

EXCLUSIVE
By Molly Kingsley



THE HIDDEN LESSON BEHIND EDTECH

From interactive whiteboards to 'gamified' homework, technology now dominates almost every aspect of pupils' education. But with parents and children's campaigners increasingly worried that gadgets are creating more harm than help, some schools are now opting for a complete switch-off

I'M IN the reception area of Heritage School in Cambridge, waiting to speak to headteacher Jason Fletcher. Above the welcome desk, a photograph shows two children sitting under a tree, reading a book. For most of the country's schoolchildren, the image represents a quaint anachronism – a quarter of British children spend each day on phones, tablets or gaming consoles, according to a recent study for the Children's Commissioner, while only one in five reads daily.

But for pupils at Heritage, the photograph reflects a daily reality. The school, as Fletcher proudly explains to me, is unique in using no iPads, laptops or interactive whiteboards during normal teaching time. While there is a firm belief here that technology has a place – with dedicated computing lessons from Year 6, a STEM club and "creative robotics" competitions – the ethos is squarely grounded in the belief that books, textbooks and handwriting foster better cognitive development and educational attainment than apps and screens.

"What we are arguing for is tech in a box," Fletcher explains. He says the school believes that a "calmer environment where children can actually engage with words patiently, and where normal interaction with teachers is cognitively vastly superior to the deluge of information that the digital makes possible".

And its strong values are borne out by impeccable results: last year, Heritage achieved the second-best GCSE results in Cambridge, a city overrun with high-performing schools. They also set the school apart from most, if not all, other schools in the UK, as well as from the general thrust of national educational policy, through which children are fed a staple diet of tech.

The UK's EdTech (educational technology) sector is the largest in Europe and if Pearson – the UK's largest exam board – gets its way, GCSEs and A-Levels could well be fully digital by 2030. Furthermore, reports suggest AI might even soon be marking children's homework.

Concern among parents and experts is mounting. As clinical psychologist Dr Grace Hancock explains, the digitisation of the school day "contributes to [children's] overall daily screen/device use, which exacerbates the bigger issue of what this is taking from children – the ability to tolerate boredom, to let their mind wander towards curiosity and ideas, and to maintain a regulated mind and body throughout their day".

Many of the families I speak to echo professionals' concerns. "We've had a 30-minute stress-out and we've not even found the right homework," says one parent, describing how internet connectivity issues introduce panic and friction into what should be calm, thoughtful homework time.

"What if we don't want to open our own screens again after a day in the office?" says another. "We fight screen time at home and then their primary school puts 85% of homework on an app!" says a third.

OTHERS tell me of the disruptive effects the tech has in the classroom. Kate, the parent of a teenage boy, believes the introduction of iPads into her son's formerly sacred classroom space was deleterious to his education. She calls the devices "seriously distracting and routinely misused".

Controls which notionally blocked access to sites other than Google Classroom routinely failed, and pupils frittered away lesson time on gaming and film sites, where 18-certificate films are readily accessible. Teachers were forced to walk around the

classroom to monitor iPad use. Many simply gave up. As one state school teacher, who did not want to be named, told me: "We have kids who just sit in class at the back on their iPads. We've written them off."

And then there is the "educational" element of EdTech. As a damning Education Select Committee Report conducted last year noted, only 7% of EdTech companies in the UK have conducted randomised controlled trials, and just 12% have used third-party certification. "It is difficult to assess whether digitalisation has had a positive impact on schools", concluded the report.

Dr Hancock says: "There is no sound scientific research that supports its use. "While there have been some single studies which found positive outcomes, meta-analysis studies have concluded no significant benefit to children."

ON MY drive to Sevenoaks station, I pass streams of children at the bus stop. Heads down, too often they are side by side in silence. Faces illuminated by the blue screens of their smartphones.

Children are ever more reliant on screens. The evidence of the damage that smartphones are having on children's attainment and mental health is now overwhelming. It's why I have been pushing hard to get phones out of the classroom, a campaign that Keir Starmer

described last month as "completely unnecessary" and a "waste of time". He is wrong. We need the law to protect children and this must begin in the classroom. However, I know some feel that it has become harder to separate children from their screens at home when

'WE MUST SAFEGUARD CHILDREN'S HEALTH, NOT STUNT THEIR SKILL LEVELS'

By Laura Trott MP
Shadow Education Secretary

children with their own devices from Year 7. "My children's scores are plummeting", says Bryony. "They aren't learning anything, they are losing confidence across subjects. "The class WhatsApp group is like a bomb site. People are going, 'Hang on a sec, I'm

so much learning and homework has to be done on tablets and phones. During the pandemic, these devices helped many children continue their education remotely when schools were shut, but the role of EdTech needs to be closely examined and considered carefully. While tech obviously has a role to play in modern education, it should never replace the core skills that are essential for a child's development. Evidence suggests excessive screen

time can lead to issues such as disrupted sleep and long-term damage to vision. We know that handwriting and reading from books are essential for retaining knowledge. As the world embraces EdTech, we must ensure we are safeguarding children's health and not stunting some of the core skills they need to set them up for the future.

bankrupting myself for this education and it's worse than if they were just at home reading a book." And "inane" is a word used more than once to describe the typical EdTech homework experience. One father gives the example of languages

as a subject now particularly degraded. "Instead of writing out verb forms again and again – the only way to learn the scaffold



PLUG-OUT OUTLIERS: Jason Fletcher and his wife Fiona, who set up Heritage School in Cambridge, that restricts tech, in 2007



WEANED ON SCREENS: Typical teaching is now conveyed via computers, not books, above; below inset, Laura Trott MP

2023 UNESCO book *An EdTech Tragedy?* concluded that the "elevation of learning models that put machines and profit before people" during the pandemic had "introduced novel health and safety risks, handed significant control of public education to for-profit companies, expanded invasive digital surveillance and carried detrimental environmental repercussions" and adversely "impacted educational access, equity, quality and outcomes in most contexts".

Across most OECD countries, PISA scores have been steadily falling since 2012, with sharp declines, exacerbated by – but largely pre-dating – the pandemic, since 2018.

We seem to have forgotten that EdTech platforms are, by and large, not created by altruistic child-centred benefactors, but by hard-nosed companies, many private equity-owned, whose raison d'être is to make profit by leveraging children's attention – and even selling their data.

Professor of Cognitive Neuroscience Dr Mark Williams explains that, just as with social media and smartphones, many of the EdTech platforms are "gamified by design".

The way they work, he explains, is by "giving reinforcements at intermittent periods so that you increase the amount of dopamine that's being released, and you do it regularly so that [children] get addicted as quickly as possible...And we know that when you get addicted to one thing, you're more likely to get addicted to other things".

As Williams explains, the loss of grey and white matter in areas of the frontal lobe associated with learning and memory are, with screen-addicted children, sufficiently pronounced as to be visible in brain scans.

"We have been deceived by a false promise," says Jason Fletcher. "Is it too much to hope other [schools] might join us?"

HERE are early signs some schools are beginning to re-examine their commitment to EdTech. Damian McBeath, principal of the John Wallis Academy in Kent, tells me that after the school went completely smartphone-free in 2023, they saw enough tremendous benefits to trigger "a lightbulb" moment.

It's early days, but they are actively looking at how to move back towards traditional methods that more readily develop "thoughts and discussion and debate" in a way that Powerpoint and interactive platforms often do not.

Madrid's government has unveiled plans to severely limit the use of computers and tablets in primary schools, and to ban primary teachers from setting homework on screens. Sweden, on the basis of findings from its influential Karolinska Institute that "there's clear scientific evidence that digital tools impair rather than enhance learning", has moved students off digital devices.

A DfE spokeswoman told the Express: "Effective use of technology is proven to boost pupil performance, improve outcomes for children with additional needs and help students develop digital skills needed for modern life. That's why we are modernising our education system with a digital revolution in classrooms – helping children achieve and thrive through higher standards of teaching and learning."

As I glimpse into a classroom at Heritage full of engaged, focused pupils, not a screen in sight, I think back to Fletcher's words: "What we actually want as educators is direct access to the thoughts of the child. I want to know it's not being manipulated by AI or ChatGBT or cut and paste. So just write it in an exercise book. It's so clean. It's so pure. Why would we not want that?"

I can't help but wonder how many parents would agree.

● Parents' names have been changed on request; Molly Kingsley is co-founder of parent-led campaign group *UsForThem*

