Independent Schools Queensland
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Briefings
Thought leadership for the independent schooling sector

VOLUME 30 | ISSUE 4

RESEARCH FEATURE: From 'digital detox' to digital discernment

Foreword

Across Australia, schools are navigating an increasingly complex relationship with digital technology. While technology offers significant opportunities to enhance learning, participation and accessibility, growing concerns about screen time, distraction and artificial intelligence are prompting important questions about how, when and why technology should be used in education.



A Digital Detox, November 2026

For school leaders, the challenge is not simply to choose between more technology or less. Rather, it is to ensure that its use is purposeful, informed by evidence and responsive to the needs of students and their school communities.

From 'Digital Detox' to Digital Discernment examines the evidence surrounding screen use, handwriting and artificial intelligence, and considers what this means in practice for schools.

The paper also explores the emerging challenge of AI and cognitive offloading. As AI becomes increasingly embedded in education, schools must consider not only the quality of the work students produce, but whether students are undertaking the thinking and learning required to develop lasting knowledge and understanding.

For Queensland's independent schools, this is a timely and relevant discussion. Digital discernment provides a useful framework for moving beyond simple debates about whether technology is 'good' or 'bad', towards informed professional judgement about when and how it adds educational value.

At Independent Schools Queensland, we remain committed to supporting schools to navigate these questions thoughtfully, ensuring technology serves educational purpose while protecting the learning, wellbeing and relationships at the heart of education.



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RESEARCH FEATURE: From ‘digital detox’ to digital discernment



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What School Leaders Need to Know About Screen Time, Learning, Handwriting and AI

The Australian Government has put digital technology use in schools firmly on the agenda. The central principle is sound: technology should serve education. The leadership challenge is to look beyond the rhetoric, examine what the evidence actually measures and make decisions that protect learning, wellbeing, attention and relationships.

The Key Message

Schools do not need a simple choice between embracing technology and withdrawing from it. They need digital discernment: the informed capacity to decide whether, when, how and for whom a digital practice serves an educational purpose.

At a Glance

- **The government paper is strongest when it asks technology to earn its place** through educational purpose, evidence and care.
- **‘Screen time’ is an imprecise measure**. It can combine leisure browsing, social media, television, digital textbooks, homework and stylus-based handwriting as though they were educationally equivalent.
- **The evidence supports decisive action on distraction, excessive recreational use and AI-enabled outsourcing of learning**. It does not support a general retreat from purposeful digital learning.
- **Handwriting deserves a secure place in schooling, but evidence in its favour does not establish that paper is superior** to every screen-based activity.
- **AI can improve students’ immediate performance while weakening subsequent unaided performance**. Learning design and teacher guidance are decisive.
- **The practical test is screen value: what an activity contributes to learning, participation and human development**, alongside its costs, risks and what it displaces.

The Issue for School Leaders

The Australian Government’s ***A Digital Detox***, released on 4 November 2026, advances an important principle: technology should serve education. It rejects removing technology from schools, recognises that students need to use AI safely and responsibly, acknowledges accessibility benefits and cites evidence supporting purposeful use.

The difficulty lies less in the existence of qualifications than in the framing.

“Detox” evokes contamination and recovery through withdrawal. Claims about children falling behind as time online increases compress a varied evidence base into a simple relationship. References to “cognitive stunting”, a “great unwiring” and “screen time” foreground harm, while important distinctions appear later.

Why it Matters for Schools

Headlines can encourage communities to interpret the paper as a case for broad withdrawal from digital technology. The evidence supports a more discriminating response: reduce harmful and distracting uses, preserve purposeful uses and judge each practice in its educational context.

TABLE 1: DIGITAL DISCERNMENT

DIGITAL DISCERNMENT	SCREEN VALUE
The informed capacity to decide whether, when, how and for whom a digital practice serves an educational purpose. Sometimes, that might mean choosing not to use technology.	A judgement about what a digital activity contributes to learning, participation and human development, alongside its costs, risks and opportunity costs.

FIGURE 1: A DIGITAL DETOX: SCREEN TIME BY NUMBERS

SCREEN TIME BY THE NUMBERS

A Digital Detox refers to Australian Bureau of Statistics (ABS) research related to ‘screen time’. This data is often quoted in the media. It is important for education decision-makers to get below the headlines when considering this date.

In June 2026, the ABS reported that only 27.8% of children aged 5–17 met the daily sedentary-screen guideline.

Its explanatory notes indicate that this data specifically excluded study-related screen use.

The statistic, therefore, describes sedentary, also called passive, screen behaviour other than school related study. It is important for educators to recognise that this research does not refer to classroom technology use or its effect on academic achievement.

CONSIDER THIS SENTENCE

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A Better Frame: Digital Discernment

Rather than treating ‘screen time’ as a sufficient measure, school leaders, teachers and communities should consider screen value.

Both require professional judgement grounded in evidence. Neither begins with a predetermined answer for or against technology. Refer to Table 1 above.

What The Evidence Actually Shows

The most useful question is not simply how much time students spend on screens. It is what they are doing, why they are doing it, what learning the activity supports and what else it may displace.

1. **‘Screen time’ can obscure more than it reveals**

   Definitions of the term ‘screen time’, methodologies for research and categories of screen considered in the research vary across studies. Those distinctions are usually made clear in the original research but often become less visible as findings move into policy rhetoric, political debate and media commentary. Such information is crucial if schools are going to apply research effectively in their contexts.

   An example of research findings not being absorbed into media discourse is the Australian National University (ANU) study cited in ***A Digital Detox***. This study used time-use diaries and linked digital technology to educational outcomes for up to 7,929 adolescents between 2010 and 2018. Refer to Figure 1 above.

   This study examined messaging and social networking, gaming, homework on electronic devices, passive activities such as television and other uses. The researchers explicitly stated that school-related screen time was not measured.

   Despite this aspect of its methodology, the ANU study remains relevant. It indicates that, in the Australian context, **passive screen use and social-media time shared strong negative associations, while educational screen use was associated with better academic outcomes, particularly writing**.

   Importantly, the authors recommend examining the type of activity and patterns of extreme use rather than relying only on total time.

   They did not recommend reducing educational device use.

The Leadership Implications

Do not use an aggregate screen-time figure as a proxy for the quality of classroom technology use.

Separate educational from recreational use, active from passive activity, guided from unguided practice, and ‘typical’ use patterns in a school context from extreme patterns of student behaviour.

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FIGURE 2: A DIGITAL DETOX: A CLOSER LOOK

A CLOSER LOOK AT THAT PISA DATA

School leaders should note that an Organisation for Economic Co-operation and Development (OECD) analysis of 2025 Programme for International Student Assessment (PISA) results identified a 72-point difference in science scores between students reporting up to one hour of leisure device use at school and those reporting five to seven hours of leisure use of digital devices at school.

Leisure activities on digital devices at **school** included activities such as social media, gaming and unstructured browsing. The study is an interesting insight into digital distraction in schools.

On its own, this research may not justify removing digital technologies from classrooms or establish a universal allowance for educational screen use but does support action to reduce digital distraction and excessive recreational use at school.

FIGURE 3: HANDWRITING MATTERS

HANDWRITING MATTERS - YES, BUT PAPER?

In the Van der Weel and Van der Meer study cited in ***A Digital Detox***, 36 American university students handwrote words with a digital pen on a touchscreen or typed with one index finger.

It's not uncommon for many to interpret the findings of this research as evidence that Australian school students should always handwrite with pen or pencil on paper. There are few, if any, recent peer-reviewed studies supporting this position.

The 2024 study measured brain connectivity - not learning. Subsequent commentary on this research has questioned both the inferred relationship between connectivity to learning and the artificial typing conditions.

… and it bears repeating that the 'handwriting' condition in the methodology of this research was in itself the use of digital technology.

2. Distraction is a legitimate concern, but context matters

A Digital Detox recognises that educational and recreational uses differ and acknowledges limitations in the evidence, including short-term studies, overseas settings and limited primary-school research. The risk *A Digital Detox* is the reach of its rhetoric, not the absence of qualification. See Figure 2 above.

Health and displacement also matter. Even valuable digital activities can crowd out sleep, movement, sustained reading, conversation and play.

Digital discernment therefore asks both what an activity contributes and what it displaces in students' lives.

Handwriting Deserves Better Than a Paper-Screen Binary

Handwriting deserves a secure place in schooling. Evidence cited in *A Digital Detox* supports that position. It does not follow, however, that paper is superior to every screen-based activity.

Flanigan et al.'s 2024 meta-analysis of 24 studies involving 3,005 American college students certainly found a small average achievement advantage for handwritten over typed lecture notes, but this is an example where drilling into the research may help school leaders. This research provides useful evidence about a particular task and population, but applying it across diverse Australian P–12 contexts requires care. The authors themselves caution against transferring the findings without nuance. See Figure 3 above.

None of this diminishes the importance of handwriting.

It does prevent evidence in favour of handwriting's importance from becoming a sweeping claim that paper is superior to every screen.

Schools need to consider the activity, learner, accessibility requirements and intended outcomes.

Handwriting and purposeful digital learning can both belong in a coherent educational program.

TABLE 2: PERFORMANCE PARADOX

POTENTIALLY BENEFICIAL	POTENTIALLY DETRIMENTAL
AI assistance with grammar may help a student focus on working with research and developing logical arguments when grammatical control is not the learning goal. Generating alternatives may sharpen critical comparison after a student has formed an initial position.	The same assistance may remove important opportunities to practice when grammatical control is the learning goal. Alternatives generated too early may short-circuit the student's development of an initial position.

FIGURE 4: THE LEADERSHIP IMPLICATION

THE LEADERSHIP IMPLICATION

Do not assume that a better 'product' demonstrates better learning. AI can create an 'illusion of competence' when it is used to detrimentally offload.

Consider the process of learning carefully.

Consider where students must think independently (of AI, of tutors, of teachers, of peers, of others).

Consider when assistance is appropriate and when it is not.?

Consider how the learners' understandings will be checked..

AI: Protect the Work Through Which Learning Happens

The concern that AI can replace essential thinking is substantial. The question is not simply whether AI was used, but whether it supported the intended learning or performed the cognitive work students needed to practise.

Lodge and Loble (2026) distinguish **beneficial cognitive offloading**, which frees capacity for intended learning, from **detrimental offloading**, which bypasses it.

Their **performance paradox** explains how a better immediate product can coexist with weaker durable learning. Refer to Table 2 above.

The evidence gives school leaders reason for both caution and design:

- A study of 30 months of data from 26,811 Chinese secondary students in education found better homework performance alongside weaker examination performance after AI adoption. Losses were most significant among students whose patterns suggested that they were using AI to do 'their study for them' at home. This practice is a clear example of detrimental cognitive offloading.
- That warning is substantial, but the paper is a discussion paper rather than peer-reviewed research, and its setting and methods do not establish identical effects in Australian classrooms.
- Bastani et al. (2025) similarly found that unrestricted GPT-based assistance improved mathematics practice performance but harmed subsequent unaided performance. A teacher-designed AI tutor with safeguards largely mitigated the harm.

The ***Bubble and Burner Model*** (Wall, 2026) offers one way to exercise that judgement. Rather than ban AI or permit unfettered use, educators can sequence assistance according to learners' developing subject expertise, check understanding, adjust challenge and support, and curtail use where necessary. The task is to design learning for a digital age while protecting the work through which learning happens. Refer to Figure 4 above.

What this Means for School Leaders

The immediate leadership task is not to choose between 'more technology' and 'less technology'. It is to establish a disciplined way to judge educational value, manage risk and protect the conditions in which learning occurs.

1. Clarify the educational purpose

Identify the learning, participation or accessibility outcome the technology is intended to support.

Avoid beginning with the tool. Focus on the purpose.

2. Distinguish types of use

Separate educational and recreational use, active learning and passive consumption, guided and unguided practice, and ordinary from extreme patterns of use.

Balance the affordances of digitally enhanced learning with the need to reduce digital distraction in school.

3. Protect essential thinking

Identify the cognitive work students must still perform - especially where AI can produce an acceptable output without durable learning. Build 'cultures of transparency' around the use of AI. Encourage teachers to know their learners and how the learn, and to balance accessibility with the need to promote the productive struggles at the heart of learning. Routinely check for student understanding and engage in meaningful feedback processes.

Gather evidence of student learning over time.

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Questions Worth Asking in Your School

- What should students, families and staff understand about screen value and digital discernment? How do we communicate these ideas?
- Where is digital technology clearly improving learning, participation or accessibility in our school? How do we enhance this?
- Where are distraction, passive consumption or excessive recreational use affecting attention and learning? How do we reduce this?
- How effectively do our policies distinguish between different purposes and patterns of digital technology use?
- How do we best support teachers in deciding when AI assistance is helpful, premature or inappropriate in the process of learning?
- What evidence will tell us whether a digital practice is working as intended within our community?
- Who is responsible for reviewing that evidence and guiding our school practice?

4. Consider displacement

Focus on the development of the whole person. Be conscious of how many activities – not just digital technology -may crowd out sleep, movement, sustained reading, handwriting, conversation, play and opportunities to connect with others.

5. Check fit for learners and context

Match the technologies available appropriately to the learners' age, prior knowledge, additional learning needs, and accessibility needs. Consider proposed technology use against a wide range of student wellbeing needs, capabilities, and learning objectives - as well as the demands of curriculum coverage and assessment.

The Bottom Line

A Digital Detox is strongest when it insists that technology must earn its place through educational purpose, evidence and care.

Its evidence supports action on distraction, excessive recreational use and the outsourcing of learning.

Digital technologies are embedded in Australian life, but not every use serves learning equally well.

Digital discernment offers schools a productive approach for making decisions with teachers, students and families to:

- preserve what strengthens learning and participation
- restrict what causes harm or displaces essential development
- keep professional judgement at the centre.

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ISQ thanks its 2026 Alliance Partners

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