpersonal skills and empathy. Borba's approach aligns with Barnardo's findings that children often miss face-to-face interactions in tech-heavy environments. Susan Greenfield (2020) warns of potential neurological impacts from prolonged screen exposure, including a decreased ability to concentrate and empathise. Greenfield's research complements Elizabeth Englander's (2021) work on digital interactions, which reveals a troubling trend: children, when overexposed to screens, become less attentive to social cues and more isolated from the immediate, physical world around them.

Caroline Knorr (2022), focusing on family digital literacy, advocates for parents to model balanced tech use, as children often mirror adult behaviours. This family approach supports Barnardo's recommendations for workshops and discussions around screen use, creating a community-based framework that makes balance a collective goal. Mary Aiken (2023), a cyberpsychologist, sees this as essential, warning that without communal guidelines, the influence of screens may shape children in unpredictable ways, pulling them away from real-world engagement in favour of virtual interactions.

Barnardo's findings suggest a path forward: one that recognises the value of AI and digital tools but places equal emphasis on holistic development. As classrooms become more technologically integrated, the importance of intentionality, balance, and moderation becomes ever clearer. In this, the message is simple but profound: for AI to truly serve the next generation, it must remain a tool —not a crutch, not a replacement, but a support for young minds still learning the rhythms of life beyond the screen.

Fostering Social-Emotional Development

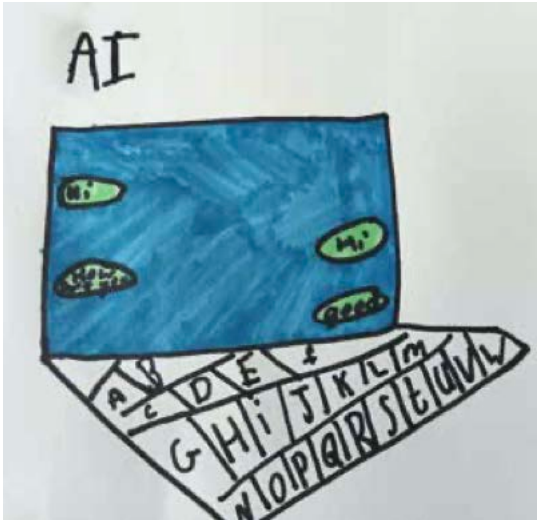
In the world of education, it is no longer enough to measure success by grades alone. The Barnardo's report underscores a point that educators have been echoing for years: academic achievements mean little without the social and emotional skills that enable children to navigate the complexities of life (Barnardo's, 2024). For Marc Brackett (2021), this is the essence of social-emotional learning (SEL): the ability to understand and manage emotions, build relationships, and make responsible decisions. And yet, as technology and AI become fixtures in classrooms, the question arises: are these tools enhancing or eroding children's social-emotional development?

Daniel Goleman (2022), a pioneer in the field of emotional intelligence, describes empathy as a foundational skill in SEL. It is empathy that allows children to connect, to understand others' perspectives, and to act with compassion. Goleman warns, however, that the more time children spend interacting with screens, the less attuned they become to the subtleties of human emotion. In classrooms, where AI is intended to enhance learning, there is a risk that it may, if not carefully integrated, create a sense of emotional distance. Linda Darling-Hammond (2021) argues that for AI to truly benefit students, it must be used in ways that strengthen, rather than replace, human connection.

Timothy D. Wilson (2020) studies human behaviour and the stories we tell ourselves, and his work suggests that emotional resilience is built not through algorithms, but through the kinds of real-world interactions that AI cannot replicate. Barnardo's report notes that many children expressed a desire for more face-to-face interaction, feeling that their digital experiences were, in some ways, hollow. This sentiment aligns with Wilson's argument: social-emotional growth is not a box to be ticked, but a process grounded in shared experience.

Social-emotional learning, according to Paul Tough (2021), is about resilience and character as much as it is about emotional regulation. Tough argues that children thrive when they learn to persevere through challenges, form meaningful connections, and engage in environments where empathy is modelled. The Barnardo's report reflects this, revealing that students see AI as a helpful tool but crave the warmth of human interaction. Stephanie M. Jones (2022) furthers this idea, emphasising that SEL in schools should not only focus on emotional regulation but also foster a sense of connection, belonging, and empathy—qualities that no machine, however sophisticated, can genuinely impart.

The role of teachers, then, becomes crucial. David Yeager (2021), whose work focuses on adolescent development, believes that relationships are central to learning. Teachers are more than content deliverers; they are mentors, guides, and role models. With AI, Yeager argues, there's a risk that the relational aspect of teaching could become diluted, leaving children without the critical support they need. Maurice Elias (2022), another leader in SEL, contends that schools should not rely on AI as a shortcut to learning but should integrate it thoughtfully, ensuring that the human elements of empathy and connection remain at the forefront. The Barnardo's report echoes this caution, showing that students value their interactions with teachers and worry about AI's potential to disrupt this dynamic.



Carol Dweck's (2020) research on growth mindset offers a compelling counterpoint: children's capacity for growth and resilience is shaped not by digital interaction but by encouragement, feedback, and real-world challenges. In Dweck's view, AI can be a useful tool, but only if it supports a culture of growth rather than supplanting it. Elias Aboujaoude (2021) highlights the danger of children developing a dependency on digital feedback, which can skew their understanding of human emotions and interactions. For AI to be an effective part of SEL, it must remain a supplement to, not a replacement for, human relationships.

Pamela Cantor (2021), who advocates for trauma-informed education, reminds us that children build resilience not in isolation, but within supportive relationships. Her work suggests that while AI may assist in personalising academic content, it cannot replicate the nurturing environment provided by attentive adults. Peter Salovey (2022), who co-developed the theory of emotional intelligence, concurs: true learning involves both intellectual and emotional engagement. For children, this engagement happens not just through instruction but through feeling seen, heard, and valued—qualities that technology, however advanced, struggles to replicate.

The intersection of brain development and social emotion is explored by Mary Helen Immordino-Yang (2022), who demonstrates that learning is not a purely cognitive act but one intertwined with emotions. Immordino-Yang's research shows that empathy, curiosity, and social connections fuel

intellectual growth. AI, while a powerful tool, cannot replicate the nuances of these human experiences. The Barnardo's report reveals a similar view from children themselves, who, when asked about AI, often express an appreciation for its efficiency but a preference for real-world interactions that feel "alive" and "authentic."

In examining how empathy develops, Tina Malti (2020) focuses on kindness and moral emotions in children, arguing that empathy is learned through acts of compassion and direct interaction with others. Roger Weissberg (2021), a co-founder of CASEL, argues that SEL is not about isolated lessons but a continuous practice embedded in school culture. For Weissberg, the integration of AI should support, rather than distract from, the social learning that happens organically among children. Robert Brooks (2021) extends this notion, advocating for resilience-building strategies that encourage children to engage meaningfully with peers and adults rather than relying on digital tools.

Angela Duckworth (2022) adds the concept of "grit," a term now common in educational psychology, suggesting that children develop resilience through facing challenges that require perseverance. The Barnardo's report picks up on this theme, noting that children value learning experiences that test their limits and help them grow. Kimberly Schonert-Reichl (2022), an expert in compassion and SEL, reminds us that the core of social-emotional development is understanding one another's perspectives, a skill best honed through direct human interaction rather than digital mediation.

Michele L. Norris (2020) posits that empathy-building exercises are most effective when they involve real emotional stakes, not just simulations. Her work suggests that while AI might mimic certain social cues, it lacks the authentic human presence necessary for meaningful emotional development. Barbara Fredrickson's (2022) broaden-and-build theory further illustrates that positive emotions, such as those fostered in face-to-face interactions, expand children's cognitive and social abilities, creating a foundation for lifelong resilience.

The Barnardo's report shows us children who are growing up in a hybrid world, one where digital tools coexist with real-world relationships. But as we examine the impact of AI on social-emotional development, it becomes clear that while AI can assist, it cannot replace the uniquely human aspects of learning. Social-emotional skills are not learned through screens alone; they are built through shared experiences, through compassion, and through connection—a lesson that is as timeless as it is urgent in the face of today's technological advances.

Combating Misinformation and Promoting AI Reliability

In an era where information flows freely but not always accurately, young people find themselves navigating an endless stream of digital content. The Barnardo's report highlights this challenge, noting children's doubts about AI's reliability and concerns about the quality of information they encounter online (Barnardo's, 2024). This generation, born into a world of algorithms and feeds, must learn to separate fact from fiction. Claire Wardle (2020) frames the issue starkly: in today's digital landscape, the ability to discern truth from misinformation is no longer just a skill; it's a survival tool.

Howard Gardner (2021), renowned for his theory of multiple intelligences, offers a pathway toward developing these critical skills in young learners. Gardner suggests that understanding isn't a one-size-fits-all process; it must be cultivated through diverse, context-rich experiences. AI can support this, but the system itself must be reliable. When children view AI as untrustworthy, they lose a vital resource for learning. The Barnardo's report shows that many young people are sceptical of AI's accuracy, wary of trusting a technology that sometimes misinterprets or oversimplifies information. This is where Renee DiResta's (2021) insights into misinformation become relevant. DiResta argues that AI, when misaligned, can inadvertently reinforce biases or even amplify falsehoods, leading children down a path where truth becomes murky.

Mike Caulfield (2022) proposes a solution rooted in what he calls "SIFT" (Stop, Investigate, Find better coverage, Trace claims). This model isn't just for seasoned researchers; it's designed for anyone, including young students, who encounters dubious information. If children were taught to approach AI-generated responses with the same critical eye, they could begin to see AI not as an ultimate authority but as a tool to be questioned and verified. Caulfield's method is an essential framework for the kind of digital literacy that Barnardo's report advocates: an informed, cautious engagement with AI, where children aren't afraid to probe and even doubt.

David Rand (2022) and Gordon Pennycook (2022) explore the cognitive biases that make people susceptible to misinformation, a topic with particular relevance for young learners. Rand's work suggests that people are more likely to accept information that aligns with their pre-existing beliefs, a phenomenon that AI can unintentionally reinforce. Pennycook adds that social media's quick-hit format promotes shallow engagement, making it harder for children to recognise and reject false information. The Barnardo's report reflects this, showing that children who rely on AI for answers may fall into a trap of surface-level understanding, accepting AI-generated responses without question. To counteract this, Barnardo's findings suggest schools should encourage children to engage deeply with information, fostering critical thinking and healthy scepticism.

Sam Wineburg (2021) takes a historical approach, advocating for "lateral reading"—a strategy in which students examine multiple sources across different platforms to verify information. In Wineburg's view, digital literacy should be treated as a skill akin to historical analysis, requiring students to assess context, source credibility, and underlying motivations. Eszter Hargittai (2021), who studies digital skills, echoes this by emphasising the importance of teaching students to evaluate the provenance and quality of online content. The Barnardo's report shows that children are often unaware of these techniques, making them vulnerable to misinformation. Introducing concepts like lateral reading could give them a framework to approach AI critically, examining not just the "what" but the "why" and "how" behind each answer.

Deborah Brandt (2021) notes that literacy in the digital age isn't about rote memorisation; it's about interpreting and interacting with content dynamically. AI, when positioned correctly, can enhance this skill by prompting children to ask questions and explore multiple perspectives. However, as Cass Sunstein (2022) points out, the danger lies in AI creating "echo chambers" where information is filtered to confirm biases, limiting a child's exposure to diverse viewpoints. Anatoliy Gruzd (2022) studies how social media algorithms create these echo chambers, and his research suggests

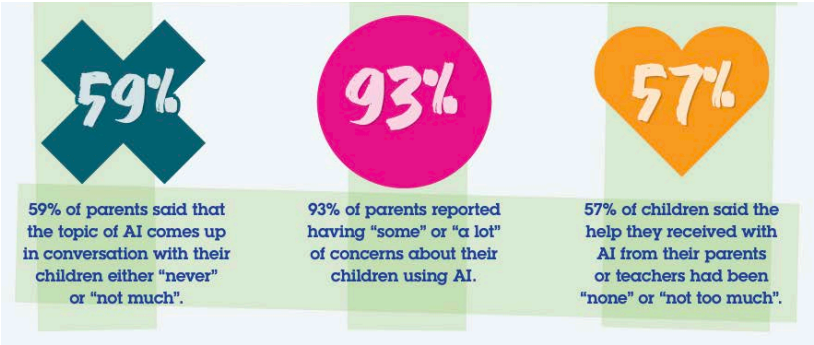
that AI in education must be designed to introduce, rather than exclude, alternative perspectives. Barnardo's report reflects this need for diversity in information, advocating for AI tools that support a broader, more inclusive digital learning environment.

Danah Henriksen (2021) highlights the role of creativity in digital literacy, arguing that fostering a sense of curiosity can help children approach information with an open mind. By teaching children to see AI as a resource to be explored rather than a final authority, educators can foster an environment where curiosity leads to discernment. Tessa Jolls (2021) agrees, advocating for media literacy education that goes beyond fact-checking to cultivate a deeper understanding of digital content. In Jolls's view, children should learn to read digital information like a detective, scrutinising every element for bias, context, and reliability—a skillset that aligns perfectly with Barnardo's recommendations.

Carl Bergstrom (2021) takes this a step further, exploring how misinformation can distort our perception of reality. For children, who are still developing their cognitive frameworks, Bergstrom's research suggests that exposure to misinformation can warp understanding in ways that persist into adulthood. Paul Mihailidis (2022), who focuses on media literacy and civic engagement, adds that equipping children with critical thinking skills is an act of empowerment. When AI tools encourage young people to question and critique, they become active participants in their own learning, developing a confidence that shields them from manipulation.

Melissa Zimdars (2022) has tackled the mechanics of "fake news," teaching students to identify markers of unreliable sources. She notes that misinformation is often designed to appeal to emotions rather than logic, a point that Elizabeth Dubois (2022) echoes in her research on online influence. Dubois argues that AI, if left unchecked, can spread emotionally charged misinformation, a danger the Barnardo's report highlights through children's concerns about AI reliability. By teaching children to recognise these manipulative tactics, educators can help them maintain a healthy distance from the digital content that saturates their lives.

Michael Hobbs (2021) studies conspiracy theories, showing that misinformation often preys on our desire for simple answers to complex questions. For children, who are naturally curious but lack experience, Hobbs's research suggests that AI could inadvertently reinforce these simplistic narratives. Jonathan Haidt (2021) examines moral reasoning and suggests that critical thinking, coupled with empathy, is essential in resisting misinformation. Haidt's work, paired with Hobbs's, supports Barnardo's recommendation that children be taught not only to seek information but to understand its impact on their perceptions and beliefs.



Finally, Douglas Rushkoff (2022) emphasises the importance of teaching young people to "program or be programmed"—a concept that resonates strongly with Barnardo's insights. Rushkoff argues that children must be more than passive recipients of AI content; they should be empowered to challenge, question, and even reprogram their interactions with technology. The Barnardo's report shows that children are often aware of AI's limitations but lack the tools to act on this knowledge. By integrating media literacy and critical thinking, we can equip young learners with a toolkit that transforms them from passive consumers into active, informed participants in their digital worlds.

As Barnardo's findings reveal, combating misinformation isn't just about providing the right answers; it's about teaching young people to ask the right questions. By fostering a critical approach to AI, schools can help children see these tools for what they are—powerful but imperfect, useful but fallible. And in doing so, they prepare a generation not just to navigate a digital landscape but to shape it with intelligence, integrity, and curiosity.

Building Trust and Engagement with Parents

In the grand tapestry of a child's life, parents are the constants—their presence a steadying force amid the rapid shifts that define childhood in the digital age. The Barnardo's report reveals a subtle but profound insight: many children feel adrift in their digital experiences, left without guidance as they navigate the complex world of AI. The trust that children place in technology, and their capacity to benefit from it, is deeply influenced by the trust that parents place in those same tools (Barnardo's, 2024). For Diana Graber (2021), who advocates for digital literacy among families, the goal is clear: technology must be an ally, not a barrier, in the parent-child relationship. This requires a foundation of mutual trust, understanding, and open dialogue.

Susan Linn (2021) argues that technology, while offering new opportunities for learning, should not disrupt the relational dynamics that anchor children's development. Parents play a vital role in setting the tone for technology use, balancing the excitement of digital possibilities with the wisdom of experience. Yet, Barnardo's report shows that many parents feel unprepared, unsure of how to support their children in an AI-enhanced world. Yalda Uhls (2022), who researches media's impact on children, highlights the importance of parents as digital mentors. When parents engage actively with their children's technology use, they transform AI from a passive presence into an interactive tool that aligns with family values.

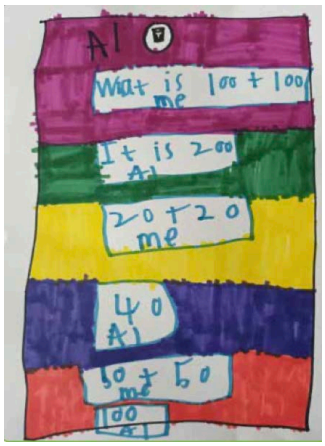
The challenge, as Emily Weinstein (2021) notes, is in bridging the generational gap that often makes technology seem foreign to parents but instinctive to children. Weinstein's work suggests that parental involvement doesn't mean policing but participating—joining children in their digital journeys, asking questions, and, most importantly, listening. Stephen Balkam (2022), founder of the Family Online Safety Institute, emphasises the power of digital citizenship: the idea that parents, by modelling responsible technology use, can guide children in becoming thoughtful digital citizens themselves. Balkam's insights align with Barnardo's call for a collaborative approach to AI in education, where parents, educators, and students form a partnership grounded in shared values.

Catherine Steiner-Adair (2020), who studies family relationships in the digital age, warns of the alienation that can occur when technology drives a wedge between family members. Barnardo's report reveals a similar concern from children themselves, who sometimes feel that AI tools distance them from the adults in their lives. Jordan Shapiro (2022), an advocate for integrating technology into education, believes that families should treat AI as they would any other educational tool—by engaging with it together. Shapiro's approach reframes AI not as a disruptive force, but as an opportunity for families to explore, discuss, and learn together, ensuring that the technology reinforces rather than diminishes their connection.

The importance of parental presence is underscored by Maya Götz (2021), who studies media's influence on children. Götz argues that children's ability to navigate digital spaces safely is strengthened when parents remain involved, providing guidance and perspective. Yet involvement alone is not enough; there must be resilience, a theme explored by Tamar Chansky (2022), who emphasises that resilience is built through supportive relationships and open communication. Barnardo's report shows that children are not only receptive to but desire this kind of guidance, wanting their parents to engage more deeply with their digital experiences.

For Vicki Shotbolt (2021), the answer lies in digital literacy education that includes both children and their parents. Shotbolt's work advocates for workshops and resources that empower families to make informed decisions about technology use. Devorah Heitner (2021) similarly calls for a shift in the digital parenting paradigm, from surveillance to mentorship. Heitner suggests that children benefit most when parents act as guides rather than gatekeepers, encouraging open discussions about digital challenges. This approach aligns with Barnardo's recommendation for family-oriented programs that foster trust and support children's autonomous yet safe exploration of AI.

Richard Culatta (2022), an expert in digital citizenship, points out that trust is a reciprocal process. When parents trust the digital tools their children use, children feel more secure in those experiences. Culatta's insights resonate with Barnardo's findings: children who feel supported in their digital journeys are more likely to approach AI thoughtfully and responsibly. Jean Rogers (2021) adds that managing screen time and technology use should be a family decision, one that involves open discussions and shared agreements. Rogers' work suggests that by including children in these conversations, parents help them develop a sense of ownership and responsibility.



The concept of family "digital contracts," as Janell Burley Hofmann (2022) calls them, offers a practical framework for these discussions. Hofmann's idea is simple but powerful: families create agreements about technology use, setting boundaries together and revisiting them as needed. Christine Elgersma (2021) supports this approach, noting that when children participate in setting their own boundaries, they are more likely to respect them. Elgersma's work, like Barnardo's report, highlights the importance of a collaborative approach to technology—one where children and parents work together to establish trust.

In adolescence, Lisa Damour (2021) suggests, trust becomes even more crucial, as teenagers seek autonomy while still needing parental support. Damour argues that parents should strive to remain engaged, even as their children's digital lives become more complex. Warren Buckleitner (2021), who studies children's media use, supports this view, advocating for balance and reminding parents that the "off" switch is still an option. Barnardo's report reveals that children respect boundaries when they are set with empathy and consistency, a point that resonates strongly with Buckleitner's findings.

Monica Bulger (2020), who researches children's rights in digital spaces, asserts that children's voices must be part of the conversation around AI use. For Bulger, trust is built not by dictating rules but by acknowledging children's perspectives, treating them as stakeholders in their own digital lives. This idea is further supported by Mark Griffiths (2021), who studies family dynamics in the digital era, highlighting the role of communication in fostering understanding. Sonia Lupien (2022), an expert on childhood stress, adds that open dialogue can alleviate children's anxieties about technology, creating a safe space for them to express concerns and ask questions.

The Barnardo's report offers a blueprint for family engagement in the digital age, emphasising that children want their parents to be more than bystanders in their AI experiences. When families establish trust through shared values, communication, and mutual respect, technology becomes not an obstacle but a bridge—one that connects, rather than divides, generations. It is in this shared journey that children find not only guidance but confidence, growing up with the understanding that they are not alone in navigating the complex world of AI.

Conclusion

The Barnardo's report stands as a powerful reminder of the nuanced role that artificial intelligence now plays in the lives of young people, shaping their educational experiences, influencing their social landscapes, and, perhaps most importantly, challenging their perceptions of privacy, agency, and trust (Barnardo's, 2024). In exploring the report through various lenses—digital literacy, privacy, holistic development, social-emotional learning, misinformation, and family engagement—a complex picture emerges, one that both affirms AI's potential and underscores the vigilance required in harnessing it responsibly.

At the heart of this inquiry lies a shared insight: that AI is not inherently good or bad; its value is shaped by how it is integrated into children's lives. This sentiment resonates with Sherry Turkle's (2021) reflections on technology as an "ambivalent companion"—a force that enhances our capabilities even as it quietly reshapes our identities. Barnardo's report echoes this ambivalence, revealing children's excitement for AI's potential alongside their concerns about its opacity and control. As the report aptly illustrates, young people recognise the power of AI to assist in learning and exploration, yet they remain wary of its "black box" nature, its tendency to operate in the shadows, where few can see or understand its mechanisms (Barnardo's, 2024).

Throughout the report, a call emerges for demystification—a term championed by thinkers like Neil Selwyn (2021) and Sonia Livingstone (2022), who argue that technology's benefits are maximised when children understand the tools they use. Barnardo's findings on digital literacy affirm this, suggesting that children desire clarity, not just content; they want to engage with AI in a way that is both enlightening and empowering. By framing AI as a tool for exploration rather than a passive recipient of commands, educators can help bridge the divide between curiosity and agency, allowing children to see themselves as active participants in their digital interactions.

Equally pressing is the question of privacy, a theme underscored by Shoshana Zuboff's (2020) warnings of surveillance capitalism. The Barnardo's report reflects a similar wariness among children, who sense that their digital lives are constantly under observation. Helen Nissenbaum's (2020) work on privacy as contextual integrity provides a fitting framework here, arguing that privacy is not about absolute seclusion but about respecting boundaries—boundaries that, as Barnardo's findings show, children value deeply. When AI is perceived as an overbearing presence, it risks eroding the trust that young people need to feel safe, not just in classrooms but in the larger world of digital interactions.

The report's focus on balanced screen time also highlights a recurring tension: the need to integrate AI in ways that support, rather than overwhelm, holistic development. Scholars like Patricia Greenfield (2021) and Jean Twenge (2020) have documented the impact of screen time on mental health, urging caution in adopting technologies that blur the line between educational support and digital immersion. Barnardo's findings underscore this need for balance, revealing children's desire for boundaries, for a structured digital experience that allows room for offline growth. In this, Barnardo's calls on schools and families to treat AI not as an omnipresent entity but as a resource that complements the richness of real-world experiences.

Social-emotional learning (SEL), another cornerstone of the report, serves as a reminder that education is not merely an academic pursuit; it is a deeply human one. The voices of children in the Barnardo's report reveal a desire for empathy, connection, and understanding, values championed by Marc Brackett (2021) and Daniel Goleman (2022), who view SEL as the foundation for meaningful learning. AI, when positioned thoughtfully, can support these goals by personalising instruction and providing feedback, but it cannot replace the empathy that only a teacher can offer.

As the report suggests, AI should be an ally, not a substitute, in fostering children's emotional intelligence and interpersonal skills.

As misinformation looms large in today's digital landscape, Barnardo's findings reflect a generational need for critical thinking skills that go beyond rote learning. Figures like Claire Wardle (2020) and Mike Caulfield (2022) advocate for media literacy education that empowers young people to question, probe, and validate the information they encounter. The Barnardo's report aligns with this, recommending that schools equip students with the tools to discern reliable from unreliable content. By framing AI as a resource that supports informed inquiry, educators can ensure that children engage with digital information responsibly, protecting themselves from the pitfalls of misinformation.

Finally, the report's call for family engagement serves as a poignant reminder of the trust that underpins children's interactions with AI. The insights of scholars like Devorah Heitner (2021) and Janell Burley Hofmann (2022) reinforce Barnardo's findings that children thrive when parents are involved, not as overseers but as partners in their digital journeys. For parents, building trust means not only monitoring but mentoring, not only setting limits but encouraging exploration. When families create open dialogues around technology, they help children build a relationship with AI that is both curious and cautious, both engaged and reflective.

In the end, the Barnardo's report is less a cautionary tale and more a guide—a blueprint for educators, parents, and policymakers seeking to integrate AI in ways that uplift and empower. It reminds us that while AI is a powerful tool, it is only as effective as the hands and hearts that wield it. As we move forward, the challenge will be to honour the voices of young people, to listen to their hopes and hesitations, and to build an educational landscape where technology serves as a partner in, not a replacement for, the journey of growing up.

About the Author

Dr. Neil Hopkin is a globally recognised thought leader in international K-12 education, and serves as the Director of Education at Fortes Education.

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