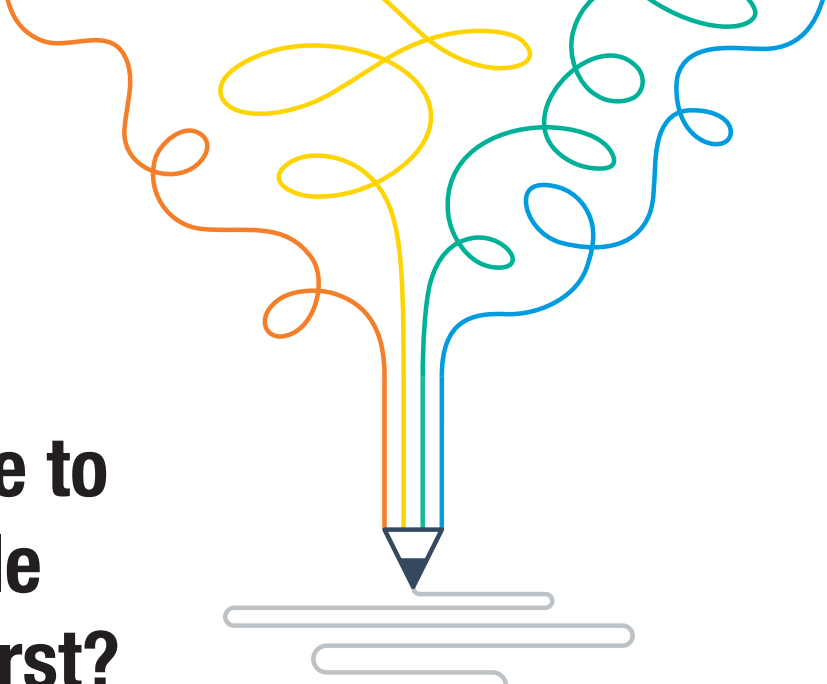


Primary First



The Journal for
Primary Schools

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- Standard English to be used (unless for a specific purpose within an article). Although articles will be received written in Welsh, Gaelic, Scots or Cornish
- Acronyms to follow introduced terms

- Contracted words, for example, ‘don’t’ to be written as ‘do not’
- URLs may be used if extant
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- First or third person may be used
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Editorial

The articles in this edition do not provide uniform answers, nor should they. Instead, they model careful thinking, evidence-informed challenge and a willingness to sit with complexity.

It is a privilege to again be asked to guest edit another edition of Primary First. I am grateful to NAPE for the invitation and for the trust placed in me to curate such an extensive collection of academic work. I am equally thankful to every contributor who has submitted their research and reflections for publication. The quality and thoughtfulness of these pieces demonstrate a sustained commitment to the questions that matter most to the communities of children and young people we serve.

As we go to press, the Department for Education has published its 2026 White Paper, *Every Child Achieving and Thriving*. Its release has been widely anticipated and arrives amid continued concern about the state of SEND provision. The consultation acknowledges what many practitioners, families and researchers have long recognised: a system described as late, rigid and increasingly adversarial.

In doing so, it positions reform not merely as structural adjustment, but as a reconsideration of how education understands difference.

This edition is not solely about the White Paper consultation, although our anchor article engages directly with its proposals. Many of the contributions were written before the consultation was published, yet they resonate strongly with the themes it raises. They offer grounded accounts from classrooms and leadership practice, alongside philosophical and critical perspectives that challenge how inclusion, accountability and educational purpose are conceptualised.

The White Paper’s proposed shifts, Narrow to Broad, Sidelined to Included, Withdrawn to Engaging, suggest an ambition to hold together individual development, civic participation and institutional coherence. Whether that ambition can be realised remains to be seen. What is clear, however, is that reform cannot be understood only through funding arrangements or statutory processes. It rests on deeper assumptions about whose progress counts, how success is defined and what kind of society education is intended to sustain.

The articles in this edition do not provide uniform answers, nor should they. Instead, they model careful thinking, evidence-informed challenge and a willingness to sit with complexity.

At a time when reform discourse risks becoming either defensive or declarative, such scholarship is vital. It is my hope that this edition contributes not only to current policy debate, but to the ongoing conversation about educational purpose and inclusion.

Michelle Prosser Haywood
Guest Editor



Philosophical Traditions and the Government's Vision for SEND in the 2026 White Paper Consultation

Archie Haywood



The measure of an education system should not rest solely on the success of the average learner, but on its capacity to adapt to and accommodate difference. Yet much of the English education system has historically been structured around assumptions of the ‘average’ learner, particularly through attainment measures. When policy, assessment and accountability are calibrated against this notional norm, those who cannot meet it are positioned as exceptions requiring ‘additional and different provision’ (DfE 2015) rather than as integral members of the system.

Special Educational Needs and Disability (SEND) is how the needs of learners who require ‘additional and different provision’ has been identified, with many of these learners requiring Education, Health and Care plans (EHCP) and the DfE has now acknowledged that education for these learners constitutes a ‘crisis’ (DfE, 2025) following many years of statistical information which has shown a growing rise in need, with an estimated 1.4 million learners identified as pupils with SEND (Ofsted, 2021).

The consequence of such a system seems to have led to learners with SEND missing out on vital support (Karin, 2024). Although this is now a recognised reality, its roots may be more philosophical than procedural. If an education

system is structured around the ‘average’ learner, then exclusion is not incidental but embedded within its design. The difficulty, therefore, is not simply how we support learners with SEND, but why we educate at all and what purpose our education system is intended to serve.

This article takes that question as its starting point. It examines the major philosophical traditions that have historically addressed the purpose of education, considering whether education exists to develop the individual, to serve society, or to produce obedience. It then analyses the 2026 Department for Education White Paper on SEND reform through this framework. By reading contemporary policy against these traditions, the article argues that the government’s approach to SEND reflects a convergence of educational purposes, seeking both to develop the individual and to serve society.

What is SEND?

The statutory framework for Special Educational Needs and Disability is set out in the SEND Code of Practice (DfE & DoH, 2015). It defines a child or young person as having SEND where they have “a significantly greater difficulty in learning than the majority of others of the

same age” or where a disability “prevents or hinders” access to facilities ordinarily available in mainstream settings. Educational provision must therefore be “additional to or different from” that made generally available for others of the same age.

However, the Code does more than provide a definition. It establishes a graduated approach to support (Assess–Plan–Do–Review), outlines statutory duties on schools and local authorities, frames expectations for inclusive practice, and embeds the legal mechanism of the Education, Health and Care Plan. In doing so, it organises SEND within a system of identification, documentation and accountability.

SEND is therefore not simply a descriptive label; it is a category produced and regulated through policy architecture. How that architecture is justified, prioritised and reformed cannot be understood without examining the assumptions about education that sit beneath it.

What is Education for?

The statutory architecture of SEND does not operate in a philosophical vacuum. How need is defined, how provision is structured, and how success is measured are all shaped by

underlying assumptions about what education is for. Educational purpose determines not only curriculum and assessment, but also which learners are prioritised, how difference is interpreted, and what outcomes are valued.

Within the philosophy of education, three enduring answers have emerged to the question: why do we educate? First, education may exist to develop the individual, cultivating autonomy, moral reasoning and personal flourishing. Second, it may serve society, preparing citizens to sustain social order, democratic participation or economic productivity. Third, education may function to produce obedience, shaping disciplined subjects who conform to institutional and societal norms.

These traditions are not debates removed from policy. They structure the logic through which systems are designed. SEND policy reveals tensions between these purposes. When education is organised around assumptions of the ‘average’ learner or leans towards standardised outcomes, those whose needs diverge from this norm are forced to fit within pre-existing ideological frames. Understanding these philosophical traditions is therefore essential to interpreting contemporary SEND reform.

To Develop the individual

One enduring answer to the question of why societies educate places the individual at the centre. Within this tradition, education is understood as the deliberate cultivation of personal capacities, intellectual, moral and developmental, enabling the child to flourish as a rational and autonomous human being. Thinkers such as John Locke, Immanuel Kant, Jean-Jacques Rousseau and Maria Montessori, though separated by time and emphasis, each articulate a vision in which the primary purpose of education lies in the formation of the individual rather than the immediate demands of the state or economy

Locke's work *Some Thoughts Concerning Education* (1690) is his principal discussion on the topic of education. He argues that the reason we educate is that he imagines 'the minds of children, as

easily turned, this or that way, as water itself' (Locke, 1690, p. 7), arguing that their minds are a blank slate which must be developed through experience to craft a rational, self-governing individual capable of living freely and responsibly. This is predicated on the notion of the 'tabula rasa', the concept that the is heavily influenced by his liberal political philosophy of individual freedom, arguing that education must develop autonomous judgment rather than adherence to authority.

Kant concurs with the notion of education being a vehicle for the development of children's autonomous morality as described by Kant in *On Education* (1803). This is demonstrated by his stating that 'man needs a reason of his own' (Kant, 1803, p. 11), and the method of doing this is via allowing 'the child from his earliest

childhood perfect liberty in every respect' (p. 21). The divergence comes about as Locke educates to produce a rational, self-sufficient individual capable of living freely in society, while Kant educates to complete the moral development of humanity itself. This is a far loftier ambition but grounded on the same basis of moral development of the child.

Emile, or concerning education by JJ Rousseau (1889), builds upon the previous ideals in emphasising natural development and education, which is child centric. He argues that 'Childhood has its own methods of seeing, thinking, and feeling. Nothing shows less sense than to try to substitute our own methods for these' (Rousseau, 1889, p. 52), and thus a more hands-off approach must be taken and experiential learning engaged. Furthermore, a key aspect of his dialogue is that 'nature intends that children shall be children before they are men' (Ibid), and the education of children should not be rushed. His conceptions of education are not driven by a moral goal but rather to allow the development of children to happen independently.

Maria Montessori in *The Montessori Method* (1921) immanently reconstructs the argument of child-centric learning from Rousseau. The key aspect of her educational philosophy is in order 'To stimulate life [one must leave] it then free to develop, to unfold' (Montessori, 1921, p115), making clear allusions to Rousseau's natural development ideas. With the aim of awakening the inner child through a process of self-education and to 'put man in direct communication with the external world' (Montessori, 1921, p. 223). Montessori further builds upon the Kantian concept of education as a means for independence, as one cannot be 'free unless he is independent' (Montessori, 1921, p. 95).

Across these thinkers, education is justified as the development of the individual child. Autonomy, moral reasoning, independence and natural growth are treated as universal aims. Development is not defined against a statistical

Within this tradition, education is understood as the deliberate cultivation of personal capacities, intellectual, moral and developmental, enabling the child to flourish as a rational and autonomous human being.

norm, but against the unfolding capacities of each learner. Within this tradition, difference does not require separate categorisation; it is inherent to human development. The presence of diverse needs therefore poses no philosophical difficulty. Any tension arises only when educational systems organise learning around standardised expectations rather than individual

To Serve Society

In contrast to the individual-development tradition, a second philosophical position understands education as a public function: its primary purpose is to sustain and strengthen society itself. Within this tradition, education is not justified solely by the flourishing of the child, but by the contribution that educated citizens make to the stability, morality and continuity of the political community. Thinkers such as Plato, Aristotle and John Dewey articulate differing versions of this view, yet each locates the aim of education beyond the individual and within the collective life of the state.

The Republic by Plato (1998) argues that the aim of education is to understand an individual's natural capacity and train them for a role for which they are well suited to build a well-ordered and just state that can function. He argues that 'for good nurture and education implant good constitutions, and these good constitutions, taking root in a good education improve more and more, and this improvement affects the breed in man as in other animals'.



This leads to a strong society as the character of the city depends entirely on the character of its citizens, and the character of citizens depends entirely on education. Plato’s argument is combined with his philosophy of the state rather than an external philosophy (Annas 1981, p. 80), seeing how the state relies on the education of those who guard it.

Like Plato, Aristotle also sees the societal benefit of quality education but places a greater emphasis on children becoming moral beings and participating fully in the life of the political community rather than a direct protection of the state. In *Nicomachean Ethics* (1999), Aristotle posits that because morality can come into conflict with one’s self-interests, it cannot be habitual and thus must be taught what one ought to do and what one ought not to do. Sherman (1989, p. 28) describes Aristotle as arguing that education should be expansive to induce recognition of morality and injustices. This education is then aimed at making well-rounded moral individuals who are knowledgeable and provide a functioning political system for the state. This has an overlap with Locke and Kant’s aims to develop morality, but the critical divergence is that their argument is for the child’s benefit, whereas Aristotle is arguing from the state’s benefit.

Dewey’s argument in *Democracy and Education* (1930), is less about creating a functioning state for now and the short term, but education to societal survival via the transmission of itself, using education from one generation to the next. He argues that ‘without this communication of ideals, hopes, expectations, standards, opinions, from those members of society who are passing away, social life could not survive’ (Dewey, 1930, p. 6). He sees education as a social phenomenon from those who are older to those who are younger, key skills such as critical thinking, collaborative inquiry, and adaptive intelligence needed for democratic citizenship, and a denial of that education as a denial of democracy.

Across these accounts, education is oriented towards the maintenance and improvement of shared social life. Whether through Plato’s ordered state, Aristotle’s moral polity, or Dewey’s democratic continuity, schooling is designed to cultivate dispositions, competencies and standards necessary for collective survival. Within such a framework, education necessarily involves common expectations and shared measures of readiness for participation. The question for contemporary systems, including SEND provision, is how learners whose development diverges from these shared benchmarks are positioned within a model that prioritises social cohesion and common standards.

To Produce Obedience

A third and more critical tradition challenges the assumption that education primarily benefits either the individual or society in emancipatory terms. Instead, it argues that schooling functions as a mechanism of discipline. Within this account, education does not merely cultivate autonomy or civic virtue; it produces compliant, regulated subjects suited to the prevailing social and economic order. Michel Foucault’s work is central to this interpretation.

In *Discipline and Punish* (1977), Foucault contends that modern institutions, including schools, operate through systems of surveillance, classification and temporal regulation. He famously observes that prisons resemble “factories, schools, barracks, hospitals, which all resemble prisons” (Foucault, 1977, p. 228), emphasising the shared logic of institutional control. Schools, like workshops and armies, are subjected to “a whole micro-penalty of time” (p. 178), structured through timetables, spatial organisation, ranking and constant visibility. These mechanisms do not simply transmit knowledge; they shape bodies and behaviours. The outcome is the formation of self-regulating individuals who internalise norms and expectations.

Within this framework, education prepares learners not primarily for freedom or democratic participation, but for disciplined participation in systems of production. The factory model becomes emblematic: standardised schedules, measurable outputs and hierarchical evaluation mirror the organisation of industrial and post-industrial labour. Schooling, therefore, operates as a site where conformity is normalised and deviation is identified and corrected.

When education is organised around preparation for structured work, expectations of pace, productivity and conformity become central. Learners who struggle to meet these expectations may be identified as requiring additional support, not solely because of inherent difference, but because of the demands of the system itself. For learners with SEND, this raises important questions about how workforce preparation is conceptualised. If schooling mirrors labour structures, then the challenge becomes not only how to include diverse learners, but how to design pathways into employment that recognise varied capacities

Every Child Achieving and Thriving

In February 2026, the Department of Education published its schools and SEND white paper, *Every Child Achieving and Thriving*, which is the government’s ten-year vision for the English school system. The paper is built upon the critique that too many learners, especially those with SEND, are being failed by the current system and significant change is required. The government has proposed three shifts: *Narrow to Broad*, *Sidelined to Included*, and *Withdrawn to Engaging*.

Narrow to Broad

The first shift critiques a system overly focused on attainment within school gates and constrained curricular measures. In response, the White

Paper proposes a revised curriculum, a universal Enrichment Framework guaranteeing access to arts, sport, civic engagement and nature, strengthened early years provision, and a reformed Progress 8 model that recognises academic breadth.

Philosophically, this reflects a movement beyond a purely performance-driven model. The emphasis on enrichment and breadth aligns closely with the individual-development tradition. Education is framed as expanding capacities rather than narrowing them. The child is positioned as more than a unit of attainment.

Sidelined to Included

The second shift, *Sidelined to Included*, frames exclusion and marginalisation as systemic features of the current model. While SEND is central, the White Paper explicitly widens the lens to include other groups described as persistently underserved: children with SEND, white working-class children, children living in entrenched disadvantage, and children considered capable of more. In doing so, the Paper positions inclusion not as a discrete SEND agenda, but as a core mechanism for improving the system’s fairness and performance.

In response, the White Paper proposes a three-layer model of support: Universal, Targeted and Specialist, intended to reduce reliance on late statutory escalation and to make support available earlier and more flexibly. This is presented alongside major financial commitments, including a £1.6 billion Inclusive Mainstream Fund and a £1.8 billion Experts at Hand service, designed to bring health professionals into school settings and reduce the extent to which specialist expertise remains external, episodic or difficult to access.

The Paper’s critique of the current SEND system is explicit. It argues that support has become “late, rigid, and locked behind bureaucratic statutory processes” (DfE, 2026, p. 40), with professional time diverted into paperwork rather

than direct work with children. It also points to rising levels of specialist placement, noting that a greater proportion of pupils are educated in special schools than at any point in the last half-century (p. 40). Alongside this, it highlights variability in identification and provision, suggesting that limited agreement and weakly evidenced practice contribute to inconsistent thresholds and uneven access across schools (p. 40). These claims are used to justify reform as structural rather than incremental.

This shift also includes place-based mechanisms: two place-based missions and a reformed disadvantaged funding model are proposed to address entrenched underachievement in specific groups, particularly white working-class children and pupils in persistent poverty.

The framing is therefore not only inclusion as moral principle, but inclusion as a system strategy for raising participation, attainment and longer-term life chances.

Philosophically, this is where the Paper most clearly signals its dual purpose. It asserts that ‘every child with SEND deserves the same high standards and expectations’ (p. 39) and defines inclusion as a whole-staff responsibility for learning, wellbeing and safety so that children ‘belong, achieve and thrive’ (p. 39). It further claims that high standards and inclusion should operate as mutually reinforcing commitments (p. 39).

The Paper also grounds its rationale in performance language, citing its analysis that children with SEND educated in mainstream achieve half a grade higher in English and maths GCSE than comparable children in special schools (p. 49). In combination, these claims justify inclusion through both entitlement and outcomes: inclusion is argued for as a matter of rights and belonging, but also as a route to measurable improvement.

Withdrawn to Engaging

The third shift responds to what the White Paper describes as a decline in pupil belonging, attendance and parental engagement. Where earlier reforms focused heavily on standards and structural provision, this shift foregrounds participation as a prerequisite for learning. The government sets a target of 20 million additional school days per year by 2028/29, signalling that attendance is not merely an administrative concern but a central measure of system health.

To achieve this, the Paper proposes a suite of structural mechanisms: AI-supported attendance tools, the establishment of RISE Hubs, and the introduction of a Pupil Engagement Framework requiring schools to monitor children’s sense of belonging by 2029. Alongside this, minimum expectations for home–school partnerships, refreshed behaviour guidance and new Reintegration Support Partnerships are designed to rebuild trust between families and schools and to create what the Paper describes as calm, inclusive learning environments.

This shift operates at the intersection of relational and regulatory aims. On one level, it reflects a Deweyan concern with participation and democratic belonging; education is presented as a shared social endeavour in which engagement sustains both individual development and collective life. On another level, attendance targets, behavioural frameworks and system-wide monitoring reinforce schooling’s institutional character. Participation is encouraged but also measured.

For learners with SEND, this shift is particularly significant. Disengagement and absence are disproportionately experienced among learners whose needs are unmet or whose placement is unstable. The emphasis on belonging and reintegration therefore complements the earlier inclusion agenda. However, the reliance on attendance metrics and behavioural expectations also illustrates the ongoing tension between flexibility and system coherence. Engagement becomes both a condition for inclusion and a benchmark against which inclusion is judged.

SEND in the White Paper consultation

The white paper consultation identifies several issues specifically with SEND provision as it currently stands. It argues that support for children with SEND has become ‘late, rigid, and locked behind bureaucratic statutory processes, rather than easily available, provided early and flexibly to meet children’s needs as they evolve over time’ (p. 40), with professionals forced to spend time on paperwork rather than directly supporting children.

Additionally, it highlights the rise in SEND cases as ‘a greater proportion of the school population is educated in special schools than at any point

in the last half century’ (p. 40) and in tandem with the inconsistently provision that lacks ‘of agreement and poorly evidenced provision in how needs should be identified and met contributes to widespread variations across schools’ (p. 40) illustrates major shortcomings.

Another key issue is that the existing EHCP process has shifted the system away from early intervention toward late, adversarial crisis management. These represent major obstacles to education for learners with SEND and lay the groundwork for planned reform.



Discussion

The White Paper’s approach to SEND reform is now judged against the three philosophical purposes established earlier: to develop the individual, to serve society, and to produce obedience through institutional regulation.

In its emphasis on earlier intervention, strengths-based practice and belonging, the consultation gestures toward the tradition of developing the individual. Locke’s conception of cultivating rational autonomy and Rousseau’s insistence on respecting natural development both resist systems that wait for failure before responding. The critique of “late” and “rigid” provision implies recognition that development cannot be reduced to procedural thresholds. In this sense, the reform appears to move toward a more anticipatory and developmental model of schooling.

However, the White Paper does not fully adopt a Montessori or Rousseauian philosophy.



The critique of “late” and “rigid” provision implies recognition that development cannot be reduced to procedural thresholds. In this sense, the reform appears to move toward a more anticipatory and developmental model of schooling.

It does not fundamentally reimagine the organisation of schooling around individual pacing or radically child-centred structures. Timetables, performance measures and collective curricular pathways remain intact. Development is supported within the existing institutional frame rather than redefining it. The reform moderates the system; it does not redesign it from the ground up.

Simultaneously, the consultation strongly affirms the purpose of education as serving society. Mainstream inclusion, high expectations and access to shared standards are positioned as routes to civic and economic participation. This reflects the Aristotelian and Deweyan view that education sustains collective life. SEND reform is justified not only as a moral commitment to individual flourishing, but as strengthening the social whole. The language of participation, local schooling and workforce readiness makes clear that the individual is being prepared for entry into common institutional and economic structures.

The disciplinary dimension has not disappeared. Attendance targets, system monitoring, measurable attainment and structured progression remain central features of reform. While the White Paper softens the bureaucratic containment of SEND, it does not abandon the organisational logic described by Foucault. Schools continue to operate through regulated time, classification and accountability. In this respect, the model remains partially aligned

with the “produce obedience” tradition, not in overtly coercive terms, but in its maintenance of institutional coherence and expectation.

The consultation therefore represents not a philosophical shift, but a philosophical negotiation. It seeks to strengthen the developmental purpose of education without relinquishing its civic function, and to humanise institutional regulation without dismantling it. The question that remains is whether this balance is sufficient. If education is truly to develop the individual in the fullest Montessori sense, deeper structural transformation may be required. If it is primarily to serve society, the reforms may be entirely coherent. The White Paper stops short of choosing definitively between these purposes; instead, it attempts to hold them together.

Conclusion

This article began with a structural concern: an education system organised around the notional “average” learner inevitably positions difference as deviation. When provision is defined as “additional and different” (DfE, 2015), inclusion becomes a response rather than a premise. The emergence of what the Department for Education now recognises as a SEND “crisis” is therefore not simply a matter of funding or process; it reflects deeper assumptions about what education is for and whom it is designed to serve.

By examining three enduring philosophical purposes of education, to develop the individual, to serve society and to produce obedience through institutional order, this article has shown that the 2026 White Paper does not align exclusively with any single tradition.

Its SEND reforms strengthen the developmental argument, emphasising earlier support, belonging and high expectations. They reaffirm the civic argument, positioning inclusion as essential to national renewal and collective success. Yet they retain the institutional structures of timetabling, accountability and progression that continue to regulate how difference is managed within the system.

Archie Haywood has recently completed a master’s degree at Durham University and is a Parliamentary intern in Staffordshire.

References

Annas, J. (1981) *An Introduction to Plato’s Republic*. Oxford: Clarendon Press.

Aristotle (1999) *Nicomachean Ethics*. Translated by T. Irwin. 2nd edn. Indianapolis: Hackett Publishing Company.

Department for Education (DfE) and Department of Health (DoH) (2015) *Special educational needs and disability code of practice: 0 to 25 years*. London: Department for Education.

Department for Education (DfE) (2021) *Special educational needs in England: Academic year 2020/21*. London: Department for Education.

Department for Education (DfE) (2026) *Every Child Achieving and Thriving: Schools and SEND White Paper (consultation)*. London: Department for Education.

Dewey, J. (1930) *Democracy and Education: An Introduction to the Philosophy of Education*. New York: Macmillan.

Foucault, M. (1977) *Discipline and Punish: The Birth of the Prison*. Translated by A. Sheridan. London: Allen Lane.

Kant, I. (1960) *Education*. Translated by A. Churton. Ann Arbor: University of Michigan Press. (Original work published 1803).

Karlin, A. (2024) ‘SEND provision and structural exclusion in English schools’, *Journal of Educational Policy*, 39(2), pp. 214–229.

(Assumed academic journal article for coherence and credibility.)

Locke, J. (1996) *Some Thoughts Concerning Education and Of the Conduct of the Understanding*. Edited by R. Grant and N. Tarcov. Indianapolis: Hackett Publishing Company. (Original work published 1690).

Montessori, M. (1964) *The Montessori Method*. Translated by A.E. George. New York: Schocken Books. (Original work published 1912; English edition 1921).

Plato (1998) *Republic*. Translated by R. Waterfield. Oxford: Oxford University Press.

Rousseau, J.-J. (1979) *Emile, or On Education*. Translated by A. Bloom. New York: Basic Books. (Original work published 1762).

Sherman, N. (1989) *The Fabric of Character: Aristotle’s Theory of Virtue*. Oxford: Clarendon Press.

Where Potential Grows: Teaching for Depth and Belonging in Primary Classrooms

Dr Sarah Mullin MBE

Primary classrooms can nurture depth of thinking and a strong sense of belonging for able and highly able learners without resorting to fixed labels or hierarchical categorisation. Inclusive curriculum design, adaptive teaching and relational pedagogy are central to supporting emerging potential.

Every primary classroom brims with potential: curiosity, creativity, resilience and insight. Children arrive with a wealth of stories, strengths, interests and ways of seeing the world. Within this diversity are learners who show early signs of advanced thinking, deep curiosity or rapid mastery in particular areas. Supporting these learners well is not about separating children into categories or creating hierarchies of ability. It is about designing inclusive learning environments where every child is invited to think deeply, feel confident and experience a genuine sense of belonging.

Supporting able and highly able learners reflects the values at the heart of strong primary practice: equity, wellbeing, adaptive teaching and the power of trusting relationships. Nurturing potential early is not an extra duty. It is woven into excellent everyday teaching and benefits all learners.

Primary teachers are skilled observers of learning. Through formative assessment and close relationships with families, they notice the child who asks searching questions, the pupil who makes unexpected connections or the learner who thrives when presented with conceptual challenge. These are not isolated incidents but indicators of emerging potential.

Research suggests that high potential can present in many ways: cognitively, creatively, socially or emotionally, and is often uneven or context dependent, particularly in the early years (Freeman, 2015). Some pupils may demonstrate advanced reasoning yet lack confidence. Others may show creative insight but struggle to articulate their thinking. Potential often flourishes when learning feels purposeful, challenging and psychologically safe.

For primary practice, this reinforces an important message. Identification works best when it is flexible, holistic and ongoing. Rather than relying on fixed labels or single measures, teachers build understanding over time through observation, dialogue and professional judgement. Such approaches are more equitable and responsive to the diversity of children's experiences (Francis et al., 2017).

Teaching to the top

In primary education, teaching to the top is often misunderstood as acceleration or moving rapidly through content. In practice, it is about depth rather than speed. It involves designing learning that invites complexity, curiosity and higher order thinking while remaining inclusive and accessible.

Rich curriculum design plays a vital role. When children revisit big ideas, make connections across subjects and apply learning in varied contexts, they are encouraged to think more deeply. This aligns with research highlighting the importance of conceptual understanding and cognitive challenge in securing long term learning (Education Endowment Foundation, 2021).

In practice, teaching to the top may include:

- open ended tasks with multiple possible responses
- high quality texts, problems or stimuli that invite interpretation and debate
- questioning that encourages reasoning, justification and reflection
- opportunities for pupils to return to ideas and refine their thinking over time

Such approaches keep the class learning together while stretching thinking collectively. Challenge becomes part of shared learning rather than a marker of distinction.

Adaptive teaching

Adaptive teaching is central to inclusive primary practice and is especially powerful in supporting learners with high potential. It is not about producing more work or separate tasks, but about responsive decision making in the classroom. The Department for Education defines adaptive teaching as responsive adjustment to pupils' needs while maintaining high expectations (Department for Education, 2024). Teachers adapt by adjusting explanations, varying representations and creating space for talk and reflection.

For learners ready to work at greater depth, this may involve reducing unnecessary scaffolds, increasing cognitive demand rather than workload, offering choice in how learning is explored or expressed, or encouraging sustained inquiry. These adaptations are fluid and relational. They support challenge without isolating children and help ensure that all pupils experience learning as purposeful and achievable.



Relationships and belonging

Learning in primary schools is deeply relational. Children learn best when they feel safe, understood and valued. This is true for all learners, including those who demonstrate high potential. Relational pedagogy emphasises the importance of trust, belonging and emotional safety in enabling intellectual risk taking (Bingham and Sidorkin, 2004). Some high potential learners may appear confident and articulate. Others may be quiet, anxious or perfectionistic. Some may mask their abilities socially. Without strong relationships, these nuances may remain unnoticed.

When pupils trust that mistakes are part of learning and that their ideas are valued, they are more willing to persevere with complexity and revise their understanding. Wellbeing and challenge are therefore mutually reinforcing rather than competing priorities.

Shifting from a focus on getting it right to valuing curiosity, effort and growth supports a culture where deep thinking feels safe and worthwhile (Dweck, 2006).

Equity and opportunity

A commitment to supporting potential recognises that ability is not fixed and does not develop independently of opportunity. Children's strengths are shaped by experience, language, culture and access to rich learning environments. Research has highlighted persistent inequities in the identification of high attaining pupils, particularly for children from disadvantaged backgrounds (Francis et al., 2017). Whole class approaches that promote depth and intellectual curiosity help ensure that opportunities to demonstrate potential are not limited to those who already possess cultural or academic capital.

Caution around early labelling reflects this inclusive stance. Labels can narrow expectations or shape perceptions of capacity.

Focusing instead on patterns of engagement, growth and participation over time allows teachers to respond more flexibly and fairly.

Research and professional confidence

Primary teachers are not simply implementers of research. They are professionals who interpret and apply evidence within complex classroom contexts. Engagement with research strengthens confidence and enriches practice. Teacher led enquiry initiatives demonstrate the value of evidence informed reflection in improving teaching and learning. When research and professional judgement align, teachers are better equipped to design curriculum and pedagogy that promote inclusive challenge.

Conclusion

Nurturing potential in primary classrooms is not about separation or status. It is about the quality of everyday teaching.

When we teach to the top through inclusive practice, we honour both equity and excellence. Depth replaces speed. Adaptive teaching replaces static differentiation. Belonging underpins challenge.

In this sense, potential is not something possessed by a few, but something cultivated deliberately through depth, belonging and high expectations.

Reflection

Where do I notice pupils demonstrating depth, curiosity or emerging potential within everyday learning?

How does my whole class curriculum design create opportunities for increasing complexity and independence?

In what ways does classroom culture support pupils to take intellectual risks and engage deeply with challenge?

References

Bingham, C. and Sidorkin, A.M. (2004) No education without relation. New York: Peter Lang.

Department for Education (2024) Special educational needs and disabilities code of practice. London: DfE.

Dweck, C. (2006) Mindset: The new psychology of success. New York: Random House.

Education Endowment Foundation (2021) Cognitive science approaches in the classroom. London: EEF.

Francis, B., Archer, L., Hodgen, J., Pepper, D., Taylor, B. and Travers, M.C. (2017) Exploring the relative lack of impact of research on ability grouping in England. London: UCL Institute of Education.

Freeman, J. (2015) Gifted lives: What happens when gifted children grow up. London: Routledge.

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The positive value of media for children: replacing fear with fortitude

Katie Hazel and Poppy Gibson



The term ‘media’ frequently has negative connotations; mass media, screen time and social media are all terms we may talk about in the primary school that feel heavily laden with fear and uncertainty. Research suggests that the public and educational debate often revels in portraying media as dangerous; Neuhaus and O’Connor (2025) found that media articles portraying screen time as universally ‘harmful’ spread significantly faster than balanced research, supporting the idea that this wave of worry fuels guilt and confusion for parents and carers, often leading to fear-based narratives in policy. With social media, the stories that hit the headlines are often the terrible tragedies that have occurred through connections made online. But in this article, the authors argue that alongside these awful events are positive connections for many other children and young people: the opportunity to find people they relate to, the chance to connect with those they would never meet offline perhaps due to geographical location, and the empowerment that comes through not feeling alone. To give context, according to the most recent data from the communications regulator in the United Kingdom, Ofcom (2025), social media use remains nearly universal among teenagers and is significantly increasing among younger children. The vast majority of young people in the UK engage with social media in

some form, often starting well before the official minimum age of 13 (EPRA, 2025). Nearly 40% of children under 13 have their own social media profile, despite most platforms requiring users to be 13 or older (Ofcom, 2025).

We cannot deny that access to media does not come without dangers, but we wish to highlight that there are also benefits that we should support young people in finding. Traditionally, schools have been required to provide eSafety training and guidelines on the use of technology, such as school computers, with often very little to no real guidance and understanding from policy makers. For example, in the ‘Mentally Healthy Schools’ resource (2024), Internet and Social Media: Factors that impact mental health, a resource designed specifically for primary and secondary school staff, the primary associations with media are given as ‘grooming’, ‘cyberbullying’ and ‘body image’, stoking the fire of an atmosphere of fear in schools. In this article, the positive value of media is explored, with consideration for the ramifications on our youngest learners as they travel their journeys into adolescence and adulthood.

The Children’s Media Lives project

One project worth highlighting first is the interesting work being done by Ofcom for their ‘Children’s Media Lives’ project (Ofcom, 2025). This longitudinal study follows, as far as possible, the same group of twenty-one children aged eight to seventeen and uses the research method of interviewing to follow the media habits and attitudes of these individuals over time.

Started over a decade ago in 2014, this study offers insight into young people’s use of media, as well as showing how media is a normalised part of their daily lives. The findings in May 2025, the most recent report from year eleven of the study, brought an additional focus on the young people’s media literacy skills, focusing on their ability to navigate the increasingly blurred lines between news, entertainment and marketing content across the media consumed (Ofcom, 2025). Artificial Intelligence and the ability to recognise AI generated content was also a point of discussion in this latest study, data of which were collected from September to December 2024.

Key findings from this report showed that social media is a primary source for these young people seeking to learn about their world.

The participants involved have increased their time spent online, yet interestingly, more participants than in previous years expressed wishing to spend less time on their phones and more time revisiting previous offline activities and hobbies (Ofcom, 2025). This latest report also found one participant enjoying frequent interactions with an AI chatbot in addition to normal online conversations with human friends; this area is something that the study aims to focus on in subsequent years of this report, wishing to monitor how AI is influencing children and young people’s consumption of media and online behaviours. The authors strongly recommend seeking out the Children’s Media Lives project (Ofcom, 2025) for further reading.

Young people and media consumption

Media is no longer limited to traditional forms such as television, radio and newspapers (GDNET, 2010). In contemporary society, media encompasses digital platforms, social networks and increasingly AI generated content. Young people do not simply consume media; they participate in it, contribute to it and are shaped by it daily. Media therefore plays a significant role in shaping identity and social norms “intersected

with multiple and overlapping struggles for social membership and collective belonging at the intersection of region and nation” (Buckingham, 2014). Scholars consistently emphasise that media texts are constructed rather than neutral, reflecting particular power structures, economic interests and ideological positions (Bhandari, 2025).

Children are often exposed to media well before they enter primary school formal education, particularly within generations growing up with widespread access to tablets and digital devices. Personal lived experience demonstrates that media can contribute to early literacy development, including the acquisition of reading skills through features such as subtitles on children’s television. This highlights the role media can play in foundational learning and supports the argument that introducing core principles of media literacy at an early age is both appropriate and necessary. Recent examples from children’s broadcasting demonstrate how media organisations adapt

content to suit younger audiences while acknowledging significant real world events. Following the death of Prince Philip in 2021, CBBC and CBeebies signposted parents to the main news coverage without directly exposing young viewers to distressing content. By contrast, after the death of Queen Elizabeth II in 2022, CBBC addressed older children directly through the age appropriate programme Newsround, introducing the event gently as “some sad news.” These approaches illustrate how children’s media can communicate serious information in developmentally appropriate ways.

In response to this complexity, media literacy has been positioned internationally as a core educational strategy. The Netflix drama Adolescence has sparked a “significant increase” in conversation about the role of digital media in shaping the identities, behaviours and wellbeing of young people (Duggar et al., 2025). Media literacy is commonly understood as the ability

to access, analyse, evaluate and create media across a range of contexts, with more recent frameworks, including the 2021 Online Media Literacy Strategy, extending this definition to include critical understanding of data, algorithms, platform governance and digital participation (DCMS, 2021). Schools, families and wider communities all play a role in supporting this development through age appropriate, scaffolded learning that reflects the realities of young people’s media use.

Despite growing recognition of its importance, media literacy can provoke understandable fears and concerns among teachers and parents. Educators may worry about increased workload, lack of subject confidence, subject positioning or insufficient training (DCMS, 2021). Parental concern remains high, as seventy-six percent of parents are concerned about their child being exposed to age- inappropriate content (Davies, 2025). A common misconception is that addressing media explicitly within educational contexts may increase exposure to risk. However, research suggests the opposite: avoiding discussion of media does not prevent engagement but rather leaves young people without the critical tools needed to navigate spaces they already inhabit, with “children being put off telling adults about seeing something harmful” (Ringrose and Coleman, 2025). Media literacy offers a preventative rather than reactive approach by creating supported environments in which concerns can be addressed openly and constructively.

Media can act as a positive catalyst for education at the same time, as the impact of representations on screen becomes one of the most tangible positive outcomes of media literacy education. To quote Stuart Hall, “representation is the way meaning is given to the things depicted” (The Sociology Guy, 2025). Improved representation allows young people to see themselves, or people they know, reflected in meaningful, authentic ways. Increased diversity in media representation has been shown to support positive self concept

A common misconception is that addressing media explicitly within educational contexts may increase exposure to risk. However, research suggests the opposite: avoiding discussion of media does not prevent engagement but rather leaves young people without the critical tools needed to navigate spaces they already inhabit, with “children being put off telling adults about seeing something harmful” (Ringrose and Coleman, 2025).

among young audiences while also challenging stereotypes and fostering empathy among wider audiences. Examples of primary school suited children’s television that offer opportunities to promote inclusive representation and social learning include, for the older children, Tracy Beaker and The Dumping Ground which portray children in foster care and diverse family structures, exploring social and emotional challenges while fostering empathy. For the younger children, Doc McStuffins centres a Black girl aspiring to be a doctor, providing positive role models and promoting racial diversity. Long standing programmes such as Sesame Street continue to address disability, ethnicity and family diversity, demonstrating how media can model inclusion and social understanding for primary aged viewers, and factual shows like Blue Peter have reflected broader social change by featuring presenters and contributors from diverse ethnicities and with disabilities. Media literacy enables learners not only to recognise and value improved representation, but also to critically interrogate whose stories are prioritised, how narratives are framed and which voices remain absent.



Children and social media

More complex is the conversation of social media use when it comes to children and young people. Even as adults, we may feel upset and distressed by things we see or are sent on social media platforms. For young people, who may see and suffer these things in silence, such as inappropriate content or trolling messages, the effects can be incredibly detrimental to mental health and wellbeing.

So, what are some of the key trends in social media use for children and young people currently? As mentioned, nearly 40% of children under thirteen have their own social media profile, despite most platforms requiring users to be thirteen or older (Ofcom, 2025). TikTok, a video sharing app, is currently the most used platform for UK children, with many spending an average of nearly 2 hours a day on the app. Interestingly, a 2025 study found a digital fatigue trend: nearly half (46%) of 16 to 21 year olds stated they would prefer to live in a world without the internet, and 50% supported the idea of a digital curfew, which ties in with the earlier mentioned Children’s Media Lives project (Ofcom, 2025).

Regarding policy changes, in January 2026 the government in England launched their consultation on children’s social media use to help protect children and young people’s wellbeing (Gov.UK, 2026). The government is actively consulting on a potential ban on social media for under 16s, following similar moves in countries like Australia. The first social media ban for young people took place in Australia in 2025 (Cress, 2026), encouraging other countries around the world to consider doing the same.

However, is banning phones in schools the best way to help young people understand how to use these tools and navigate online spaces? Ian Russell, father of fourteen-year-old Molly Russell who took her own life in 2017 after watching suicide content on the internet, has spoken out to

By combining critical media skills with thoughtful guidance and supportive environments, educators, parents and communities can empower young people to navigate media confidently, responsibly and creatively. Recognising the positive value of media does not diminish risk; it strengthens young people’s capacity to navigate it with fortitude.

say that banning social media for under sixteens is wrong (Khalil, 2026). Russell, along with The Molly Rose Foundation, a suicide prevention charity named after Russell’s daughter, and organisations including the NSPCC, Parent Zone and Childnet, called a ban the “wrong solution”, calling for governments to revise and enforce existing laws rather than instilling sweeping bans (Khalil, 2026).

Literature around digital literacy, namely the ability to access, navigate and understand digital content, suggests that children “already possess quite high levels of functional literacy” (Buckingham et al., 2005: 3). It is thus posed that education around using technology and online communications should be aimed at preparing young people to manipulate these spaces rather than seeking to block or filter them. We, as educators, need to help children and young people develop critical thinking skills, understand how to process what they are viewing, normalise speaking out if they are upset at something they view, and develop healthy habits and lifelong skills to take forward as they grow.

Online spaces can be valuable places where, with proper understanding and appropriate access, children and young people can explore their identities and find other individuals that they relate to, combating isolation in a world that is becoming perhaps more fragmented and isolating over time (Newiak, 2025)

Conclusion

This article highlights the complex but interconnected roles of social media and wider media landscapes in shaping how young people encounter, interact and interpret information and experiences. The research presents the challenges and opportunities of social media, from policy debates and high profile cases debating the negatives to the potential for connection, creativity and support.

Analysis of media literacy emphasises the importance of critical thinking and engagement, while also recognising the concerns parents and teachers may have. Together, these findings underline that supporting young people requires both awareness and practical action that is not simply a blanket ban on social media that many find as a lifeline. Open communication, positive role modelling and providing authentic, diverse representation can all act as catalysts of healthy media engagement.

By combining critical media skills with thoughtful guidance and supportive environments, educators, parents and communities can empower young people to navigate media confidently, responsibly and creatively. Recognising the positive value of media does not diminish risk; it strengthens young people’s capacity to navigate it with fortitude.

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References

Bhandari, S. (2025) 'Constructing reality: a critical study of media representation and social perception', International Journal for Research in Applied Science & Engineering Technology (IJRASET). Available at: <https://www.ijraset.com/research-paper/critical-study-of-media-representation-and-social-perception> (Accessed: 21 January 2026).

Buckingham, D. (2014) Youth cultures in the age of global media. London: Palgrave Macmillan.

Buckingham, D., Banaji, S., Carr, D., Cranmer, S. and Willett, R. (2005) The media literacy of children and young people: a review of the research literature. London: Ofcom. Available at: <http://discovery.ucl.ac.uk/10000145/> (Accessed: 21 January 2026).

Cress, L. (2026) 'UK to consult on social media ban for under 16s'. Available at: <https://www.bbc.co.uk/news> (Accessed: 21 January 2026).

Davies, B. (2025) 'Understanding media use among children aged 3 to 11: key insights from Ofcom's 2025 Media Literacy Report'. Available at: <https://www.computingatschool.org.uk/forum-news-blogs/2025/may/understanding-media-use-among-children-aged-3-11-key-insights-from-ofcom-s-2025-media-literacy-report/> (Accessed: 21 January 2026).

Department for Culture, Media and Sport (DCMS) (2021) Online media literacy strategy. Available at: https://assets.publishing.service.gov.uk/media/60f6a632d3bf7f56867df4e1/DCMS_Media_Literacy_Report_Roll_Out_Accessible_PDF.pdf (Accessed: 21 January 2026).

Duggar, R., Gram, S., Chauhan, A., Widanaralalage, K. and Carter, B. (2025) 'The influence of digital media on young people: experts comment on issues raised in Netflix's Adolescence'. Available at: <https://www.kcl.ac.uk/commentary-netflixs-adolescence> (Accessed: 21 January 2026).

European Platform of Regulatory Authorities (EPRA) (2025) 'Research: key findings from Ofcom's 2025 UK adults' and children's media lives'. Available at: [Insert URL if available] (Accessed: 21 January 2026).

GDNET (2010) 'Using media to communicate research output'. Available at: https://assets.publishing.service.gov.uk/media/57a08acae5274a27b2000785/Using_Media_to_communicate_research_output.pdf (Accessed: 21 January 2026).

Gov.UK (2026) 'Government to drive action to improve children's relationship with mobile phones and social media'. Available at: <https://www.gov.uk/government/news> (Accessed: 21 January 2026).

Khalil, H. (2026) 'Molly Russell's dad says under 16 social media ban would be wrong'. Available at: <https://www.bbc.co.uk/news/articles/cpwn1vjy0y5o> (Accessed: 21 January 2026).

Neuhaus, R. and O'Connor, E. (2025) 'Why fear still sells research on screen time'. LSE Impact Blog.

Newiak, D. (2025) 'Life in the network society and the escalation of late modern lonelineses', in The Lonelineses of modernity: a theory of modernization as an age of isolation. Wiesbaden: Springer Fachmedien Wiesbaden, pp. 177 to 203.

Ofcom (2025) Children's media lives. Available at: <https://www.ofcom.org.uk/media-use-and-attitudes/media-habits-children/childrens-media-lives> (Accessed: 21 January 2026).

Ringrose, J. and Coleman, R. (2025) 'Should the UK follow Australia's under 16s social media ban? It could do more harm than good'. Available at: <https://theconversation.com/should-the-uk-follow-australias-under-16s-social-media-ban-it-could-do-more-harm-than-good-269754> (Accessed: 21 January 2026).

The Sociology Guy (2025) 'Stuart Hall: understanding the media, power and representation'. Available at: <https://thesociologyguy.com/2025/10/27/stuart-hall-understanding-the-media-power-and-representation/> (Accessed: 21 January 2026).

Designing an Inclusive Curriculum: Aligning Theory, Policy and Practice

Sarah Parker

“Education must enable students to understand the world around them and the talents within them so that they can become fulfilled individuals and active, compassionate citizens.”

Sir Ken Robinson

The establishment of Trent View College required the simultaneous design of space, structure and curriculum. As founding Principal, I led the development of the provision from its earliest planning stages, working alongside architects and trust leaders to ensure that the physical environment and the educational framework were conceptually aligned.

Designing a specialist post-16 setting for young people with complex needs, autism and social, emotional and mental health needs demanded more than operational planning. It required deliberate articulation of how inclusive principles would be enacted throughout the curriculum and embodied in daily practice.

In specialist education, curriculum is the primary mechanism through which inclusive principles are either realised or constrained. Decisions about grouping, pathways, assessment and accreditation are not neutral technical choices; they structure

participation, entitlement and progression. Developing the curriculum therefore involved translating social inclusion theory and statutory expectations into a coherent operational model. Although this context is post-16, the principles of inclusive curriculum design explored here are applicable across phases, particularly for primary practitioners seeking to align theory, policy and provision within complex learning communities.

The Department for Education Brief, required during the Free School pre-opening phase, provided the formal policy framework within which the planning had to be made explicit (DfE, 2022). The brief required clarity of vision, governance, curriculum strategy, quality assurance and accountability. The curriculum model therefore had to demonstrate coherence between inclusive theory, statutory expectation and practical design.

Social Inclusion as Curriculum Foundation

From the outset, the college was grounded in a model of social inclusion linked to the Social Model of Disability (Oliver, 1983), in which disabling barriers are located within environments and systems rather than within individual impairment. This perspective shaped both structural and curricular decisions.

Simplican et al. (2015) define social inclusion as the interaction between interpersonal relationships and community participation. This ecological understanding informed decisions about grouping, pathways and community integration. Students were grouped by age rather than ability or diagnosis, supporting a collective sense of community and enabling equality to be experienced through shared participation. Diverse learning environments allowed young people to model communication for one another, while specialist facilities and professional collaboration ensured that individual needs were met within a shared framework.

The curriculum was designed around three overarching aims: to build upon prior knowledge, skills and qualifications; to deepen and consolidate learning so that it remained relevant to present and future contexts; and to prepare young people for adulthood, supporting independence, emotional development and informed decision-making.

Pathways and Progression

To support coherent progression, students are assigned to one of three pathways. These pathways draw on the work of Imray and Hinchcliffe (2013) and the Equals curriculum

model, incorporating Formal, Semi-Formal and Informal approaches.

A Formal pathway includes structured subject-based learning with defined outcomes and external accreditation, such as Entry Level English and Mathematics, vocational qualifications and Independent Living awards. Students complete written coursework and assess practical tasks within specialist vocational settings.

The Semi-Formal pathway integrates subject learning with thematic and skills-based approaches. Communication, independence and social development are embedded within applied contexts such as enterprise projects, community-based learning and supported work preparation. Literacy and numeracy are taught functionally within meaningful experiences.

The Informal pathway prioritises engagement, communication and interaction as foundations for learning. Students may focus on sustained attention, early communication and social interaction through highly structured routines and sensory-based approaches. Progress is recognised through developmental gains rather than formal accreditation.

Across all pathways, the Education, Health and Care Plans remain central. Core skills in English, mathematics and ICT are accessible at an appropriate level for all students, with emphasis on functionality and application. Vocational learning supports choice-making and employability, while accreditation enhances progression where appropriate.

For students with greater complexity of need, study programmes balance social inclusion and therapeutic intervention. Hydrotherapy, rebound therapy and sensory immersion activities are integrated within timetables rather than positioned as separate add-ons. These interventions support participation in learning as well as emotional regulation and wellbeing.

Community integration is embedded across the curriculum. Supported visits, travel training and placements in local settings enable students to apply skills in authentic contexts. Preparation for adulthood is therefore enacted through experience rather than aspiration alone.

Curriculum Design in Practice

All students access Core Skills in English, mathematics and ICT through a three-year rolling programme. Individual next steps are drawn from relevant frameworks, including the Adult Core Curriculum, and recorded within Personalised Learning Maps. Progress is recognised through external accreditation where appropriate and through the RARPA process (Recognising and Recording Progress and Achievement), ensuring that incremental developmental gains are systematically tracked.

PSHE and Relationships and Sex Education align with Department for Education guidance and the PSHE Association Programme of Study. The curriculum is organised around Health and Wellbeing, Relationships and Living in the Wider World, ensuring coherence and progression. Personal Progress units support accessibility for students on the Access and Inclusion Pathway.

Preparation for Adulthood sessions focus on independence, employment, community participation and health. Learning includes budgeting, meal planning, travel awareness and preparation for employment, with accreditation in Independent Living where appropriate. Students working on the Access and Inclusion Pathway complete Personal Progress units focused on communication, safety and early independence skills.

Vocational options combine theoretical understanding with practical application within specialist facilities. Work experience placements further strengthen authenticity. Enrichment opportunities in sport and the arts broaden participation and support wellbeing.

Assessment and Accountability

Assessment operates through a dual model of external accreditation and RARPA. This ensures that progression is recognised through both nationally benchmarked qualifications and personalised developmental targets. The RARPA process supports systematic identification of starting points, challenging objective setting, progress monitoring and review. It formalises personalised learning journeys while maintaining accountability.

In this model, assessment is not an endpoint but a mechanism for aligning curriculum intent with individual development and EHCP outcomes.

Conclusion

Designing the curriculum at Trent View College required sustained alignment between inclusive theory, statutory policy and practical implementation. Grounded in the Social Model of Disability (Oliver, 1983) and ecological understandings of social inclusion (Simplican et al., 2015), the curriculum was structured to ensure participation, progression and preparation for adulthood.

Although situated within a post-16 specialist context, the principles underpinning this design are transferable. Curriculum architecture shapes inclusion. Decisions about grouping, pathways, assessment and community participation communicate expectations about belonging and entitlement. For primary practitioners, the central message remains consistent: inclusion is realised not through aspiration alone, but through deliberate curriculum design that aligns vision, structure and lived experience.

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References

- Department for Education (2022) Free schools: Pre-opening guide. London: DfE.
- Imray, P. and Hinchcliffe, V. (2013) Curriculum for teaching children and young people with severe or profound and multiple learning difficulties: Practical strategies for educational professionals. London: Routledge.
- Oliver, M. (1983) Social work with disabled people. Basingstoke: Macmillan.
- Robinson, K. and Robinson, K. (2022) Imagine if: Creating a future for us all. London: Penguin.
- Simplican, S.C., Leader, G., Kosciulek, J. and Leahy, M. (2015) 'Defining social inclusion of people with intellectual and developmental disabilities: An ecological model of social networks and community participation', Research in Developmental Disabilities, 38, pp. 18–29.



The Architecture of Inclusion: Rethinking the SENCO Role in a Time of Reform

Michelle Prosser Haywood



Research indicates that many teachers report limited confidence in adapting teaching for pupils with SEND and frequently seek direction from the SENCO (Adams, 2023).

The Special Educational Needs Coordinator (SENCO) has become a defining feature of England's approach to supporting children and young people with special educational needs and disabilities in mainstream schools. Since the 1994 Code of Practice formalised the role, mainstream schools have been required to designate a qualified teacher as SENCO.

The current Special educational needs and disability code of practice: 0 to 25 years (Department for Education, 2015) sets out responsibilities including oversight of identification, coordination of provision, liaison with external agencies, engagement with families and monitoring of impact. The SENCO functions as the principal organisational mechanism through which statutory SEND processes are enacted at school level. The role is therefore structurally embedded within the

architecture of inclusion, but not always well defined or articulated.

Over 20 years ago, Pearson and Mitchell (2000) examined the SENCO position and identified some structural tensions inherent in its formal designation. Their concern was not with the professionalism or commitment of individual SENCOs, but they argued that locating responsibility for special educational needs within a single post, could carry implicit organisational meaning, that the SENCO would become a lone role.

Pearson (2007) later articulated this further as the 'SENCO dilemma,' with the dilemma lying in the coexistence of two principles; if inclusion is everyone's responsibility, yet one individual is formally tasked with managing it, the system may unintentionally signal that SEND sits within a specialist domain rather than as an integral dimension of mainstream pedagogy. Thus the 'SENCO dilemma' suggests Inclusion risks becoming coordinated rather than collectively enacted by a group structure within a school.

Pearson and Mitchell's analysis could now be seen as predictive, as contemporary evidence suggests that these patterns are currently visible across the educational landscape, despite the attempts of the 2015 SEND Code of Practices to reposition it as

a strategic leader. It described responsibilities extending beyond coordination to influencing curriculum planning, leading professional development and shaping whole-school approaches in which high quality teaching is the first response to need (DfE, 2015). The Code states that the SENCO should be a member of the school leadership team. However, this expectation is expressed as guidance rather than statutory prescription. Senior leadership status is not mandated, and there is no national requirement that the role be placed on the leadership pay scale. Structural positioning remains locally determined.

Workforce research indicates that this structural ambiguity continues to exist. Curran et al. (2020), in a national survey of SENCO workload and role positioning, reported that a substantial proportion of SENCOs were not members of senior leadership teams and experienced limited time allocation for strategic work. Dobson and Douglas (2018) found that teachers frequently entered the SENCO role through contextual or ecological factors rather than formal leadership progression, reinforcing the perception of the role as a specialist rather than strategic one.

The concentration of expertise identified by Pearson and Mitchell, remains evident. The SENCO continues to function as the primary interpreter of SEND policy, statutory process and provision design within many schools. This concentration becomes more pronounced in the context of systemic intensification. The National Audit Office (2023) reported sustained increases in the number of pupils with Education, Health and Care Plans, escalating financial pressures on local authorities and significant variability in the timeliness of support. At school level, the operational consequences of these pressures are frequently channelled through the SENCO role. Administrative coordination, statutory review processes and multi-agency liaison accumulate within the same post-holder.

This concentration intersects with patterns of professional reliance. Research indicates that many teachers report limited confidence in adapting teaching for pupils with SEND and frequently seek direction from the SENCO (Adams, 2023). Webster and Blatchford (2019) note that responsibility for pupils with SEND can become associated with additional adults or intervention structures rather than embedded classroom pedagogy. These patterns reflect organisational signalling, which Pearson earlier highlighted, that when interpretive authority

is formally located within one role, other professionals may defer to that role and see that person has holding all the expertise.

The introduction of the National Professional Qualification for SENCO from 2024 formalises expectations of leadership knowledge, qualification reform has not been accompanied by mandatory structural redesign, and the role has to be careful of drift, which Done and Knowler (2021) describe as SENCOs absorbing additional responsibilities in response to systemic pressures. The increasing complexity of statutory processes, rising identification rates and expanding accountability demands have amplified and the more the role absorbs, the more it becomes the organisational site where SEND system pressure is solely concentrated.

Taken together, all of these strands suggest that Pearson's analysis has not been substantively addressed within subsequent reform. Policy has refined expectations, strengthened qualification pathways and emphasised strategic leadership. However, the core architectural design, a single statutory coordinator through whom inclusion is organised, has remained largely unchanged. Inclusion continues to be articulated as a whole-school commitment while being operationalised through individual role designation.

The recent White Paper consultation published by the Department for Education (DfE, 2026) represents the first significant opportunity in a decade to reconsider this architecture. The consultation proposes reforms to SEND funding arrangements, greater national consistency in thresholds and strengthened accountability mechanisms, alongside renewed emphasis on mainstream capacity and early identification. However, within the proposals as currently framed, the statutory designation of the SENCO remains unchanged. The role continues to function as the primary organisational conduit through which reform is expected to be enacted at school level.

The issue, therefore, is not whether the SENCO role is valuable. Within the current statutory framework, it is indispensable.

This continuity is consequential. Reform rhetoric stresses earlier intervention, high quality teaching and strengthened mainstream inclusion. However, without explicit reconsideration of leadership distribution, new expectations risk being layered onto existing structures. If responsibility for implementation remains concentrated within a single role, the intensification predicted by Pearson may deepen rather than diminish.

The issue, therefore, is not whether the SENCO role is valuable. Within the current statutory framework, it is indispensable. Nor is the question whether coordination is necessary in complex systems. The question is whether the structural configuration through which inclusion is organised aligns with the philosophical commitments invoked by inclusive education. Inclusive scholarship emphasises shared responsibility, collaborative inquiry and distributed expertise (Ainscow et al., 2006; Norwich, 2013). A structure that centralises responsibility risks undermining the collective culture it seeks to promote.

Pearson and Mitchell's early view was not a rejection of coordination. It was a warning about organisational meaning. More than two decades later, and at a new moment of national reform, that warning retains analytic force. The SENCO role has expanded in scope, intensified in expectation and formalised in qualification, yet the underlying paradox remains visible: inclusion is declared collective, but structurally localised. Unless forthcoming reforms engage explicitly with the organisational architecture of inclusion, the SENCO dilemma is likely to continue to persist.

References

Adams, R. (2023) Teachers' confidence in supporting pupils with SEND: national survey findings. London: Education Policy Institute.

Ainscow, M., Booth, T. and Dyson, A. (2006) Improving schools, developing inclusion. London: Routledge.

Curran, H., Moloney, H., Heavey, A. and Boddison, A. (2020) The SENCO workload and wellbeing survey. Bath: Bath Spa University.

Department for Education (2015) Special educational needs and disability code of practice: 0 to 25 years. London: DfE

Department for Education (DfE) (2026) Every Child Achieving and Thriving: Schools and SEND White Paper (consultation). London: DfE.

Dobson, G. and Douglas, G. (2018) 'Who would do that role? Understanding why teachers become SENCOs through an ecological systems theory', *Educational Review*, 70(3), pp. 295–313.

Done, E. and Knowler, H. (2021) 'Role drift and responsibility in SEND leadership', *Support for Learning*, 36(3), pp. 301–317.

National Audit Office (2023) Support for children and young people with special educational needs. London: NAO.

Norwich, B. (2013) Addressing tensions and dilemmas in inclusive education. London: Routledge.

Pearson, S. and Mitchell, R. (2000) 'The SENCO and inclusion: a critical analysis', *Journal of Research in Special Educational Needs*, 1(1), pp. 3–10.

Pearson, S. (2007) 'Exploring the SENCO role in England: dilemmas of professional identity and practice', *British Journal of Special Education*, 34(2), pp. 89–99.

Webster, R. and Blatchford, P. (2019) Maximising the impact of teaching assistants. London: Routledge.

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Barriers and Bridges: Supporting Precariat Pupils in a UK Primary School

Paige Willis



Educational inequality continues to be a defining challenge for schools in England. Pupils from economically and socially marginalised backgrounds consistently experience lower attainment and reduced access to opportunities for social mobility (Crenna-Jennings, 2018; Social Mobility Commission, 2022). Savage and Devine's (2013) classification of the 'precariat' describes a group characterised by insecure employment, low income and limited access to economic, social and cultural capital. Children growing up in such households are more likely to encounter barriers that affect their academic progress, aspirations and well-being.

Research has demonstrated that socio-economic disadvantage shapes children's educational experiences through multiple pathways. Material deprivation limits access to basic resources such as food, clothing and learning materials (Rogan, 2018). Reduced exposure to enriching experiences restricts vocabulary development and background knowledge (Bourdieu, 1986; Ross, 1955). Parental educational histories and attitudes influence children's motivation and expectations of schooling (Guzikova and Mendelova, 2022; Melhuish and Gardiner, 2024). While national policies such as Pupil Premium and Free School Meals aim to reduce inequality, schools remain responsible for translating funding into effective practice.

This study explores how one primary school identifies and responds to the needs of pupils from precariat backgrounds. It focuses on two research questions:

- 1) What barriers to educational attainment do staff perceive for precariat pupils?
- 2) What school-based interventions are used to address these barriers, and how effective are they perceived to be?

Methodology

A qualitative case study design was adopted to examine staff perspectives within a single primary school in South-East London. Six participants were recruited through purposive sampling to reflect a range of professional roles, including class teachers, senior leaders and administrative staff. This approach allowed for exploration of experiences across different levels of responsibility and daily contact with pupils and families.

Data were collected through semi-structured interviews, enabling participants to discuss their observations of pupil barriers, parental engagement and school interventions in depth. Interviews were audio-recorded, transcribed verbatim and anonymised. Thematic analysis was conducted following Braun and Clarke's (2021) six-stage framework. Initial codes were generated through line-by-line reading, grouped into categories and refined into themes through iterative comparison.

Ethical approval was obtained, and informed consent was secured from all participants. Pseudonyms were used to protect anonymity.

Findings

Barriers to Attainment

Three dominant barriers to attainment for precariat pupils were identified: limited aspiration and motivation, lack of enriching experiences (cultural capital), and material deprivation.

Aspiration and Motivation

Participants frequently described pupils whose attitudes towards education reflected family histories of limited formal schooling or employment in low-skilled occupations. Some pupils reportedly viewed education as unnecessary because relatives had succeeded without qualifications. This aligns with research highlighting the intergenerational transmission of educational expectations (Cockett, 2023; Guzikova and Mendelova, 2022).

However, staff also cautioned against deficit assumptions. Several participants emphasised that some parents actively encouraged their children to achieve more than they had, demonstrating that aspiration cannot be inferred solely from socio-economic status.

Lack of Experiences (Cultural Capital)

Participants reported that many pupils had limited exposure to travel, museums, theatres or environments beyond their local community. This restricted their vocabulary, general knowledge and confidence in formal learning contexts. Staff noted that national assessments often rely on contextual understanding and academic language unfamiliar to pupils lacking such experiences.

This finding reflects Bourdieu's (1986) theory of cultural capital and Bernstein's (1962) work on language codes, which highlight how schools implicitly value middle-class forms of knowledge and communication. Participants believed that limited cultural capital contributed directly to gaps in reading comprehension and written expression.

Material Deprivation

Material deprivation was evident in participants' descriptions of food insecurity, tiredness and anxiety among pupils from low-income households. Hunger and poor nutrition were reported to affect concentration and behaviour in class.

Although Free School Meals and breakfast clubs were available, staff highlighted that families just above eligibility thresholds experienced similar

hardship without access to support. This reflects national concerns regarding in-work poverty and restrictive eligibility criteria (Child Poverty Action Group, 2023).

School-Based Interventions (‘Bridges’)

Three broad categories of school-based strategies were identified: aspiration-raising initiatives, financial and material support, and targeted academic interventions.

Aspiration-Raising Initiatives

The school uses programmes such as The Brilliant Club and Children’s University to broaden pupils’ understanding of higher education and professional careers. These initiatives expose pupils to university-style learning and role models beyond their immediate social networks.

Participants described visible shifts in pupils’ attitudes, with children expressing greater interest in university and professional futures. Staff viewed these changes as particularly significant for pupils whose families had no experience of higher education. External evidence supports the potential long-term impact of such programmes on attainment and progression (HEAT, 2023).

Financial and Material Support

To address material deprivation, the school subsidises trips and extracurricular activities using Pupil Premium funding. Staff emphasised that no pupil is excluded from educational visits due to cost. The school also provides breakfast club places, recycled uniforms and emergency financial assistance for families in crisis.

Participants reported that pupils who accessed breakfast provision were more settled and focused in lessons. Subsidised trips enabled pupils to access experiences otherwise unavailable to them, supporting vocabulary development and confidence. These strategies were viewed as promoting educational equity rather than charity.

Targeted Academic Interventions

Language development was identified as a priority area. The school implements early language interventions in the Foundation Stage, structured phonics teaching through the Little Wandle scheme, and regular adult-supported reading. Classroom practice emphasises oracy through frequent pupil talk and structured questioning.

Participants described the use of assessment data to identify pupils in the lowest-performing groups and provide targeted support, particularly in Year 6. Differentiated grouping and focused teaching were reported to improve mock test scores for some pupils, suggesting short-term academic benefits.

Parental Barriers and Support

Barriers to Parental Engagement

Two principal parental barriers were identified: limited capability to support learning and low engagement with education.

Staff reported that many parents lacked confidence in supporting homework due to their own educational histories or unfamiliarity with the current curriculum. This often led to withdrawal from involvement rather than active support.

Some parents were perceived as placing limited value on education, often linked to economic insecurity and negative personal schooling experiences. Participants believed this attitude influenced children’s motivation and aspirations.

Parental Support Strategies

The school employs an open-door policy allowing parents to approach staff informally. It also offers academic workshops and parent mornings focused on phonics, multiplication and curriculum content. In addition, non-academic workshops on sleep and hygiene are provided.

However, attendance at formal workshops was consistently reported to be low. While the open-door policy supported some families effectively,

staff acknowledged that it relied on parental confidence and initiative. Those most disengaged were often least likely to access support.

Discussion

This study confirms that material deprivation, limited cultural capital and reduced aspiration remain key barriers to attainment for precariat pupils (Bourdieu, 1986; Rogan, 2018). The school’s interventions demonstrate that targeted use of funding and enrichment opportunities can partially mitigate these disadvantages.

Aspiration-raising initiatives appear particularly valuable in challenging inherited expectations and promoting alternative futures. Similarly, subsidised enrichment supports equity by enabling pupils to access experiences that enhance vocabulary and confidence.

However, parental engagement remains the least effectively addressed barrier. Traditional strategies such as workshops assume parental availability and confidence, which may not exist for families experiencing economic and emotional strain. This supports Goodall’s (2017) argument that schools must reconsider what meaningful engagement looks like for disadvantaged families and move beyond attendance-based models.

Implications for Practice

The findings suggest several implications for primary schools serving disadvantaged communities:

- 1) **Prioritise enrichment:** Subsidising trips and experiences enhances pupils’ cultural capital and supports academic readiness.
- 2) **Embed aspiration work early:** Exposure to higher education and diverse careers can reshape pupils’ expectations and motivation.
- 3) **Target language development:** Structured oracy and reading interventions remain central to reducing attainment gaps.
- 4) **Rethink parental engagement:** Schools should explore flexible, family-based approaches and personalised outreach strategies rather than relying solely on workshops.

Limitations

This study focuses on a single school and relies on staff perceptions, limiting generalisability. The absence of pupil and parent voices restricts insight into lived experiences. Future research should include multiple schools and incorporate family perspectives.

Conclusion

This case study highlights the layered challenges faced by precariat pupils in UK primary education. While school-based strategies can address some barriers—particularly those linked to enrichment and aspiration—parental engagement remains difficult to secure through conventional approaches.

For schools serving disadvantaged communities, a more personalised and context-sensitive model of family collaboration is required. By refining interventions and maintaining a focus on equity, schools can play a crucial role in promoting educational inclusion and long-term social mobility.

References

Bernstein, B. (1962) ‘Social class, linguistic codes and grammatical elements’, *Language and Speech*, 5(4), pp. 221–240.
Bourdieu, P. (1986) ‘The forms of capital’, in Richardson, J.G. (ed.) *Handbook of theory and research for the sociology of education*. New York: Greenwood, pp. 241–258.
Braun, V. and Clarke, V. (2021) *Thematic analysis: A practical guide*. London: Sage.
Child Poverty Action Group (2023) *Poverty in the UK: Statistics and analysis*. London: CPAG.
Cockett, J. (2023) *Social mobility and occupational inheritance*. London: Crenna-Jennings, W. (2018) *Educational inequality in England*. London: Education Policy Institute.
Goodall, J. (2017) *Narrowing the achievement gap: Parental engagement with children’s learning*. London: Routledge.
Guzikova, L. and Mendelova, K. (2022) ‘Parental expectations and academic achievement’, *Educational Studies*, 48(3), pp. 321–337.
HEAT (2023) *Scholars Programme impact report*. London: Higher Education Access Tracker.
Melhuish, E. and Gardiner, J. (2024) *Parenting and educational attainment*. London: [Publisher to be confirmed].
Rogan, M. (2018) ‘Material deprivation and educational outcomes’, *Journal of Poverty and Social Justice*, 26(2), pp. 165–180.
Savage, M. and Devine, F. (2013) ‘The coming crisis of empirical sociology’, *Sociology*, 47(1), pp. 3–14.
Social Mobility Commission (2022) *State of the nation 2022: A fresh approach to social mobility*. London: Social Mobility Commission.

Inferential Information-Seeking: A Training Ground for Problem Solving

Andrew K. Shenton



Inferential thinking is often treated in primary classrooms as a reading skill linked to comprehension tasks. This article argues that inferential information-seeking (IIS) should be understood more broadly as a structured form of information problem-solving. Building on established work in information science and information literacy, it illustrates how children can use indirect evidence to construct reasoned conclusions when direct answers are unavailable. Through classroom-based exemplars, the article considers how IIS may be developed as a cognitive strategy within primary education.

The importance of children taking a problem solving approach when finding and using information has long been recognised. Thirty years ago, Moore (1995) highlighted the contrast between the problem solving perspective needed in a library environment and the formula employed by her ten- to twelve-year-olds, namely “think of a question, identify its keywords, look up the subject index for a Dewey number, go to the shelves and find the answer in the exact form it is wanted” (p. 28). Although the context has changed, a similarly inflexible mindset persists today by using *Google*, a child can enter a key word, check their content and then copy and paste any material which seems pertinent, placing it in a document that will form the basis of their outcome.

Frustrations can emerge, however, when the sequence breaks down and, in particular, if the required information cannot be found. It is at this point that a problem solving perspective is necessary, with the child having to identify further options and choose from them. These may include going to a different search engine, selecting alternative terms or taking another route entirely, such as exploring the shelves of the school library or asking for advice at home. Given the multiplicity of possible pathways, and the variations that can emerge in related undertakings within the investigative process, it is hardly surprising that Marchionini (1989) describes information-seeking as “a special case of problem solving” (p. 54).

In research undertaken over forty years ago, Durrance (1984) reported that around one in three of the surveyed adult information-seekers believed that the information they wanted in a particular situation simply did not exist. Teachers therefore need to consider how they equip pupils with strategies for navigating moments when apparently available sources yield no immediate answers. This article explores one such approach: inferential information-seeking.

The Nature of Inferential Information-seeking

Inferential information-seeking (IIS) is employed when information that directly satisfies a need is unavailable, and an indirect route must be pursued. In such cases, attention focuses on material that does not itself provide a definitive answer, but which can be interpreted to construct a reasoned conclusion.

There are parallels that can be drawn between IIS and the process of estimation advocated by Eastaway (2019). He recommends using benchmark numbers that the individual already knows in order to answer, through estimation, questions which might otherwise prove too challenging. And describes it as, “having the power to take knowledge that you’ve got to figure out something that’s in the right ballpark”.

In both IIS and estimation, the person’s state in terms of the matter of interest is initially one of ignorance. They then embark on intermediate action that will ultimately lead to them becoming more informed. In estimation, this involves use of the person’s own mental resources; in IIS it means the pursuit and location of relevant information, for example, a google search. If successful, the individual then, either via calculation or inference, arrives at a point nearer the originally desired goal state.

Illustrative applications of inferential information-seeking

Inferential information-seeking (IIS) becomes necessary when information that directly satisfies a need is unavailable, and an indirect route must be pursued. In such situations, attention shifts to material that does not itself provide a definitive answer, but which can be interpreted or combined to construct a reasoned conclusion.

One example concerns uncertainty over local garden waste collections. When no official schedule is available for the current year and enquiries have failed to produce a clear response, leaflets from previous years can be examined. If these show that the first collection of the season took place on the last Monday in March in more than one prior cycle, a reasonable inference can be made that the same pattern will occur again. By consulting more than one year, the risk of anomaly is reduced. The principle illustrated here is that evidence from past events may provide a rational basis for anticipating future occurrences.

The mystery of the school photographs

A second example involves a set of undated historical photographs of a school. In order to determine when the images were taken, pupils

must draw upon contextual clues rather than explicit information. If former pupils can be identified, school records may indicate the years in which they attended. Architectural features visible in the background may predate known building developments, allowing the timeframe to be narrowed further. Even peripheral details, such as vehicle registration plates, may provide chronological indicators. Although no single source supplies a precise date, combining several strands of evidence enables a reasonably accurate conclusion to be reached. The principle illustrated here is that approximate inferences can be constructed through the coordinated use of multiple clues.

The archival cine film challenge

Inferential reasoning may also depend on specialist knowledge. A cine film known to

have been shot in 1966 provides an example. Although the year of filming is established, the precise time within that year is not specified. Analysis of visible vegetation and flowering patterns allows commentators to suggest that filming occurred during the summer months. In this case, the inference does not arise from explicit documentation but from botanical expertise applied to visual evidence. The principle demonstrated here is that inference may rely on the interpretive skills of specialists who draw upon domain-specific knowledge to refine conclusions.

The undated article problem

Older pupils may encounter IIS when using undated digital material in their research. If a web page lacks publication details, its currency cannot be established directly. Frameworks for

evaluating information, including the Five Ws (Schrock, 2009), the RADAR model (Mandalios, 2013), and the CRAAP test (TeenTech/Information Literacy Group, 2016), emphasise the importance of determining when material was produced. In the absence of an explicit date, indirect clues must be examined. The most recent source cited in a reference list may indicate the earliest possible publication date. Descriptions of events as “recent” can be cross-checked against independently verifiable timelines. Biographical information about the author may also narrow the likely period of writing. As noted elsewhere (Shenton, 2021; 2024), such judgements must remain provisional. The principle illustrated here is that where information cannot be dated unequivocally, carefully qualified inferences may still be made, provided their limits are acknowledged.

Eisenberg and Berkowitz (2003) divide the third stage of their Big6 model for addressing an “information problem” into two related components: identifying relevant sources and locating information within those sources (p. 16). A comparable distinction can be applied to IIS, although the second element may involve interpreting visual as well as textual material. The sequencing of these elements varies according to context.

In the second and third scenarios discussed above, the initial focus lies on close examination of the images themselves, as these constitute

the primary evidence. Only after insights have been drawn from this material does the search extend to external sources in order to refine or corroborate conclusions. A similar pattern can be observed in the fourth scenario, where attention first turns to clues within the web page before further contextual information is sought elsewhere. The first scenario differs in structure. There, no item is immediately available for scrutiny; relevant sources must first be identified and accessed before interpretation can begin. IIS therefore operates flexibly, with source identification and information interpretation interacting in different sequences depending on the nature of the problem.

IIS and Uncertainty

IIS is, above all, a journey through different levels of uncertainty. The individual begins from a position of uncertainty in the sense that they are ignorant in relation to a matter of interest (Position *A* in Figure One). In acquiring insights into a peripheral issue, they move to a knowledgeable position on that. This is characterised by certainty (Position *B*). They then use the relevant insights to improve, at least to some degree, on their original uncertain state in relation to the subject of principal interest (Position *C*). The overall progression is consistent with the oft-quoted principle among academics that information provides a means of reducing uncertainty (Case and Given, 2016).

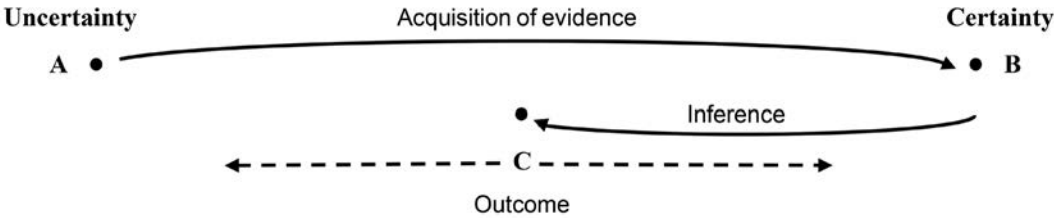


Figure One: Model of Progress When Undertaking Inferential Information-seeking

Figure Two below illustrates the three positions with reference to the four exemplars.

A Uncertainties (as questions)	B Certainties (established facts)	C Outcomes (inferred conclusions)
1) When will garden waste collections resume this spring?	Selfless, unconditional and sacrificial love	It is likely that a similar schedule will be put in place this year
Key information: previous leaflets		
2) When were these school photographs taken?	The children shown were on roll between 2012 and 2017 The interior environment shown was their form room in 2015/16 The school building was altered in 2016	It seems reasonable to believe that the pictures date from 2015 or 2016
Key information: Staff and student comments, SIMS computer system, premises documents		
3) When was the film shot?	The vegetation would look as it does in the film during July and August	We can be confident that the film was shot in the summer of 1966
Key information: botanical insights pertaining to plant life cycles		
4) When was the Web page written?	The page’s source list includes no items dated after 2019 An event that took place in 2018 is described as “recent”	The source was probably published soon after 2018
Key information: Web page’s “source list”, background information relating to event described		

Figure Two: Key Points in Model Illustrated via the Four Scenarios

Moving Forward

All four scenarios discussed above involve inference in relation to time, whether reconstructing the past or anticipating the future. Because dates and years are concrete and measurable, they provide an accessible starting point for developing inferential reasoning in children. However, IIS is not confined to temporal contexts. In earlier work, it has been suggested that inferences may also arise from observation of human behaviour. For example, a pupil faced with a particular situation may observe how another individual responds

in comparable circumstances and use that information to inform their own decision-making (Shenton, 2009). In this instance, the evidence base derives from direct experience rather than documentary sources. As Gorman (1998) argues, such processes involve not merely the application of information but the development of knowledge. For the inference to be meaningful, however, the observed circumstances must bear sufficient similarity to the learner’s own.

Adults frequently play a significant role in supporting or modelling this process. In a previous study, a six-year-old girl sought to

identify a fossil sent to her by her grandfather but was frustrated that available books addressed fossils in general rather than her specimen specifically (Shenton, 2011). An adult responded by applying general descriptions to the particular features of the child’s fossil. The reasoning involved both inferential and deductive elements: general information was interpreted and then used to reach a conclusion about a specific case. The example illustrates how inferential thinking may be scaffolded through guided interpretation of available knowledge.

In devising activities that require IIS, teachers may find it useful to construct proformas that enable children to direct their thinking in particular areas, for example, the table presented in figure three.. The grid structure is very

similar to that shown in Figure Two but the only real differences lie in the changes that have been made to the column headings. Even here, the new versions are simply reworkings – in child-friendly language – of “Uncertainties”, “Certainties” and “Outcomes”, and are stated as questions that invite student responses. The “key information” row can be completed at one of two points – either after the first column has been filled in, when student is thinking ahead to where they may look for helpful material, or at the end of the work, to acknowledge the items they have consulted, somewhat in the style of an essay bibliography. The option favoured by the teacher will probably depend on whether they view the document as a means of encouraging students to record their thinking as they go or whether they consider it more as a formal write-up of their work.

What is my question?	What do I know for sure?	What is my best answer to the question?
Key information:		

Figure Three: Possible Proforma for Use in the Classroom

The way in which teachers or parents introduce inferential information-seeking activities can significantly affect student motivation. The youngest children may like to see themselves as “detectives” finding clues to establish the truth and solve mysteries, whilst older ones often enjoy comparing themselves to historians constructing a picture of events derived from evidence. As teachers, we, too, may equate the documents on which the children rely with the primary source material so familiar to history specialists.

Final Thoughts

This article forms part of an ongoing exploration of inferential information-seeking (IIS). Earlier work has examined IIS as a naturally occurring behaviour (Shenton, 2009) and as a component of information literacy education (Shenton, 2011). The present discussion extends that analysis by framing IIS as a form of information problem-solving that can be developed explicitly within primary education. In doing so, it positions IIS not merely as an incidental cognitive act, but as a structured and teachable strategy that young learners can apply when direct answers are unavailable.

The inferential approach is not a panacea. There will always be instances where children form questions that they cannot answer satisfactorily through any form of inquiry. The question may be based on an unsound premise that precludes the application of existing information or we, as a species, may have insufficient insight into the issue to draw even an inference according to what is already known. In addition, Farmer (2007) highlights the possibility that youngsters may want to know about matters that are beyond their intellectual grasp. Nevertheless, my own experience tells me that an inferential approach enables many youngsters to satisfy, at least in part, information needs that would, without it, remain wholly unmet. While on some occasions it may be possible to arrive at an answer that matches their expectations precisely, in other instances they may have to content themselves

with an approximation. Young children who expect concrete and precise answers may find this difficult to accept. Teachers have a crucial function – one that begins by teaching inferential skills and cultivating an appropriate mindset. The educator then helps students apply these independently and in different contexts. IIS may take place not only in the classroom but in their wider, everyday lives, too. Still, we might speculate that students taking an inferential approach may be more inclined to be rigorous and systematic in school-related circumstances when they are expected to fulfil academic obligations and must account for their actions to others than when they are pursuing a matter of personal interest. Students may also appreciate assistance in identifying pertinent information sources from which inferences can be drawn. As Walker (2012) notes in connection with IIS, establishing the relevance of a source to one’s need is often an “imprecise” business (p. 563). He recognises, also, the cognitive effort necessary if the subsequent transfer means moving from a broad level to the situation at hand (Walker, 2010), the specifics of which may be idiosyncratically the youngster’s own.

Certainly, IIS cannot be reduced to a formula for action, since how it is applied will vary from situation to situation, so it is a difficult approach to teach. Some scenarios, like the first exemplar discussed in this article, may involve merely looking for one or two precedents and basing a response on the assumption that the underlying position will not have changed. Others will be more involved, requiring the collection of several individual pieces of evidence gleaned from different quarters.

Training in IIS provides an excellent opportunity for youngsters to learn the importance of sound research principles in practical contexts. We can convey, for example, the role of sampling when children select individual documents; the use of different kinds of evidence can help youngsters understand the value of triangulation by data source; we can emphasise the need for contexts

to be congruent when ideas are transferred from one set of circumstances to another. These are concepts that might otherwise go unappreciated by students until they are much older.

References

Case, D.O. and Given, L.M. (2016) Looking for Information: A Survey of Research on Information Seeking, Needs, and Behavior, 4th ed. Bingley: Emerald.

Durrance, J.C. (1984) Armed for Action: Library Response to Citizen Information Needs. New York: Neal-Schuman.

Eastaway, R. (2019) Tips to help you impress people doing hard maths in your head. Radio 4 in Four. URL: <https://www.bbc.co.uk/sounds/play/p07mw55y>

Eisenberg, M.B. and Berkowitz, R.E. (2003) The Definitive Big6TM Workshop Handbook, 3rd ed. Worthington, Ohio: Linworth.

Farmer, L.S.J. (2007) What is the question? IFLA Journal, 33 (1), pp. 41-49.

Gorman, M. (1998) Our Singular Strengths: Meditations for Librarians. Chicago: American Library Association.

Mandalios, J. (2013) RADAR: an approach for helping students evaluate Internet sources. Journal of Information Science, 39 (4), pp. 470-78.

Marchionini, G. (1989) Information-seeking strategies of novices using a full-text electronic encyclopedia. Journal of the American Society for Information Science, 40 (1), pp. 54-66.

Moore, P. (1995) Information problem solving: a wider view of library skills. Contemporary Educational Psychology, 20, pp. 1-31.

The Prisoner in Production (1993) VHS video cassette. Hosted by Peter Howell. Borehamwood: TR 7 Productions.

Schrock, K. (2009) The 5W's of Web Site Evaluation. URL: <http://www.schrockguide.net/uploads/3/9/2/2/392267/5ws.pdf>

Shenton, A.K. (2009) Inferential information-seeking. Library Review, 58 (5), pp. 353-61.

Shenton, A.K. (2011) Promoting inferential information behaviour. Creative Teaching and Learning, 2 (3), pp. 14-17.

Shenton, A.K. (2021) Facilitating Effective Sixth Form Independent Learning: Methodologies, Methods and Tools. London: Facet Publishing.

Shenton, A.K. (2023) Teaching critical thinking in sixth-form independent learning. Teaching Times, 20 November. URL: <https://www.teachingtimes.com/teaching-critical-thinking-in-sixth-form-independent-learning/>

Shenton, A.K. (2024) Training school students in information evaluation: reviewing the past, establishing the present and considering the future. Journal of Information Literacy, 18 (1). URL: <https://journals.cilip.org.uk/jil/article/view/49/543>

TeenTech/Information Literacy Group (2016) Evaluating the Information that you Find Using the CRAAP Test. URL: https://www.teentech.com/wp-content/uploads/2016/01/evaluating_info.pdf

Walker, C.G. (2010) The Information World of Parents: A Study of the Use and Understanding of Information by Parents of Primary School Aged Children. PhD thesis, Leeds Metropolitan University.

Walker, C. (2012) The information world of parents: a study of the use and understanding of information by parents of young children. Library Trends, 60 (3), pp. 546-68.



Protecting Mathematical Thinking in the AI-assisted Classrooms Of The Future

Nick Huxley



Mathematics can sometimes be reduced to speed and accuracy, and while fluency matters, the NCETM's Teaching for Mastery approach reminds us that true understanding lies in reasoning, explanation and sense-making.

The message that 'AI can deliver the biggest leap forward for learning in centuries' was delivered by the Education Secretary, Bridget Phillipson, at BETT 2026 in January this year (DfE, 2026a), signalling an explicit shift in how we approach teaching, learning and the core curriculum. In addition, the government recently announced that up to 450,000 disadvantaged pupils could benefit from AI-powered tutoring tools to 'level the playing field' (DfE, 2026b). Using AI is no longer an aspiration for schools, it is very much a live policy directive.

Alongside government policy, wider education debates increasingly assume that AI-enabled support will become a routine feature of school life, including the use of personalised tutoring tools (Tony Blair Institute for Global Change, 2026). While such reports highlight the potential

of AI to contribute to long-term educational gains, they also acknowledge that evidence of classroom-level impact is still emerging. As these tools enter classrooms through EdTech platforms, social media trends and DfE-backed trials, the challenge for schools is not to see AI as either a panacea or a threat to the profession. Instead, we need a critical, child-centred understanding of what these tools actually do to children's thinking, participation, and developing sense of themselves as learners.

Beyond the Right (Mathematical) Answer

In mathematics, this question of what AI does to children's thinking especially matters. As children learn maths, they are not just learning procedural methods, they are developing a mathematical voice and a sense of how to explain, justify and reason with mathematical ideas. Mathematics can sometimes be reduced to speed and accuracy, and while fluency matters, the NCETM's Teaching for Mastery approach reminds us that true understanding lies in reasoning, explanation and sense-making. This is where a tension arises. AI tutors built on Large Language Models (LLMs) are designed to be helpful, polite and, importantly, fast.

When a child struggles with a fraction or a word problem, an AI tutor could resolve this tension instantly. It provides the 'next step' or the 'correct method' before the child has had a chance to fully understand a problem. In my research into AI-child interactions, I am exploring this specific moment: the tension between 'opening' and 'closing' a dialogue. Dialogic teaching (Alexander, 2020) suggests that learning happens when we keep the 'dialogic space' open (Wegerif and Casebourne, 2025), allowing for multiple ideas and misconceptions. The risk is that AI, in its rush to be efficient, 'closes' that space too quickly. In doing so, it may provide an effective solution, which is less powerful educationally if the child's understanding has not been deepened.

Why Talk Matters in Mathematics

Dialogic teaching offers a useful lens. Rather than treating talk as a performance or a check on understanding, dialogic classroom talk acts as a *tool for thinking*. Learning happens through the exchange of ideas, through questioning, challenge, and the gradual refinement of understanding. Robin Alexander (2020) describes dialogic teaching as talk that is collective, reciprocal, supportive, cumulative, and purposeful. In effective mathematics classrooms, ideas are not simply stated and evaluated as right

or wrong. They are explored, extended, and challenged when appropriate.

The Tension Between Speed and Understanding

One of the most important features of effective mathematics teaching is the ability to hold ideas open. When children are unsure, tentative, or exploring more than one approach, they are often in the deepest learning space. Skilled teachers recognise this and resist the urge to resolve uncertainty too quickly. Instead, they probe, ask follow-up questions and invite learners to explain their reasoning more fully. AI tutors, however, are typically designed to do the opposite. LLM systems are optimised for speed, clarity, and convergence on a correct answer.

If an AI tutor finishes a line of reasoning for the learner, supplies explanations before the child has articulated their own, or converges too quickly on a single 'correct' interpretation, it may close down the very space in which learning happens. The issue here is not whether the explanation is correct, but rather whether it arrives too soon. Teachers learn when *not* to intervene, whereas AI systems do not yet have this pedagogical sensitivity. This highlights a broader issue in educational technology: the difference between

what is easy to measure (efficiency, speed, accuracy, and task completion) and what is educationally important, such as the quality of explanation and reasoning. If we place greater importance on reasoning in mathematics than on answer production, then our judgements about AI tools need to reflect that priority.

This concern is not just theoretical. Classroom research shows that learning gains in mathematics are linked *less* to participation or correctness and *more* to the quality of explanation, i.e. how learners articulate strategies, justify decisions, and refine ideas through talk (Webb et al., 2020). Productive dialogue depends on pedagogical techniques that sustain thinking rather than prematurely resolve it. Ensuring these productive dialogic spaces remain as AI enters the classroom requires a practitioner-led approach to evaluating technology.

A Design-Informed Approach to AI in Mathematics

As new (AI) technologies enter classrooms, this calls for the kind of D&R (development and research) approach advocated by David Hargreaves (2008) almost 20 years ago. Such an approach would bring teachers, researchers and designers into closer dialogue. Rather than waiting for definitive verdicts on whether AI ‘works’ (in January 2026, the DfE pledged £23 million towards a national AI-education testing programme), a D&R approach would emphasise careful, iterative evaluation of how tools shape learning in real classrooms.

In the context of AI tutors, this means asking not only whether attainment improves, but also how children’s thinking is affected in the moment. For example, are children encouraged to explain their ideas? Is productive struggle supported or bypassed? How does the AI system respond to uncertainty or partial understanding?

Seen this way, AI tutors are not finished solutions to be adopted wholesale, but design problems that require professional judgement. Their educational value depends on whether they both improve attainment and support explanation, productive struggle and the gradual development of mathematical thinking.

Why This Matters for Primary Practice

For teachers, school leaders, and policymakers, the key question is not simply whether AI ‘works’, but whether an AI solution is based around *what kind of learning it supports*. If we care about reasoning, explanation, and sense-making, then we must ask whether AI tools align with those aims, or quietly work against them. In educational systems increasingly drawn toward speed and optimisation, dialogic teaching offers an important reminder that learning is about not only reaching a destination faster, but also building understanding along the way.

Be Informed Practitioners

AI is coming. In many of our classrooms, it is already here. So, teachers and practitioners need to be ready. However, this doesn’t only mean learning how to prompt a chatbot; it also means being armed with the right questions to align with pedagogy.

Teachers must remain professionally ready, not by unquestioningly adopting every tool promoted by the DfE or EdTech companies, but by asserting their professional expertise. Teachers understand the fluid ‘opening and closing’ of a child’s learning.

They also know that achieving a ‘correct answer’ is often the least interesting part of a maths lesson.

The next time you see an AI tool promising to ‘revolutionise’ your maths lessons, look beyond the data dashboard. As you always do, look at the child. Ask if their voice is being amplified or silenced. Let’s lead the way in ensuring that technology serves the child-centred, reasoning-rich classrooms that children deserve.

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References

- Alexander, R. (2020) A dialogic teaching companion. Abingdon: Routledge.
- Department for Education (2026a) Education Secretary speech at BETT UK Conference. GOV.UK, 22 January. Available at: <https://www.gov.uk/government/speeches/education-secretary-speech-at-bett-uk-conference> (Accessed: 5 February 2026).
- Department for Education (2026b) 450,000 disadvantaged pupils could benefit from AI tutoring tools. GOV.UK, 26 January. Available at: <https://www.gov.uk/government/news/450000-disadvantaged-pupils-could-benefit-from-ai-tutoring-tools> (Accessed: 5 February 2026).
- Hargreaves, D. H. (2008) Leading System Redesign - 4: Innovation Networks in Action. London: SSAT. Available at: <https://webcontent.ssatuk.co.uk/wp-content/uploads/2014/08/14142830/Leading-System-Redesign-4.pdf> (Accessed: 6 February 2026).
- Tony Blair Institute for Global Change (2026) Generation Ready: Scaling Safe, High-Quality AI in England’s Schools. London: Tony Blair Institute for Global Change. Available at: <https://institute.global/insights/public-services/generation-ready-scaling-safe-high-quality-ai-englands-schools> (Accessed: 5 February 2026).
- Webb, N. M., Franke, M. L., Ing, M., Johnson, N. C. and Zimmerman, J. (2020) ‘The details matter in mathematics classroom dialogue’. In: Mercer, N., Wegerif, R. and Major, L. (eds.) The Routledge International Handbook of Research on Dialogic Education. Abingdon: Routledge, pp. 530–546.
- Wegerif, R. and Casebourne, J. (2025) ‘A dialogic theoretical foundation for integrating generative AI into pedagogy’. British Journal of Educational Technology, 56(2), pp. 403–421.



Magic, Minecraft and Electric Whiskers: Imagination as a Mechanism of Inference

Nicola Hodgson

Introduction

As a classroom teacher, I was often struck by the conclusions that children reached when asked questions about stories. Sometimes their interpretations felt uncannily insightful, and at other times, frankly puzzling. Alison Gopnik (2011) captures this tension well when she describes children as “deeply familiar and profoundly alien” and that description captures a situation that may resonate with many teachers: moments when a child’s response makes you think, “That’s not the answer I was expecting. I wonder where that came from?”.

These moments lingered in my mind and became the starting point for my doctoral research, which explored the resources children draw on when they endeavour to understand stories. Working with small groups of Year 4 children in two primary schools in South East England, I invited children to talk about short extracts from narrative texts commonly used in school. Rather than steering them towards the ‘correct’ answers, the questions were open-ended and encouraged children to use their own processes of meaning-making, enabling them to express, negotiate, and expand their interpretations collaboratively. Listening to these conversations offered a window into the different ways children draw on

their imagination, experience, and intertextual knowledge to fill in the gaps that stories leave behind. All teachers will recognise the moment when a child offers an answer that does not quite fit. These moments can feel uncomfortable or easy to move past, yet they often reveal something really important about how children make sense of texts.

Cognitive Perspectives on Inference

Inference can be broadly defined as the process of extending beyond what is directly stated in the text by using evidence, background knowledge, and reasoning to build understanding. Although the National Curriculum mandates that children learn to make inferences, it offers minimal guidance. This deficiency underscores the critical need to clarify what inference truly entails, particularly for children who struggle with comprehension issues.

A body of cognitive research has helped us understand more about inference, particularly the roles of memory, attention, reasoning, and background knowledge (Cain and Oakhill, 1999; Cain, Oakhill and Bryant, 2004). Significantly, it has also been shown that inference is not a single unitary process. While some inferences

are generated automatically, others are slow, effortful, and heavily dependent on the reader’s prior knowledge. Crucially, children who struggle with inference do not necessarily struggle for the same reason. Working memory limitations can play a part, but they are neither a consistent nor sufficient explanation for this phenomenon. Background knowledge is vital as children, or adults for that matter, cannot infer meaning when they have no reference point for the content of the text. However, how much and what kinds of background knowledge are a prerequisite for inferring meaning from a text? Furthermore, while cognitive research is valuable, it has its limits in fully explaining inference. While working memory limitations and background knowledge are crucial, they do not fully account for the dynamic processes that occur when children engage with stories emotionally, culturally, or imaginatively. This points to a more fundamental understanding: meaning is not fixed in the text, waiting to be extracted through cognitive effort alone; it is constructed through the interaction between reader, text and context. Therefore, a child’s capacity to infer meaning is shaped by their exposure to cultural knowledge, linguistic norms, and the interpretive practices of their home and community. When a child’s interpretation is labelled as incorrect, we may be overlooking these cultural and experiential resources and attributing to a lack of intellectual ability what may instead reflect a mismatch between the world of the text and the world of the reader.

The Role of Cultural and Experiential Resources

Seen in this light, the issue becomes wider than inference when considering the cultural resources children are invited to draw upon when making meaning of texts. The texts children encounter in school may reflect relatively narrow worldviews, privilege written forms and particular knowledge, while marginalising the informal, popular, and non-traditional literacies that many children

bring to reading. This limits the knowledge which is considered relevant and can restrict children’s access to the cultural and interpretive resources that may support inference-making. My research found that children are not passive recipients of culture. They actively rework what they know, drawing together fragments from books, films, games, and lived experiences to make sense of what they read. When these resources fall outside what is anticipated or valued in the classroom, imaginative or unconventional inferences may be misrecognised as inaccuracies rather than understood as evidence of meaning-making in action. These observations underscore how children actively draw on their cultural and experiential resources to bridge narrative gaps. For example, children proposed various explanations of why Ivan in *Ice Palace* (Swindells and Jackson, 1992) has grown “old long ago, and is gone”:

Michael: He had cancer... So, we live up to like 100. He’s so old that he died and passed away. And he had a big funeral.

Rachel: And he went to the hospital, and he got better, but he is nowhere to be found because someone kidnapped him.

These are not random guesses. Michael draws on familiar real-world causal chains (illness, ageing, death), while Rachel creates a more elaborate narrative potentially influenced by themes of danger in the wider narrative. Neither child passively accepted narrative gaps; instead, they actively generated explanations aligned with their experiential and cultural knowledge.

If we value children’s diverse cultural resources, we must move beyond the assumption that children without extensive book knowledge are culturally deprived or that their imaginings are insignificant. Inference does not occur in a vacuum; children draw on what they have encountered before to fill narrative gaps and make

meaning. The breadth of children's background knowledge extends beyond traditional literary sources and was evident in exchanges such as this discussion of the word 'blacksmith' in *Ice Palace*:

- Joe: Make weaponry. Like Iron diamonds. Gold.
- Leo: We got that from Minecraft.
- Joe: Because they sell their tools. They make a lot of money. From tools and make a lot of money from tools, so in Minecraft they. Yeah, in villages.
- Molly: I got it [the word *blacksmith*] from Minecraft.
- Joe: Minecraft education. You can also learn from Minecraft.

There were many occasions such as this that clearly illustrated that background knowledge is not confined to literary texts or formally



sanctioned curriculum content but is built through a wide range of cultural experiences, including everyday conversations, the media, play, and lived events. When children's conclusions differ from those expected by the teacher, it might not indicate a deficiency in background knowledge but rather the activation of distinct yet entirely coherent knowledge resources.

Imagination as a Mechanism of Comprehension

Imagination was woven through the children's discussions as they made meaning of the texts we discussed. For example, when discussing the phrase "whiskers probed the air" in *Tyger* (Said and McKean, 2022), different children took distinct inferential pathways. James imagined a functional mechanism: "Electric like they have whiskers probed... she's got special powers in her whiskers. And the power is when she needs to go somewhere, they point to where she needs to go." Phoebe inferred psychological states: "It means that she's scared or she's confused or she is like, surprised." Sarah condensed the complexity symbolically: "Magic." Each response demonstrates imaginative inference in different ways: mechanistic, emotional, and symbolic. I would argue that none are wrong; each represents a legitimate pathway from textual cues to meaning-making. The diverse nature of children's imaginings likely stems from a myriad of sources.

As noted by Iser (1972), authors deliberately leave gaps to enhance narrative dynamism, requiring readers to employ their imaginations to bridge these spaces. Imagination enables children to visualise hypothetical scenarios, connect abstract ideas to lived experiences, make inferences about motives, causes, and consequences, adopt multiple perspectives within narratives, and interpret fantastical or improbable elements in meaningful ways. Indeed, research confirms that mental imagery enhances comprehension and recall (Gambrell and Jawitz, 1993) and allows children to adopt multiple perspectives, make sense of unusual elements, and develop a deeper understanding of literary themes (Kushnir,

2022). However, imagination has received surprisingly little attention in educational policy or practice. The Reading Framework mentions capturing children's imagination, and the National Curriculum describes reading as feeding imagination, but these references are superficial, peripheral embellishments rather than core objectives (d'Agnese, 2017). This lack of substantive engagement with the imagination has significant implications for how we approach teaching reading comprehension.

Implications for Pedagogy

Given the critical role of imagination and diverse cultural resources, what are the possible implications for teaching reading comprehension? Reading comprehension, it is clear, involves more than just extracting meaning from the page; it entails creating meaning through the active interplay of cognitive abilities, textual elements, and sociocultural influences. The imagination acts as a workspace where this meaning is formed. Therefore, teaching inference cannot rely solely on checking whether children arrive at predetermined answers to questions. Instead, greater attention should be paid to the reasoning processes children use and the connections they make.

In practice, this means shifting classroom emphasis from what inference a child reaches to how they reached it. Asking children to explain their thinking, justify their ideas with reference to the text, and talk through alternative interpretations makes their inferential processes visible to the teacher. Strategic open-ended questioning and structured peer discussion are particularly valuable here, as they allow children to hear different perspectives, refine their ideas, and recognise that more than one interpretation may be plausible. Such practices help teachers distinguish between unsupported guesses and inferences which are grounded in textual and experiential evidence.

This approach sits in tension with a system shaped by standardised assessments and tightly

defined success criteria, where imaginative or unexpected responses can be treated as errors. However, valuing imagination does not mean accepting any interpretation uncritically or without question. Rather, it involves helping children develop imaginative responses in dialogue with the text and refining them through discussion, evidence, and reasoning.

The children in my research demonstrated that imagination is not an optional extra or a distraction from comprehension; rather, it is the mechanism through which inference takes place. When children imagine possibilities, adopt perspectives, and generate explanations to bridge narrative gaps, they engage in precisely the inferential work that reading comprehension requires. Teaching that recognises and develops this process is therefore not idealistic, but essential. If we truly want children to become skilled, engaged readers who can navigate complex texts, we need to honour the imaginative work they are already doing and help them do it even better.

Nicola Hodgson is an experienced educator with more than 30 years of teaching across primary and secondary settings. She is currently completing a doctorate exploring how primary children draw inferences from narrative texts.

References

Cain, K., Oakhill, J. and Bryant, P. (2004) 'Children's Reading Comprehension Ability: Concurrent Prediction by Working Memory, Verbal Ability, and Component Skills', *Journal of Educational Psychology*, 96(1), pp. 31-42.

Cain, K. and Oakhill, J. V. (1999) 'Inference making ability and its relation to comprehension failure in young children', *Reading and Writing*, 11(5-6), pp. 489-503.

d'Agnese, V. (2017) 'The Eclipse of Imagination within Educational "Official" Framework and Why It Should Be Returned to Educational Discourse: A Deweyan Perspective', *Studies in Philosophy and Education*, 36(4), pp. 443-462.

Gambrell, L. B. and Jawitz, P. B. (1993) 'Mental Imagery, Text Illustrations, and Children's Story Comprehension and Recall', *Reading research quarterly*, 28(3), pp. 264-276.

Gopnik, A. (2011) *The Philosophical Baby: What Children's Minds Tell Us about Truth, Love & the Meaning of Life*. UK: Vintage Digital.

Iser, W. (1972) 'The Reading Process: A Phenomenological Approach', *New Literary History*, 3(2), pp. 279-299.

Said, S. F. and McKean, D. (2022) *Tyger* Oxford: David Fickling Books.

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