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2023/24

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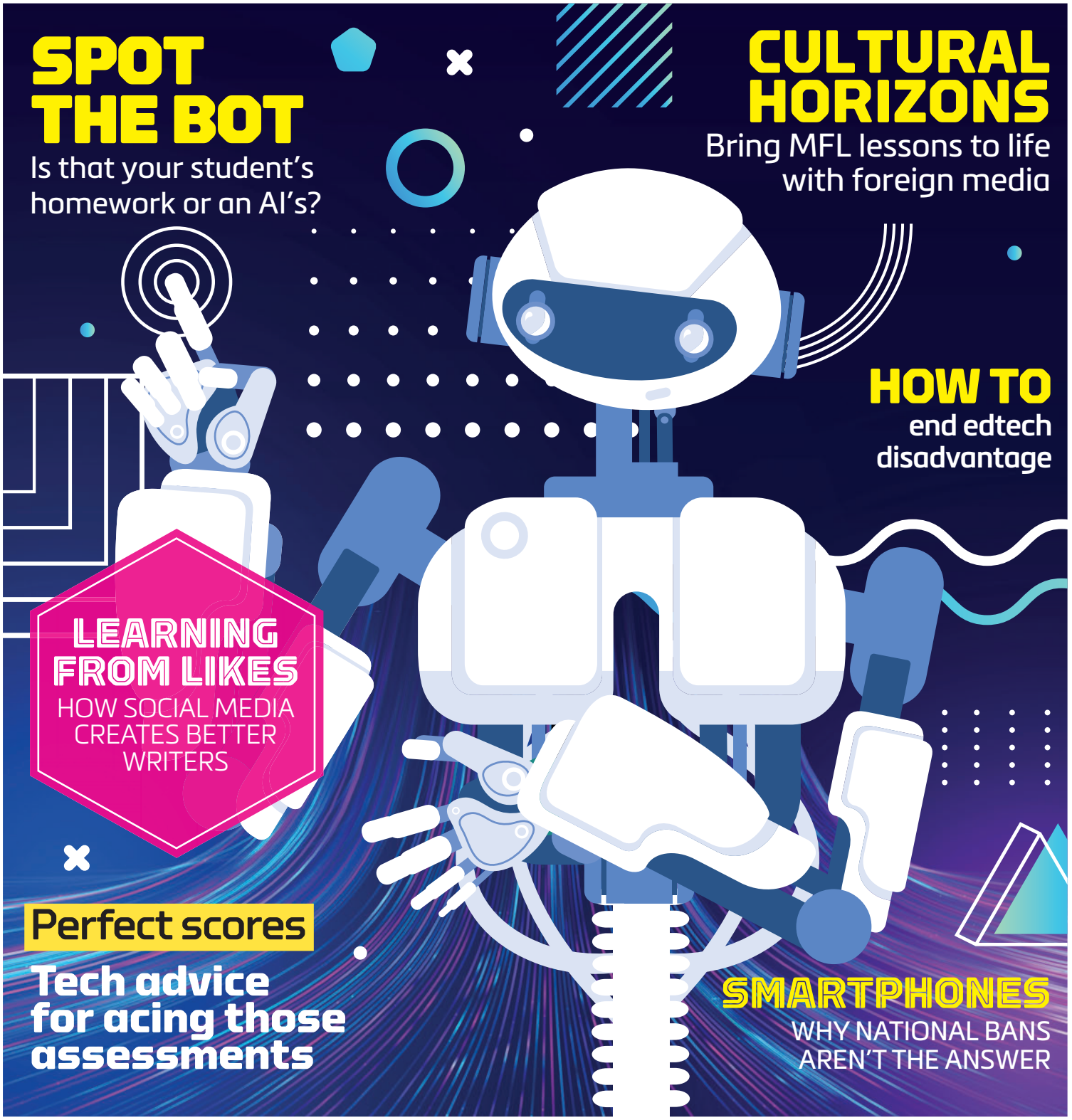

SPOT THE BOT

Is that your student's homework or an AI's?

CULTURAL HORIZONS

Bring MFL lessons to life with foreign media

HOW TO

end edtech disadvantage

LEARNING FROM LIKES

HOW SOCIAL MEDIA CREATES BETTER WRITERS

Perfect scores

Tech advice for acing those assessments

SMARTPHONES

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Welcome...

From typewriters to tape machines, from TVs to computers, the story of technology in education once amounted to a timeline of labour-saving devices deployed (resources depending), in ways that let teaching staff and administrators accomplish more in less time, and with steadily improving outcomes.

Sure, computer science teachers might have been kept on their toes by the determination of some 12-year-olds to play games on those whizzy new BBC Micros – but for the most part, the volume, expense, complexity and relative scarcity of the technologies in question largely ensured they would only be used by approved personnel for their intended purpose.

In 2023, this picture seems impossibly quaint. Most children of secondary age carry portable computers of immense power in their pockets. High speed internet connections enable students and teachers to access a planet's-worth of accumulated knowledge. The array of tablet devices and laptops routinely used in classrooms are a far cry from the beige boxes that once sat imposingly on their own in the corner.

The advances made in edtech have indeed been extraordinary, but they've also become a double-edged sword. Beginning, perhaps, with the explosive growth of the internet in the mid to late 90s, and the suddenly very real prospect of computer labs becoming a portal to all manner of inappropriate and off-limits material eagerly sought out by students – with all the safety and security concerns that entailed.

We're now at the point where decades of investment and activity aimed at making the internet as accessible as possible is presenting schools with serious problems, as the debate continues to churn over whether students should be able to use their phones when on school property (more on which can be found on page 24).

And then there's unique threat posed by AI. Previous forms of technology may have been open to misuse by students determined to cause disruption – but only AI has the potential to help students sidestep the education process completely in the here and now (see page 10), and maybe even subsume teachers' jobs entirely at some unspecified point in the future.

Edtech is still capable of eliciting awe and wonder from students (see page 30) and getting them to aim higher (see page 62). Yet at the same time, the need for caution and vigilance has never been greater. No modern teacher can afford to be a technophobe. But there's perhaps something to be said for being a techno-agnostic.

Best wishes

Callum Fauser, editor
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Visit TEACHWIRE.NET/EDTECH for more information and great ideas

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2023/2024 EDITION

artichoke

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DEVELOPMENTS

CLASSROOM INSPIRATION

SCHOOL SOLUTIONS

TECH IN ACTION

CyberFirst

AGES 11-14

://CYBERFIRST .NAVIGATORS

How to stay secure online

A suite of resources including an interactive short film, to develop students' key knowledge, skills and behaviours – helping them navigate the risks of online life.

https://www.ncsc.gov.uk/collection/cyberfirstnavigators

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COMPUTER SCIENCE

YOUTUBE.COM/CRAIGNDAVE

Also available on ClickView

TECH IN ACTION

Smart Revise for computer science and business

Raise attainment by redefining revision as a continual practice t hroughout the course

GETTING STARTED

As we return to a new, post-pandemic 'normal', attention will again be turning to preparation for those all-important terminal examinations. When should students start their revision? After Christmas? At February half term? At Easter? Evidence suggests that the very best practice is to establish revision as ongoing preparation throughout a course, not just at the end. After all, that's how marathon runners prepare to run a race. It takes years and months of preparation, with gradual increases in distance and performance improvements over time. Similarly, we need to apply the same approach when preparing for school exams.

WHAT WE DID

As practising teachers, we recognised several problems our own students were experiencing as they were learning. It's common to go through the content of a course in a linear fashion. Not necessarily in the order of the specification, but certainly one topic at a time. More recently, it's been suggested that interleaving concepts, instead of blocking learning, might have a positive impact by frequently returning to previously taught material and building upon it.

This requires careful curation of the scheme of learning, as students can get lost in the journey if it doesn't match the specification and published textbooks. We found it frustrating that regardless of approach, students could sometimes forget the basics – the very foundations upon which their knowledge should develop. In computer science, for example, we might ask, 'What is the purpose of the memory address register?' – only for students to forget this days and weeks later. We thought there must be a more effective way to retain knowledge over long periods of time.

HOW WE IMPROVED

Frequent, low stakes quizzing on all previously taught material was the answer. It's important to find time in busy lessons for knowledge recall, but that can be quite a challenge when you only have just enough time to cover the course content. This is where technology can provide a solution.

Many online quizzing tools will only create short quizzes of content from a single unit, but Smart Revise is different. It automatically interleaves and melds questions, in response to the teacher enabling topics as the course progresses. Crucially, it also creates a never-ending differentiated question playlist that is personalised for each student. Adapting over time with a focus on mastery, these question sets will change dynamically for each student in real-time as they engage with Smart Revise. Since the questions prioritise and cycle in an infinite loop, there is no fixed number of questions. Instead, students always have another question to answer, with teachers free to choose how long they wish to spend on the activity.

Did we mention?

We know that frequent low stakes quizzing isn't enough to ensure success. It solves the problem of retention, but doesn't prepare students for longer answer questions. Smart Revise therefore also includes hundreds of examination-style questions with a 'Smart Advance' mode, together with command word help and a unique guided marking interface for students, which encourages them to engage with mark schemes. Additionally, there's the 'Smart Terms' function, which facilitates the Leitner system with subject-specific terminology.

Contact:
Craig Sargent and Dave Hillyard, AKA Craig 'n' Dave
admin@craigndave.co.uk
smartrevise.craigndave.org

THE PLACE:

Stroud High School was an early adopter; Smart Revise has now been used by over 68,000 students.

THE CHALLENGE:

Tackling the 'forgetting curve' – a phenomenon whereby students forget what they have been taught over time, as investigated by Ebbinghaus in 1885 and later measured by Murre & Dros in 2015

POWER UP

Let's revolutionise KS3

KS3 should build a strong foundation that gives learners the vital skills they'll need for KS4 and beyond – but we can go further than that...

Need to know

If you're an educator looking for an innovative and comprehensive resource to enhance and support your teaching and learning, the Access Education Key Stage 3 product is the solution you've been looking for.

Providing secondary schools with a bundle of content within GCSEPod, the product gives educators everything they'll need to support students across years 7 to 11 throughout their journey to GCSE success.

Featuring a comprehensive selection of resources broken down into easily-digestible units and lessons, students can access a mix of audiovisual learning and formative assessments to enhance their learning experience.

Conceived as an immersive and interactive package that students will find engaging, the content is aligned with the National Curriculum in encouraging critical thinking and problem-solving skills, while providing learners with a thorough understanding of the material in the following ways:

Structured content: Any key vocabulary used in a lesson is defined at the start, to assist with understanding essential words that might otherwise present barriers to learning. Learners can also opt to undertake formative assessments to test their higher level knowledge.

Independent learning: As well as supporting in-classroom learning, the product is perfect for independent learners. The course can be studied at an individual's own pace, assigned as homework or completed in the lesson during independent study time.

Reporting and end of unit assessments: Reports provide an accurate overview of progress throughout the academic year, recording assessment scores and the number of videos watched, enabling educators to quickly intervene should they notice any problems or knowledge gaps. The product is designed to be adaptive, making suitable for all learning styles and abilities, while ensuring that learning sticks first time.

Those signing up before November will receive free access to the product until April 2024! For more details, visit our website.

Contact:
0845 345 3300
@gcsepod (X/Twitter)
theaccessgroup.com/education

TECH TALK

The KS3 product is packed with a mix of audiovisual learning tools, as well as gamifying quizzes and assessments to promote engagement.

A personalised learning experience

To ensure engagement, the content has been written by industry experts with a deep understanding of the subject matter and how best to deliver it.

Track student progress

Educators benefit from intuitive dashboards, packed with figures and easily exportable information. With usage data viewable at both individual and group levels, it's easy to identify which students may need additional support and interventions.

Improve outcomes

With data pertaining to entire year groups and classes readily available, educators can more easily map out knowledge gaps or common trends. Over time, this can be used to inform where your resources are deployed and improve standards overall.

Next Generation

With young people now used to fully immersive digital experiences, on-screen PowerPoint presentations no longer have the impact they once did.

This is where the KS3 product really comes into its own, since it's designed to engage pupils as they progress towards KS4, their GCSE exams and beyond.

DEVELOPMENTS

How the latest technology advances and trends are shaping educational practice

THE AGENDA:

Spot the learning SIMULATIONS

Ian Stacey reflects on the steps teachers can take to prevent students using chatbots to complete their class assignments for them...

I'm old enough to remember when the internet first found its way into schools. My experience wasn't of it being announced in the newspaper, or loudly heralded on television. Instead, it was simply a colleague at the end of the day, pointing at their computer and remarking, "Look what I can do."

It was clear that this new technology was going to usher some great new possibilities for classroom teaching, but also a fair number of problems. Yet despite the huge impact this technology was clearly going to have on our livelihoods, the profession was given little guidance at first. Teachers, parents and children simply had to figure it all out in their own time as they went along.

Gauging the impact

Unfortunately, it's been a similar experience in schools with every new technology that's appeared since, from social media, to VLEs to smartphones: *"Here's a shiny new toy. We don't know what the problems are yet – but I'm sure we can sort them out later."*

Last year, a technology quietly appeared with far-reaching implications that are set to dwarf the aforementioned examples – namely AI chatbots. For the uninitiated, these allow users to create pages of text from just a handful of prompt words. Once again, I've been left to figure out what the impact of this technology is going to be for me and my students. I know that I've barely scratched the surface, but thought I'd share here my initial thoughts so far and some possible solutions.

The most obvious issue is plagiarism. If little Johnny can now get ChatGPT to write his coursework for him, why would he want to write it himself? There's also the related question of whether this counts as theft. For now, at least, AI-generated writing is largely considered the creation of whoever enters the prompt words, regardless of whether they've written, edited or even read any of the generated text.

Needless to say, however, since the whole purpose of coursework is to *prove understanding*, I don't want anyone, or indeed anything, writing it besides the students themselves.

The second issue is accuracy. AI chatbots aren't above citing facts or statistics that are either provably false, or ones it's spontaneously generated – i.e. *made up*. Related to this is the issue of inappropriate content. You are what you eat, and since AI chatbots are fed by data and content harvested from the internet, this can easily lead to potential complications.

Take the case of 'Nothing, Forever', for example. This was a project that was set up with the fun aim of creating an AI-scripted sitcom – only for it to be temporarily shut down after creating material deemed to be transphobic.

Humans versus machines

An initial solution proposed within our school was to try to block ChatGPT and similar sites using network-level security, but this isn't a long-term answer. Pupils can simply access to the same sites, services and software at home, and ChatGPT is being joined by a growing number of AI chatbots. How could any school ever hope to track them all?

Another solution then presented itself in the form of 'classifiers' – a new class of software which promises to help teachers, publishers, employers and other interested parties to distinguish between text produced by software and original material written by a human being. They still have some way to go though, with the current generation of classifier software only producing an accuracy score of around 26%.

> **"Could we be witnessing the birth of a new phenomenon, whereby more affluent pupils are able to 'cheat' more convincingly?"**

Perhaps the real answer lies in steps that we can take during the drafting process. I've started asking my pupils to complete a first draft of the assignments they're set using paragraphs composed purely in bullet points. The advantage of this is that children are less likely to copy and paste text they don't understand into this kind of format, where the

substance of what their essay is actually saying is much more clear.

At a later date, some time after the point where what they've written is no longer so fresh in their minds, the pupils are tasked with revising their initial drafts by turning them into properly structured essays with standard paragraphs.

Learning exercises

Whatever we might think of AI as a tool in its current form, the technology is here to stay and will be playing an ever larger role in our schools, whether we like it or not. We can almost certainly expect the pupils of today to be routinely using it once they've entered the workplace. Given that a significant part of a school's role is to prepare pupils for the next stage of their life, we must teach them how to use it effectively.

I know enough to say that I'm not ready to do that yet myself. I would, however, maintain that introducing a process of 'redrafting' – where AI suggests changes and alterations students can make to their early drafts, so that they're written more cohesively – could be one example where pupils can use AI to help them with a useful learning exercise.

And yet, there's one final problem I can foresee which nether I nor my colleagues have any kind of answer for yet – and that's the creation of a huge gap between advantaged and disadvantaged pupils.

ChatGPT and its more well-known rival chatbots are, for the most part, free for anyone to access. As such, while they can certainly generate 'unique' text at impressive speed, the end result will often appear somewhat clunky in terms of sentence construction.

However, it's now possible to access a number of subscription-based chatbots which, so we're told, are capable of generating text to a much higher standard. Could we be witnessing the birth of a new phenomenon, whereby more affluent pupils are able to 'cheat' more convincingly, and obtain improvements to grades that were already better than those of their peers to start with?

Ultimately, there are many possible directions in which AI chatbots and related technologies could take us, both good and bad. Those are some of my thoughts – I'm eager to hear what everybody else has to say...

ABOUT THE AUTHOR
Ian Stacey is a product design and food teacher based at a comprehensive school in Essex

AI-PROOF YOUR COURSEWORK

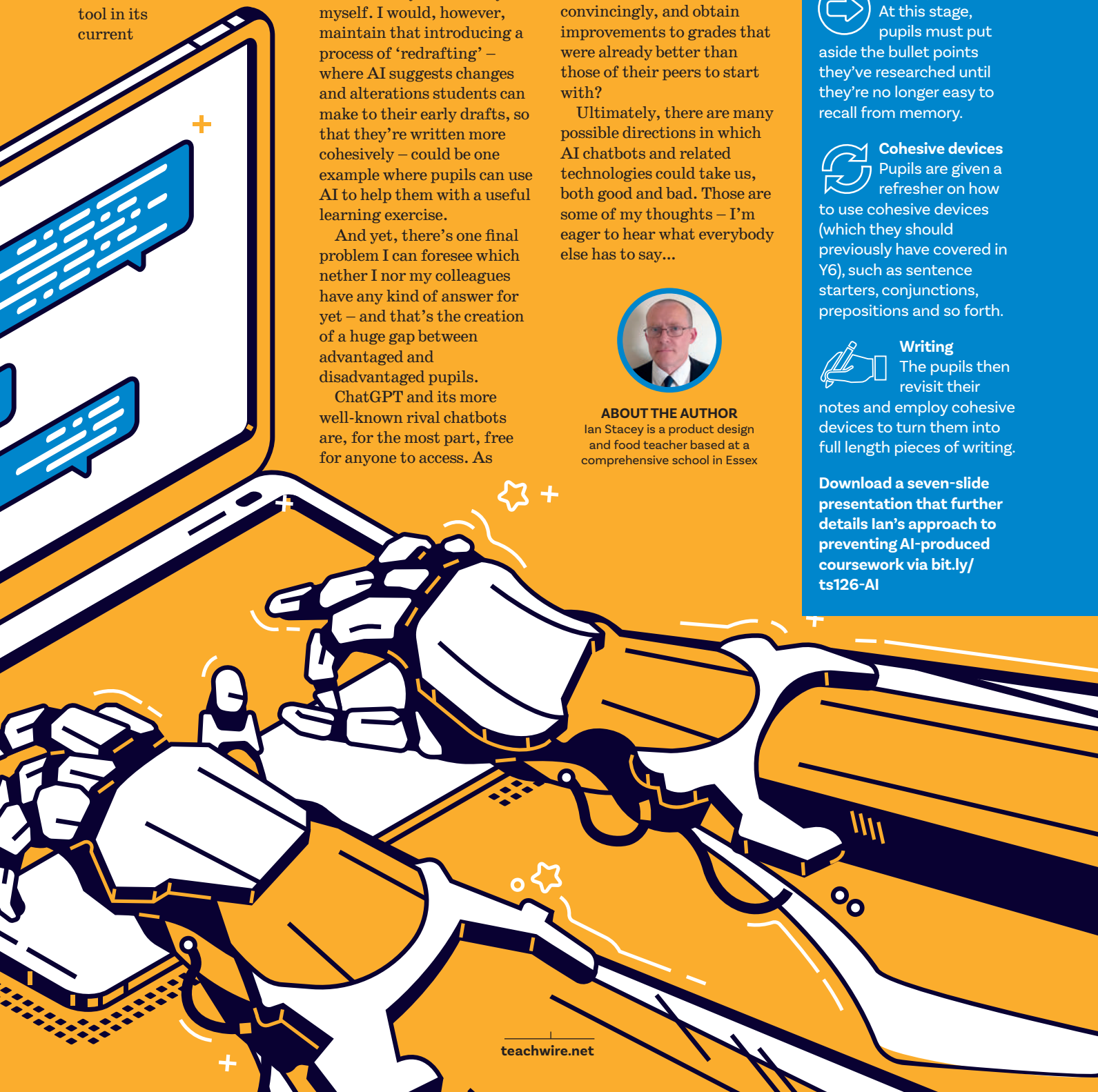
Drafting
At the start of the writing process, pupils are given a series of short prompts to research. Crucially, the details they uncover must be recorded in the form of bullet points, while keeping the sentences as simple as possible.

Moving on
At this stage, pupils must put aside the bullet points they've researched until they're no longer easy to recall from memory.

Cohesive devices
Pupils are given a refresher on how to use cohesive devices (which they should previously have covered in Y6), such as sentence starters, conjunctions, prepositions and so forth.

Writing
The pupils then revisit their notes and employ cohesive devices to turn them into full length pieces of writing.

Download a seven-slide presentation that further details Ian's approach to preventing AI-produced coursework via bit.ly/ts126-AI



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National Cyber Security Centre
a part of GCHQ

REASONS WHY...

5 NCSC Resources

Find out how the National Cyber Security Centre can help your students be more vigilant when online

Scan here to go straight to the resources or visit bit.ly/cyber_first

1 AN INTERACTIVE LEARNING EXPERIENCE

Our suite of resources are designed to engage and educate 7- to 11-year-olds and 11- to 14-year-olds with issues around online security. At the heart of each is a digital resource that brings the concepts to life, making the learning hands-on, interactive and relevant. Best of all, it's completely free!

2 THREE READY-TO-USE LESSON PLANS

Our digital resources are complemented by a collection of three convenient lesson plans, which build upon the concepts introduced in our interactive game and film. Students are given opportunities to explore the information and apply guidance across various activities, while deepening their understanding. Each lesson plan includes a PowerPoint presentation, along with all the necessary resources you'll need to get started. We hope they will allow you to create meaningful learning experiences with ease.

3 PRACTITIONER RESOURCES

The lesson material is accompanied by our comprehensive practitioner resources, which are packed with valuable background information to support your delivery. The content includes subject matter glossaries, FAQ answers and curriculum mapping for all four nations, together with clearly defined learning objectives and outcomes.

If the content in our packs works well for you, or if there is room for improvement, please help us refine the resources and make them even better by sharing your thoughts via the form available at forms.office.com/e/dissCBqkyx – we really appreciate your feedback.

Contact:
@ncsc (X)
@cyberhq (Insta)
ncsc.gov.uk

4 DON'T JUST TAKE OUR WORD FOR IT!

Our online game for KS2, CyberSprinters, has been recognised with three awards at the Learning Excellence Awards. Teachers also have shared positive feedback with us, describing it as an easily accessible resource for online safety lessons, and a valuable tool for child-led learning. In a survey of over 400 students, an impressive 85% felt more confident about cyber security after playing the game, while 87% expressed a heightened awareness of the importance of cyber security. Following a taster session for our recently launched KS3 resource CyberFirst Navigators, students commented on how much they'd learnt about the need to create secure passwords and why doing so is so important.

5 PSHE ASSOCIATION QUALITY ASSURANCE

The resources map to the UK Council for Internet Safety's 'Education for a Connected World' framework and there are also clear links to the computing curriculum. However, we see the quality assurance we've received from the PSHE Association as recognition that the internet is now an integral part of everyday life, making cyber security a crucial component of young people's personal and social education. This collaboration also means that our resources have been overseen by experienced educators, ensuring their effectiveness in live teaching settings.

Key Points

View and download these free teaching resources, plus supporting activities for use at home, via the NCSC website at ncsc.gov.uk/cyberfirst/resources

Teachers can enjoy the flexibility of being able to deliver the content as part of either the PSHE or computer science curriculum

With their focus on cyber security, these resources provide a unique angle from which to support young people's grasp of online safety

Developed by both the UK's national technical authority on cyber threats and the PSHE association, thus combining subject expertise and educational expertise

In defence of TIKTOK

It may have had a bad rap of late, but TikTok nevertheless contains a bounty of inspiring and entertaining content just waiting to be discovered by teachers, insists **Nikki Cunningham-Smith**...

It's not been great these past couple of years to be a teacher and in the vicinity of TikTok, that's for sure. This particular social media platform has been giving our great educators considerable cause for anxiety, sadness and even paranoia in our workspaces.

As is often the case with social media activity, TikTok-related incidents have the potential to consume mindsets 24/7. It goes without saying this is a far from healthy state of affairs, with some teaching professionals expressing worries over whether they're going to appear on their students' social media feeds without their permission being sought, or if they're going to be a victim of the latest TikTok 'challenge'.

Having said all that, I'd like to raise a different, but related point – that TikTok can be also an incredibly positive, collaborative, and uplifting space for educators to participate in. So before readers write off TikTok entirely, I'd just like to highlight a few of its more positive uses and potential impacts...

CPD opportunities

As an ICT and computing teacher by trade, I love seeing examples of how teachers have used tech to their advantage.

In-depth teaching and instructional videos have been available via YouTube for years, but I'm at a stage in life and in a professional role where I'm often time-poor. Being able to quickly view the concise, one-minute-max videos served up by TikTok has given me frequent injections of inspiration, as well as useful pointers I can choose to pursue or not, and highlighted potentially useful investments in learning tech.

Really, it's no different from the days when teaching professionals used to film their lessons over the top of pupils' shoulders and sell the end result in the form of CPD videos. I've often felt like a classroom observer, watching as teachers walk pupils through the use of self-regulation skills so as not to derail the lesson.

I've seen a teacher use press-on lights when discussing behaviour management with their class, and even curriculum-based examples – such as the maths teacher showing their TikTok followers how they helped their class grasp a concept they'd previously struggled with.

This ability to hear pupils in live examples is fantastic – listening to how they respond, noting what works and what doesn't, where the excitement spots are and the areas to be aware of when delivering certain topics. I think it's an invaluable tool for all teachers, but especially for prospective and student teachers who can now get real and

> ***"I'm upskilling and feeding my knowledge without even thinking about it"***

I've watched an extensive range of teaching opportunities and learning activities accomplished with micro:bits and Raspberry Pis that I'd never have thought of myself. It's been a wonderful source of CPD, without me having to attend (or indeed pay for) any courses. I'm regularly upskilling and feeding my knowledge without even thinking about it.

Live teaching

Watching teachers who have filmed their day, then edited together golden highlights to share with their audience, feels to me like a very privileged position from which to observe lesson advice from fellow practitioners.

honest insights to what classroom spaces can and do look like. They've been granted access to everyday, raw and unfiltered examples of what life as a teacher actually involves.

Sources of inspiration

The educational ideas you can find on TikTok aren't just limited to the classroom. It's also a fantastic space for seeing how other schools are engaging with national and international events, such as Children In Need, World Book Day and Black History Month. It can give you new ideas for using traditional spaces, such as libraries, calm corners, or playgrounds.

Whatever teaching idea or activity you might have in mind, there's sure to be at least some information on there that you can use to try and get your project off the ground. The great thing is that many of the schools you'll find are most likely facing similar problems as you, be it lack of funds or limited space, alongside an abundance of creative suggestions for how to tackle such challenges.

Static glimpses of the classroom spaces used by other teachers have long been available via Pinterest, but they're now increasingly accessible as snappy videos that serve as great visual examples of what you can do (and often on a more reasonable budget than you might think).

Niche teaching connections

If, like me, you're someone who works in a specialist area, your professional connections will typically be limited to others within your own school. TikTok has seen enough uptake by teachers that there are now numerous networking opportunities available at the touch of a hashtag.

I can simply type '#behaviourteacher' and there it is – teachers like me, working in spaces just like mine. At my fingertips, in real time, are educators across the globe experiencing the same educational existence as me – who understand how intense the trials, tribulations and victories in education settings can be, and who are willing to share insights that validate my own in a way my equally amazing mainstream colleagues sometimes simply can't.

Entertaining humour

As teachers, we'll often get pumped full of information about the many negative elements to teaching. Yes, on TikTok and elsewhere you can easily find many videos and viral creators who enjoy taking the time to poke fun at teachers by exaggerating the things we do – from the way we carry an ungodly amount of keys around our necks, to the nature of our interactions with pupils whilst we're trying to eat our lunch.

Though mildly triggering, such videos can often actually be quite funny. I've certainly watched a few myself and been able to laugh along, having sometimes recognised myself in the caricatures shown.

However, some TikTok teachers give as good as they get, serving up a gentle ribbing for students – not to mention leadership, parents and dinner ladies… For some teacher creators, no-one is off limits, and I'm here for it. Teaching is simply too intense to not find the fun in certain situations, and attempt to be taken seriously all the time.

With every resource, there's always two sides to how something is used – but I'd urge readers not to write off TikTok completely. By all means, approach it with caution and protect your space – but there's a lot to be gained from jumping in and seeing what you can take away for yourself. Get on the app and search '#teachersoftiktok' – just don't blame me if you blink and find that you've accidentally been on it for the past four hours…

PICK OF THE TIKS

If you're a TikTok newcomer, try searching these hashtags or users and see where you end up…

EVERYONE
#teachersoftiktok
#tiktokteacher
#teachertok
#teachersontiktok
#edutok

SECONDARY-SPECIFIC
@missenglishteacher
@harrysurplus

SEMH
@mrgteacher
@mrscs8

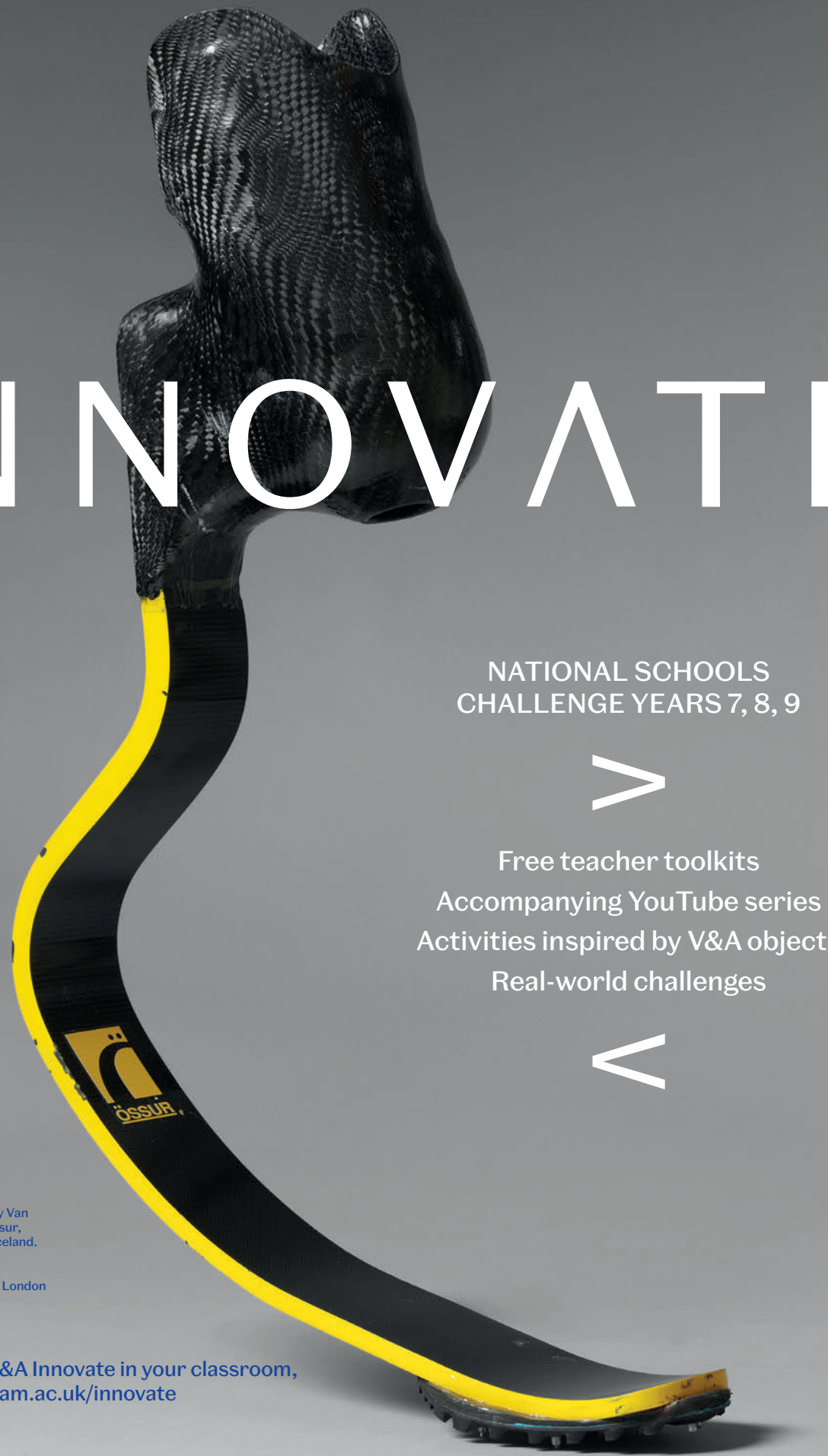
EXAMS
@firstratetutors
@hannahkettlemaths
@gcsepotential
@revisionrecharge
@revisescienceofficial

COMEDY
@teachwithtadgh
@mrdtimes3
@lovemsslater
@teachersoffdutypodcast

ABOUT THE AUTHOR
Nikki Cunningham-Smith is an assistant headteacher based in Gloucestershire

V&A

INNOVATE



NATIONAL SCHOOLS
CHALLENGE YEARS 7, 8, 9

>

Free teacher toolkits
Accompanying YouTube series
Activities inspired by V&A objects
Real-world challenges

<

Cheetah Xtreme, designed by Van Phillips, manufactured by Ossur, 1984 (manufactured 2012), Iceland. Donated by Ossur UK. Museum no. CD.152-2016.

Run V&A Innovate in your classroom,
visit vam.ac.uk/innovate

REASONS TO TRY...

5 V&A Innovate National Schools Challenge

Find out what creative heights your students are capable of by entering this free inter-schools competition organised by the V&A

30 SECOND BRIEFING

V&A Innovate is a National Schools Challenge created with teachers and designers to equip young people at KS3 with the confidence and skills to develop solutions for real-world issues. We're asking students to follow a human and planet-centred design process, and respond to one of three challenge themes inspired by V&A collections.

1 FREE TO ENTER

V&A Innovate National Schools Challenge is open to all students in years 7, 8 and 9 at state-funded schools, and is free to enter. This year's themes are: Restore, Play and Sense, inspired by objects in the V&A collection, and issues we are facing in the world today.

2 CURRICULUM-BASED

Innovate supports the delivery of the D&T curriculum and scaffolds skills towards the NEA component of the D&T GCSE.

The broad themes of the challenge encourage students to explore the role that design plays when it comes to tackling real-world issues. Modelled on the non-exam assessment specification of the D&T GCSE, V&A Innovate's challenge themes this year emphasise design thinking, problem solving and iteration.

Beyond this, the competition will further require entrants to demonstrate interdisciplinary skills, creativity, critical thinking, co-ordinated collaboration and effective communication.

3 SUPPORTING RESOURCES AVAILABLE

Check out the wide range of free online resources designed to support schools with delivering the challenge. Teacher and student toolkits will guide you through the design process step by step, and include contributions from teachers and designers. The student toolkit encourages creative thinking and collaboration through activities.

Be sure to also explore our series of films and animations containing advice from assorted designers and curators, which will bring real-world design lessons into your classroom in a lively and engaging way – and hopefully help to inspire your students' own design ideas. Visit **vam.ac.uk/info/va-innovate-challenge-resources** to find out more.

Contact:
vam.ac.uk/innovate
innovate@vam.ac.uk

4 REWARDS AND RECOGNITION

Every student who takes part will receive a participation certificate and feedback from our judging panel of industry experts.

The finalists' work will be displayed at the museum, and students will also have the chance to win prizes, including plaques, trophies and places on designer-led workshops. The whole experience encourages creative thinking.

5 ONLINE TEACHER EVENTS

Join our V&A Innovate online teacher sessions for a helpful introduction to the programme and this year's themes. The sessions will also afford a chance to pick up some top tips from other teachers who have taken part in previous years.

Places are entirely free of charge – for further details and to book your place, visit **vam.ac.uk/whatson/programmes/schools**.

What teachers say

"The whole experience has been absolutely wonderful, and incredibly inspiring!"

"This has given me greater confidence in my teaching, value and contribution within the school."

"It has been wonderful working Innovate into lesson plans, especially as the resources are so well thought-out, user-friendly and easy to access."

"Innovate is now embedded into our D&T curriculum throughout the academic year. It so enjoyable to deliver, enhancing and developing our teaching."

Literacy for the likes

Smartphones and social media platforms aren't going anywhere – so let's at least use them to improve students' ability to read, suggests **Bhamika Bhudia**...

It's widely understood that reading and literacy play a pivotal role in student outcomes, both academically and beyond. Reading for pleasure has even been shown to have a greater impact on student outcomes than their socio-economic status (see bit.ly/ts125-LT).

Schools across the country have therefore introduced various strategies and programmes to help promote reading for pleasure, but social media usage is often seen as a barrier standing in the way of these efforts.

Students are typically seen as being disengaged from reading books, due in large part to how endlessly captivating their social media feeds are. As a result, their capacity to digest large volumes of information has become limited, due to the majority of what they *do* actually read consisting mostly of short posts and comments. What's more, this 'literature' they're being exposed to tends to be informal, grammatically incorrect and expressed using a low level vocabulary.

Social reading

However, that picture seems at odds with the 2023 'What Kids Are Reading' report from Renaissance Learning, based on a study of students in the UK and Ireland (see bit.ly/ts125-LT1). They found that the pupils surveyed read a combined total of 27,265,657 books in 2021-2022, marking an increase of 24% compared to the previous academic year.

Of particular note is how the report attributes this apparent increase in reading engagement to ... social media. Online trends such as #booktok and 'bookstagram' are cited as key factors driving the rapidly increasing popularity of titles by previously lesser-known authors, such as Alice Oseman.

> **"The students of today are actually doing more reading than previous generations"**

Of course, making reading a social activity is hardly a new concept. Book clubs have always been around; social media has simply enabled them to evolve. The conversations taking place under the #booktok TikTok tag can be helpful in encouraging students to read more books and discuss their own opinions and interpretations of them, and introduce them to book recommendations from people who aren't their parents or teachers.

Adapting to need

An important part of teaching is the requirement to identify and address your students' needs – not just the understanding and skills of those in different classes, but also trends that may be affecting your cohort as a whole.

This generation is already unique, due to the pandemic hitting when they were at different stages of their educational development, to say nothing of the wider societal impacts that will continue to affect them over time. It's just another need that we teachers will need to adapt to.

When looking at the impact of social media on this generation's reading, one could argue the students of today are actually doing *more* reading than previous generations, due to how much time they're spending on social media (even if it's not quite the kind of content we'd approve of).

If students are reading short posts online instead of longer texts, that could be a cue for us to give students greater exposure to moderate length, high quality texts that can enrich their vocabulary and help them build cultural capital.

Work with the trends

Alternatively, we could work *with* those trends, by

teaching some units via extracts to help build understanding of genre and increase their exposure to an array of different texts. Introducing students to a text via a sentence or short paragraph, rather than the whole thing at once can also help build their reading and writing stamina.

This approach may entail placing more emphasis on introductions and topic sentences to extract meaning, or writing at a sentence level and then building stamina by increasing in increments – all good reading and writing strategies.

If longer texts are proving hard to digest and follow, modelling by reading aloud could aid understanding. Shifting the focus to structure, and developing students' understanding of how stories are built up and held together can help build these skills yet further.

Beyond the exam hall

We teach to help students in life, not just in their exams. If social media content is what they're reading, then it's our job to help them navigate it. Students thus need to be taught digital literacy – that is, how to make sense of information in front of them, ascertain what's true, gauge the reliability of the source, and most importantly, the author's motivations.

If we need an entire GCSE paper to focus on the skills required to understand writers' viewpoints, then surely the same applies to students' lives outside of school? A National Literacy Trust study conducted in 2021 found that, "Compared with young people with low critical digital literacy engagement, nearly three times as many young people with high critical digital literacy had high mental wellbeing (11.6% vs 30.2%)."

We often talk about the dangers of social media on young people's mental health. Using such texts in lessons, and analysing their language and structure would not only equip students with a valuable academic skill, but more importantly, help keep them safe.

Students will quickly learn to appreciate that 'textual analysis' isn't just something we do to a Shakespearean text, but can be a powerful lens though which to examine all the information they receive, and apply critical understanding to everything that they read.

Embrace the digital age

Technology has changed teaching for the better in many ways. Fighting against its use isn't just futile, but a waste of opportunities for improving practice and increasing efficacy. Take #EduTwitter, for example – it may have its flaws, but for now, at least, it still largely remains a buzzing hive of teaching strategies, ideas, resources and often excellent CPD.

Concerns regarding students' small vocabularies can be addressed with the help of assorted websites and apps. Some will automatically create activities based on difficult vocabulary sampled from a given text. Others will break down the etymology of key words to deepen understanding, and now there are even AI bots capable of generating student-level models, to help identify common errors and improve students' work – all of which can save teachers precious time.

For their part, students now have access to countless tools that can be used to aid learning, so lean into this. The aforementioned 2021 NLT study notes that, "More than half (54%) of young people say they find more to read that matches their interests online, but online activities inspire wider reading for around 3 in 5 (59%)."

Set them homework that they can do on their phones, such as self-checking quizzes or vocabulary tests. Using screen reader apps, they can have texts read aloud to them to support comprehension.

The true impact of social media and the wider internet on our students' development is, and should be a matter of real concern to us all. Putting our heads in the sand and hoping things will resolve themselves will only serve to exacerbate the potential harms.

We are currently in a position where we can give students the skills they need to navigate this new age of information – but we must do that by using all the tools available to us and to them.

REMEMBER THIS

- Harness positive social media discourse around reading (#booktok, #bookstagram) to encourage reading and build exposure to trending books.
- Identify students' needs and adapt your teaching strategies and the curriculum to meet them appropriately
- Counteract students' limited exposure to high quality literature by ensuring the curriculum covers a range of extracts and excellent models of literature that expose students to high quality writing and build on cultural capital
- Introduce texts at the level of sentences and paragraphs to avoid overwhelming students; build up reading stamina where needed
- Focus on structural features, such as introductions, topics and sentences, and show how narratives are woven to build understanding of the breadth that a text can cover
- Introducing slow writing strategies can further help to build writing stamina

ABOUT THE AUTHOR
Bhamika Bhudia is head of English at a mixed comprehensive school in London.

Forward thinking

Nicola Pearce considers the importance of STEM education at a time when the UK tech sector is in need of being revitalised...

The technology industry in the UK has more than 2 million job vacancies – as well as 12 million workers in the sector who lack essential digital skills (see bbc.in/3RR0Hx1). This lack of skilled workers within the UK tech landscape is causing growing concern, and could even be argued to have a knock-on effect in terms of the UK economy's future growth.

In light of recent findings that nearly four in five employers globally are reporting difficulties with finding the skilled talent they need in 2023 (see go.manpowergroup.com/talent-shortage), the need to attract and retain new talent within the tech industry is becoming more important than ever.

The starting point for addressing this issue is capturing the attention and imagination of young people at school, ideally during the early stages of their education so that fresh talent can be nurtured. Yet despite multiple initiatives and schemes launched by the government – including the promising, but since withdrawn 'Kickstart' – it's become clear that replenishing the skill reserves required by industry while appealing to young people will require a collaborative effort that extends beyond what the government and the tech industry are currently equipped to do.

Addressing the tech talent shortage

There is, however, a role that schools can play in addressing the issue – which is to provide young talent with the kind of knowledge and skills in demand by the industry, increase their students' exposure to the different career paths available in the technology industry, and invest in training programs.

To be clear, there are many schools already doing such work – building their students' knowledge of different career options and providing them with hands-on experiences from a young age, through a combination of in-house schools programmes and work experience opportunities. Once students' interest has been piqued, there's then the opportunity to further encourage children to follow this passion and see where it goes over the course of their education journey.

Statistics have shown that many students choosing STEM subjects at school subsequently decide to not pursue higher education qualifications in the same field (see bit.ly/TI10-FT1) – something that's historically been especially true for women.

With that in mind, a growing number of companies are now focusing their efforts on attracting a diverse range of emerging talent in an effort to close the skills gap.

However, this doesn't change the fact that many employers are still looking primarily for hand-on experience and degrees in a relevant topics among their entry-level applicants. Taken together, all this can encourage today's young talent to seek opportunities in STEM industries, while following paths unique to them, based on their individual talents and interests.

Digestible lessons

Given the right tools and resources, schools can contribute towards making the technology industry more appealing to young people, and providing them with guidance showing the benefits of studying such subjects at higher education.

Game-based apps can play a useful role here, particularly when used in conjunction with interactive displays to present maths and science lesson activities in something resembling a quiz-based format. This will allow students to acquire a deeper understanding of the STEM subjects, while also improving engagement and sparking a curiosity in the topics covered that extends beyond the classroom.

Pete Winter, programme leader at CIC Burnley College in Lancashire, previously oversaw the installation of

> *"Replenishing the skill reserves required by industry while appealing to young people will require a collaborative effort"*

multiple interactive displays at the setting. Reflecting on the subsequent impact, he says, "The interactive whiteboard functionality has dramatically changed the way we teach and interact with students. It makes the whole process much more collaborative and 'live' – we're able to annotate documents saved in the cloud in real-time, with students sharing the same screen from their personal devices and also joining in.

"We can then save these amended documents with all the notes we've made together, so that the students can access them whenever they need to return to that topic as part of their revision. The latest refurbishment has unified learning environments across the A Level hub, upgrading a total of 74 screens and maintaining the College's position at the forefront of digital experience for students nationally."

It's not just teachers and programme leaders who are seeing the benefits of utilising interactive displays, As Matthew Nuttall, Burnley College's IT manager, observes, "Our tutors can access their Google Drive directly from the display, meaning they can teach from any classrooms with confidence, knowing that the process will always be the same. The advanced collaboration capabilities also perfectly suit our forward-thinking methods of digital engagement, taking interactivity and engagement to the next level."

Display essentials

Interactive displays are thus extremely beneficial to all staff within schools – from teachers to programme leaders and IT managers. The advances and efficiencies afforded by today's classroom displays allow IT managers to assess and manage devices from a distance, allowing for more streamlined and uninterrupted lesson time for students.

Where possible, a school's provision of STEM education ought to incorporate elements of dynamic representation, collaborative reasoning and immediate feedback – all of which are techniques routinely used within many modern workplaces. It makes sense to let students familiarise themselves with how such systems operate via low-stakes, trial-and-error interactions, before their inevitable encounters with them in the real world.

When implemented effectively, these kinds of educational experiences can inspire students to embrace richly interactive and digitally-driven modes of learning which enable the embedding of vital skills, such as critical thinking, problem-solving and creativity – all attributes that are highly prized by potential employers.

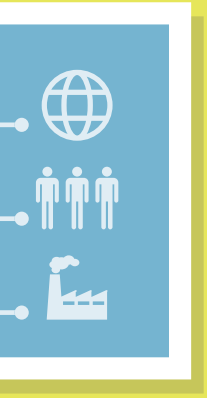
A strong grounding in STEM subjects will further encourage young people to build personal and professional skills that are transferable across different industries, which are essential to have in the rapidly changing technology sector – and also highly valued in higher education settings, since the acquisition of such skills involves the consideration of different perspectives.

Addressing demand

To ensure good outcomes from your STEM provision, it's important to use interactive displays that are appropriately matched to your learning environments, while factoring in considerations such as display size, resolution, and compatibility with separate hardware and software. If you're to realise the key benefits of using interactive displays – their versatility, their capacity to engage students' attention – then you'll need to address the demands of the spaces in which they'll be used, and what can be the highly variable needs of the individuals who'll be using them.

The utilisation of interactive display technologies can provide all students with unique and engaging opportunities to master the sort of STEM skills necessary for a range of rewarding career paths. Engaging students within these subjects will increase their likelihood of pursuing careers in these sectors, and with luck, help replenish the skills shortages currently causing so much disruption across the technology industry.

ABOUT THE AUTHOR
Nicola Pearce is head of education at BenQ; for more information, visit benq.eu/en-uk or follow @BenQ_UK



Blurring the BOUNDARIES

The explosion in remote CPD has been hugely enriching – but it's also made it harder for many to stay organised and focused, observes **Rebecca Leek**...

There's a watercolour technique which involves painting onto already wet paper. It's quite magical – as the tip of your paintbrush hits the page, the colour floods outwards, like a flower in bloom. Add another colour, and you'll witness a slow amalgamation as the two tones blur with one another.

I learnt about watercolour techniques during lockdown. In those first few weeks, despite my children's schools mobilising magnificently, there was still lots of time for us to fill. I ordered an 'art-in-a-box' watercolour set, watched some YouTube videos and planned some activities to do with my three daughters. I still have some of the art we created together.

I also applied my newfound knowledge back at the primary school where I was appointed headteacher following lockdown. We had settled on watercolours as one of our 'mastery building blocks' – the children would visit different media during their time with us, but we wanted them to develop a facility in one *really well*. Watercolours are affordable, so every child received their own watercolour set.

Self-sourced CPD

Unwittingly, I'd arranged some self-sourced CPD for myself. It was interesting, cheap and could be fitted around childcare and emails. It really taught me something, contributed to my sense of purpose and wellbeing, and ultimately improved the quality of education the children received at school.

Since I first started teaching, the nature of CPD has changed dramatically. A year into my career, I remember travelling all the way from Hertfordshire to York for a one-day course on attaining higher grades at English GCSE. I can still remember some aspects of it now, 16 years later, so it certainly had an impact. Upon my return, I had to fill in a one-page sheet outlining what I'd learnt. This was filed away somewhere by the deputy headteacher, and I never saw it again.

"Who else has sat in bed completing online safeguarding training?"

The likelihood of me, or indeed any teacher now ever spending more than five hours travelling to and from a day's training – to the tune of £150 for the train ticket alone – is very low. It does happen, but has become far rarer.

The range of what you can presently access online is kaleidoscopic. If I was someone with money to invest I'd be putting it in the e-learning sector, as the growth rates are eye-watering.

Dividing lines

But just as watercolours can flow into each other across a page, so too can the boundaries between work and school. We can access CPD modules on our phones. Who else has sat in bed completing online safeguarding training when the last thing our tired eyes need is blue light messing with our circadian rhythms? I know I have.

Already exposed to long work hours, our dividing lines can start to blur. Teachers are constantly being told to build up their professional network, read the latest research, listen to podcasts, even write their own reflective blogs. These are laudable activities, but how can we prevent this online activity from seeping into our every waking hour?

When we fire up our phones or laptop to, for example, participate in a webinar, we're also opening the door to all our other work – emails, that policy we're updating, Twitter. It's tempting to hop between tabs and rattle off a

few different tasks simultaneously, but this lack of boundaries produces diminishing returns. Since we're not really focusing on anything, neither the work nor the learning will be as efficient or as effective as it should be.

Compartmentalise

The solution is to reduce the seepage between different parts of your work and personal life. Set aside specific times for marking and your professional studies, and enter them in your diary. If a webinar is being recorded, allocate a slot for watching it at a time that suits you.

Plan homework over a cycle of lessons, not just one at a time. Check in with emails at set intervals over the course of the day, and establish a new norm of only responding at 8.15am and 4.15pm (or whichever times suit you best).

Use productivity apps like Forest (forestapp.cc) to help you stay focused on the task at hand, rather than constantly checking your phone. As you systematise your working days, you should soon find that your upcoming tasks start receiving the attention they deserve at those pre-planned, allotted times.

Innovate and improve

I've attended some terrible webinars. Some were too long, others lacked any form of interaction built into the delivery. In essence, they were demonstrations of very poor teaching – which for a teacher, is infuriating.

When delivering anything online, be it a staff briefing or in-school training, make sure you *do it well*. Invite responses in the chat. Integrate some quizzing. Send out some pre-reading. Maybe even encourage some friendly heckling.

Similarly, be brave and give feedback following any events you attend. The craft of 'e-teaching' is still quite new, and we have a responsibility to improve how it's done. Let people know what went well and how the session could have kept you more on your toes. If at any point you drifted into checking your inbox, it probably wasn't good enough.

Choose wisely

The menu of what's out there is truly vast and can be difficult to navigate. Before anything else, think carefully about what you want to learn, achieve and become in the next two to three years.

You might be considering something substantial, like a postgraduate qualification, or conversely, some bite-sized sessions in a few key areas to strengthen your subject knowledge. If you're planning on working through an online video series, keep a log and build in some peer reflection time to talk about your learning.

Also, don't assume that providers which specialise in education training are the only platforms worth considering. If you're interested in pursuing leadership, completing cross-disciplinary courses in areas such HR and change management might well set you apart from other candidates.

FIND YOUR FOCUS

DEEP FOCUS

My favourite app for aiding focus whilst working is Forest. While the app is running, it will grow a small tree, and over time, a virtual forest – but when you try using your phone for something else, the tree will die. Subscribe to the paid version, and you'll contribute to trees being planted in the real world.

BUDDY UP

There's a strategy in ADHD circles known as 'Body Doubling'. People have discovered that they're more likely to focus on tasks if there's a second person in the room also focussing. Try finding a buddy and sit together. You can be working on different things while wearing headphones, since it's the physical, focussed presence that has been proven to help.

Most importantly, think carefully about how you're going to fit all this learning into your already busy working week. A desire to go above and beyond is admirable, but there's no honour in finishing the day knowing you've spent much of it unproductively hopping between screens or inefficiently multitasking. Set yourself some boundaries, compartmentalise your time – and leave the blending and blurring for when you next get the paintbrushes out…

ABOUT THE AUTHOR
Rebecca Leek has been a secondary and primary classroom teacher, head of department, SENCo and headteacher; she is currently the CEO of SEAMAT – a trust of three schools in South Essex

"Your call isn't important to us"

Gareth Sturdy weighs up the government's decision to finally try and settle the '*Should smartphones be allowed in school?*' debate once and for all...

"*The distraction, the disruption, the bullying...*"

That was the grave lamentation with which Education Secretary Gillian Keegan set the tone for her blanket ban on smartphones in schools at the Conservative Party conference last month. She painted a picture of schools virtually overwhelmed by pupils clutching phones, struggling to cope with their wholly negative impact.

Only a government-level blanket ban could match the scale of the mounting crisis, she suggested. Such a ban would represent 'support' for heads, whom Keegan promised to back to the hilt. The implication was that school leaders are keen to ban phones but are powerless to do so in the face of... what?

The quiet bit was that this resistance is presumed to come from feckless parents and their kids, who are so addicted to phones that they're prepared to fight schools for their right to Snapchat.

Those pointing out that this 'ban' only amounted to non-statutory DfE guidance, which schools would be entirely free to ignore, tended to miss the stick concealed behind the carrot. If an insufficient number of heads are suitably grateful for such state 'support' and decline the opportunity to enact Keegan's kindly 'guidance', then legislation will surely follow.

Straw man argument

Consequently, it's been hard to accept such a self-contradictory declaration at face value. Most commentators have opted to treat it as yet another lame bandwagon leap by a struggling government desperate for positive pre-election headlines.

However, this fails to recognise the peril this issue presents. Not one concerning the threats lurking within smartphones themselves, but rather with the creation of a dangerous new social climate. One that we're at risk of sleepwalking into, unless we're willing to have a mature public debate.

I asked one leading schools adviser what he made of Keegan's announcement. He told me that teachers' threats to confiscate phones until the end of the day are of little deterrence, and that in many schools, pupils flatly refuse to hand their phones over when challenged.

He went on to note that staff are often unwilling to provoke high-stakes confrontations in such situations, and sometimes don't feel supported by their SLT. He thought a government ban might therefore give school leaders more confidence.

Other pro-ban educators have presented the issue as a matter of hard science, circulating academic papers in support of their position. One of them is a 2016 paper by Beland and Murphy, 'Ill Communication: Technology, distraction & student performance' (see bit.ly/ts128-TP1), which claims that mobile bans improve test scores "*by 6.41% of a standard deviation.*"

This, however, is a straw man argument. Nobody on either side of the school gate needs researchers to tell them that it's not desirable for children to be Candy Crushing when they should be calculating during a maths lesson. Data gathered by Teacher Tapp indicates that school leaders have increasingly adopted phone bans over the last five years, without being compelled by the state, to the point where around 80% of schools now have them.

No, the lobbying and activism for mobile phone bans isn't simply about providing better learning environments. It speaks to something else. Note this further claim from the aforementioned Beland and Murphy paper:

"State-sponsored phone bans are unlikely to empower teachers, produce better cognitive outcomes or improve student wellbeing"

"*Low-achieving students have lower levels of self-control and are more likely to be distracted by the presence of mobile phones.*" No prizes for guessing to which end of the economic spectrum attention is being tacitly drawn here.

Cultural insecurities

We could also consider other research conducted by Jean Twenge at San Diego State University, later popularised by the influential teaching guru, Doug Lemov. In his view, the research showed that mobile phones are responsible for increases in rates of youth depression, anxiety, and isolation.

Social psychologist Jonathan Haidt has also recently tweeted University of British Columbia research from last year with similar findings, concluding that, "*To reduce loneliness among adolescents, get phones out of school now.*"

Inspired by these research examples, the parental lobbying group UsForThem is pressing for a total ban on phones for all under 16s as part of its #SafeScreensForTeens campaign. It wants to see a stringent, tobacco-style regulatory regime applied to all digital devices. The campaign is endorsed by Katharine Birbalsingh – former social mobility tsar and headteacher at Michaela Community school, where families are given the option to have pupils' phones locked in a school safe for weeks or months at a time, as part of a 'digital detox' programme.

State-sponsored phone bans are unlikely to empower teachers, produce better cognitive outcomes or improve student wellbeing. Why? Because they're the locus of diffuse cultural insecurities around authority and childhood vulnerability.

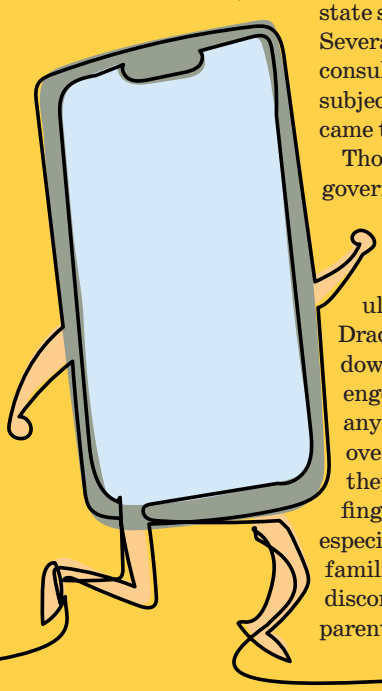
'Pied piper' tech

Supposed grown ups are feeling less and less in charge, to the point where many don't feel capable of demanding that truculent pupils hand over their phones. But instead of drawing on our own inner resources to rise to the challenge, it's easier to project these fears outwards onto digital media.

If we feel we're losing connection with our kids, it can be more palatable to apportion blame to 'Pied Piper' technologies luring away our 'screenagers' than it is to take a long, hard look at our own moral resources.

Focusing on technology as being the main problem behind the socialisation and education issues young people are experiencing only serves to encourage technical, behaviourist solutions. Encouraging freedom through the cultivation of individual agency is demoted, in favour of promoting conformity through coerced behaviour.

As the government seeks to impose smartphone bans in schools, we see it adopting a similar strategy aimed at wider society through the Online Safety Bill, which was recently passed by Parliament. In both cases, the modus operandi is the same – illiberal, restrictive and authoritarian measures becoming habituated in the name of protecting vulnerable youth from the corruptions of technology.



Pointing the finger

To push back against this trend isn't to deny '*The distraction, the disruption, the bullying*' which can surround smartphones. Or to deny the threats posed to young people by online pornography, suicide forums or svengalis like Andrew Tate.

It does, however, recognise that smartphones can be just as much a wonderfully liberating tool for education. That to a parent, their child's mobile phone provides a valuable reassurance of safety and a tool for co-ordinating family life. Phones can *aid* literacy, creativity, learning and social interaction as much as they can hinder them – especially for the 1 in 20 children who Ofcom says have no other access to digital technology.

To what extent this is allowed to intrude into the school day is a matter of negotiation between parents and schools, with good faith assumed on both sides. The state shouldn't encroach. Several government consultations held on the subject in recent years all came to the same conclusion.

Those encouraging government bans, statutory or not, in the hopes of protecting kids or empowering heads are ultimately mistaken. Draconian edicts handed down by the state can't engender self-assurance any more than an overbearing parent can. If they implicitly point the finger at families – especially working class families – they will only sow discord in situations where parental buy-in is vital.

IN BRIEF

WHAT'S THE ISSUE?
The government has signalled its wish to see smartphones banished from within schools, albeit without legislating for that to happen – yet.

WHAT'S BEING SAID?
The move has attracted vocal support from some parts of the profession and parental groups, who welcome it as a means of tackling the distractions and mental health issues phones can cause.

WHAT'S REALLY HAPPENING?
There's been a growing trend in recent years of schools voluntarily enacting phone bans of their own; the proposed state intervention fails to recognise that phones can deliver benefits too, and will deprive schools and students of their agency.

THE TAKEAWAY
Phone bans imposed from the top will fail to account for the issue's various complexities (psychological, social, economic, pedagogical) and won't encourage 'better behaviour' – only coerced conformity.

As former headteacher David Perks tweeted in response to the news of Gillian Keegan's ban, "*Why welcome the state imposing restrictions and controls on us? Don't you remember lockdown? Why invite it now? You will regret this later.*"

ABOUT THE AUTHOR
Gareth Sturdy (@stickyphysics) is a former teacher now working in edtech

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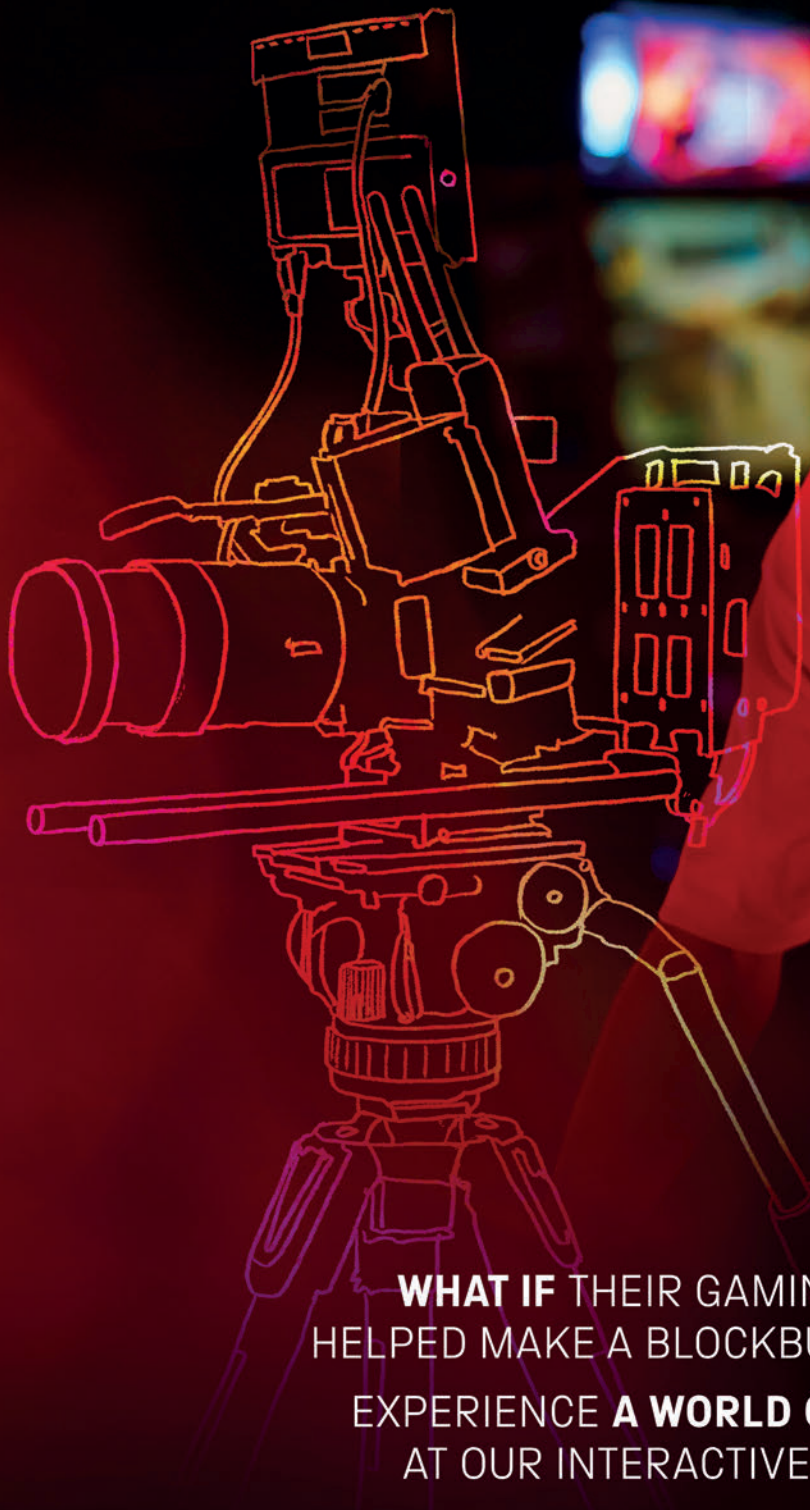

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THE AGENDA:

Broaden those HORIZONS

Love it or loathe it, edtech is here to stay – so the trick is finding smart ways of making it work with you, rather than against you, writes **Ruth Barrett**...

Are you 'done' with edtech? Did the relentless onslaught of remote learning brought on by the COVID-19 pandemic leave you longing for chalk, talk and a return to more traditional, comparatively tech-light teaching techniques?

If so, then you're not alone. According to a 2022 survey conducted by *Education Week* (see bit.ly/TI10-hhd1), 'Tech fatigue is real', with 22% of teacher respondents describing themselves as 'Very fatigued by tehnology use' and 44% as 'Somewhat fatigued'. Set alongside other challenges schools are facing right now – such as staff shortages, exhaustion, crumbling classrooms and lack of funding – it's hardly a surprise that there seems to be little appetite for spinning yet more plates.

There is ample evidence available elsewhere (see bit.ly/TI10-hhd2) that when used well, edtech can, in fact, enhance classroom instruction, improve efficiency and support student success.

If, however, teachers lack the motivation or bandwidth to use the technology, or if there's insufficient training in how to master these tools in the first place, edtech rollouts can, and will be a massive waste of time, money and energy that contribute to even further learning loss.

Mixed signals

Anyone who's ever used a laptop or desktop computer – i.e. all of us – will know how tech can sometimes fail. Those who've never experienced the dreaded 'Blue Screen' or 'Spinning Wheel of Death', can count themselves extremely lucky...

But what can be an irritation at the best of times becomes much worse when students' learning is at stake. Video conferencing platforms provided a vital form of communication between teachers and students during lockdown and beyond, ensuring that lessons could still continue, though it wasn't without its fair share of challenges and problems.

Poor WiFi signals at either end, choppy audio and frozen screens were just a few of the many technical gremlins that tested the patience of teachers and remote learners across the globe.

It also provided a vivid illustration of something we've known for some time – that digital poverty is real, can have far-reaching impacts. Some children will have access to the very latest high-spec devices, 4K screens and ultra-robust internet connections, while others have to make do with second hand phones and connections reliant on pay-as-you-go SIM cards. In this respect at least, expecting all students to use their own technology for homework purposes effectively amounts to giving some students an unfair five-second head start in a 200 metre race.

> ***"Students will still need considerable guidance if they're to get the most out of the technology that surrounds them"***

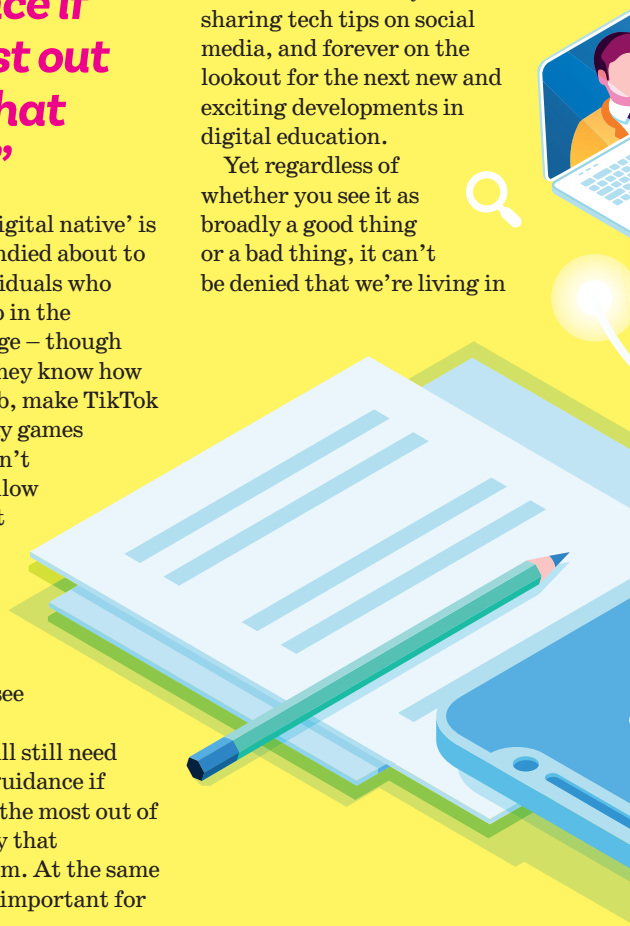
The term 'digital native' is frequently bandied about to describe individuals who have grown up in the information age – though just because they know how to surf the web, make TikTok videos and play games online, it doesn't necessarily follow that their first job will be 'in cyber', however much the government might like to see that happen.

Students will still need considerable guidance if they're to get the most out of the technology that surrounds them. At the same time, it's also important for them to master those vital 'soft social' skills that employers are increasingly looking for. These include a certain level of digital literacy, collaboration skills, leadership attributes, the ability to engage in critical thinking and some degree of creativity.

Inspiring potential

That said, however, there are some teachers who remain fully paid-up members of the edtech fan club. You may even be an edtech evangelist yourself – one of those teachers who's always sharing tech tips on social media, and forever on the lookout for the next new and exciting developments in digital education.

Yet regardless of whether you see it as broadly a good thing or a bad thing, it can't be denied that we're living in



a digital age. Virtually all jobs require some form of digital literacy across all sectors, be it finance, retail, health, transport, hospitality, marketing or anything in between. To be truly workplace ready and employable, students will require exposure to a broad range of digital hardware and software applications.

Technology has the potential to inspire. It can broaden horizons and open doors to life-changing career opportunities. It can also provide students with outlets for creative expression, allowing them to tinker, touch, test out ideas and learn while having fun.

Game-based learning platforms such as Kahoot! (kahoot.com), for example, can add a fun, competitive element to lessons in ways that will engage your students and keep them motivated. More broadly, internet-enabled applications have long enabled teachers and students to access and share a near limitless amount of information and resources and make certain tasks much more convenient – such as holding parents' evenings online.

So with all that in mind, how can you maximise the effectiveness of your IT use while minimising the fustrations?

Find the right balance

It helps to remember the 'Ed before Tech' principle – that student engagement should always come from the task first and foremost, and not the tool(s) being used to accomplish it.

The least interesting uses of technology tend to be those that are passive – i.e. presenting information on a screen for students to absorb directly. The most interesting approaches are typically active – that is, using tech in more fundamentally transformational ways that encourage some degree of creativity, imagination and/or agency.

Same equipment, different uses

You might have suspended your use of Zoom or Teams for remote teaching, but there can be some alternative and inspiring ways of using video conferencing applications and equipment that might otherwise be gathering dust:

1. PRACTICAL DEMONSTRATIONS

'Document cameras' aren't necessarily limited to actually sharing documents – especially those with flexible and posable necks. These tools offer myriad possibilities for sharing practical demonstrations, in subjects ranging from chemistry to D&T, without students having to crowd round cramped tables.

2. FLIPPED / ASYNCHRONOUS LEARNING

Document cameras let you record audio and video that you can share with students ahead of your lessons. Students can then have the option to play, pause, rewind and review these digital recordings for retrieval or revision purposes.

3. MODELLING

Document cameras also enable teachers to use real-world objects and manipulatives to model mathematical equations, literary analysis, presentation of work or revision techniques from their desk, while simultaneously facing and engaging every single student.

4. CLASSROOM GAMES

Almost any game you can play with a pen and paper can be shared with whole classes via a document camera paired with a projector or IWB. Some examples might include Snowman (the more politically correct successor to Hangman), addition and subtraction bingo or Mad Libs. You could also explore using document cameras alongside Scratch, to facilitate colour-sensing activities and video-sensing games.

5. STOP MOTION ANIMATION AND TIME-LAPSE VIDEOS

Modern 'plug & play' document cameras will almost always work with any application capable of recognising a USB camera, including including assorted video editors, HUE Animation and Stop Motion Studio. This opens up a wealth of video recording possibilities for teachers and students to explore – including stop motion animation and time-lapse photography.

If that sounds a little too technical, rest assured it's much easier than you think. There are even companies out there who can provide free animation tutorials, time-lapse capture guides and other forms of support to help get you started.

ABOUT THE AUTHOR
Ruth Barrett is a staff writer at HUE HD – a maker of colourful and affordable technology to enable creative teaching, learning, work and play; for more information, visit huehd.com

Seeing is believing

Rob Wraith considers how augmented reality has the potential to give students a more immersive, almost visceral experience of the topics they're exploring...

What is augmented reality, and what does it do? Can it help me with my delivery? Will it reduce my workload or add more? How much does it cost, what training do I need, and most important of all – will I see any actual impact from using it?

The answers to those questions ultimately depend on the nature of your classroom delivery and how you plan to expand on it. If you're not already aware, augmented reality (AR) refers to technology that's capable of creating interactive immersive experiences, whereby a user's view of their immediate surroundings is superimposed with computer-generated information.

These renderings of information can encompass both 2D and 3D objects – everything from flat images and photographs to detailed virtual models – as well as sounds. Imagine being able to occupy the same physical space as a dinosaur; observing the moon closer than it's ever been before from the school grounds; or positioning the enormous hardware components making up the 1944 Colossus computer around your classroom, to be better appreciate its size.

These use cases would be something to behold, and likely generate considerable amounts of interest and enthusiasm among students in our lessons, no?

Increasingly normalised

Advances in technology have been used to deliver education in new and evolving ways for decades of course – but the speed at which those technologies are being developed, refined and adopted has increased exponentially.

Back when I attended school, the only computers we had were BBC Micros. By the time I became a qualified teacher and began to teach computing, the BBC Micros had been replaced by much more powerful, cream-coloured PC base units and monitors that were cumbersome to move around.

> *"AR has the potential to revolutionise our classroom delivery"*

As the technologies we regularly access at home and in our classrooms have become ever more sophisticated and convenient, their place within our lives has been increasingly normalised. Where AR is concerned, one significant development has been its growing presence in the retail space– for example, to help customers see what a chair will actually look like in their living room before purchasing it.

Consumer-level AR has also been put to use in a number of mobile apps in recent years. Some let you view the night sky through your phone screen, with accompanying text labels showing the names of planets, stars and constellations. Others feature those wacky camera filters that are particularly popular with younger social media users.

Transformative impacts

Seen from a certain perspective, AR has the potential to revolutionise our classroom delivery and the ways in which we conduct formative and summative assessment. One could even argue that it already has.

Observe my own subject of computing, for example. AR has enabled us to take some of the more complex and, dare we say it, 'less interesting' areas of the curriculum and explore them in a much more visual and engaging way. This could involve turning a classroom into a room full of servers, or peeking inside a PC to see where the pieces should go without having to take any workstations apart. Pupils can be provided with the means to position items in a room to see how they might look, how much space they take up and where would best fit.

Needless to say, having access to this kind of functionality could save multiple industries significant costs at a later date if, for instance, the initial calculations for equipping and outfitting a room are incorrect.

AR could deliver similarly transformative impacts if applied to the curriculum as a whole. With any given subject, there's now the option to engage students in a whole new way, and potentially drive improvements to attendance, achievement and impact.

Ownership of learning

These kinds of interactions with technology can give pupils ownership of their learning, while also affording them opportunities to organically develop a range of soft skills,

such as communication, problem solving and leadership – all of which are highly prized by employers.

AR-assisted lessons can further facilitate learning opportunities at a fraction of the cost – and with far lower levels of risk – than taking student outside the classroom. Lessons that include an AR element can also make possible more individualised learning experiences that allow students to learn at their own pace. When appropriately monitored, this can then give teachers a way of identifying any key areas that need to be developed in either the group or specific individuals, and see to it that the right kind of support is provided.

Moreover, there are many flexible options when it comes to accessing AR. Rather than requiring the expensive headsets necessary for virtual reality, AR applications can simply be installed on smartphones, tablet devices and PCs, or even accessed via a web browser. Instantly, this opens up possibilities for setting homework, revision and independent study tasks that include AR-enabled immersive components, which can help students take ownership of their own individual immersive learning experiences.

AR has, and will likely continue to enhance and improve the education we can offer, allowing us to provide a more rounded, immersive experience for our pupils, heightening their engagement and sense of enjoyment, and leaving them with a thirst to know more.

Reuse, repurpose

With AR seeing increasing use in our social lives and lived experiences outside of school, it's surely just a matter of time before it becomes commonplace in our classrooms too. AR-powered software solutions are already delivering new forms of interaction and functionality in numerous commercial settings. Do we want our classrooms to be similarly engaging, inspiring and informative places? Well then, let's add some AR.

The means of creating our own digital classroom resources for use as part of an AR experience is already within our grasp – and once they're created, they can be revised, reused and shared over a number of years and potentially repurposed for teaching across multiple subjects. The same resource that helps students explore the development of Roman architecture in history could, for instance, be called upon to teach the principles of engineering, or provide inspiration to English students tasked with crafting a narrative that takes place in a period setting.

AR affords us the opportunity to be more engaging and effective in how we teach by providing students with a new and powerful means of interactivity. Beyond that, introducing students to the technology today can help us better prepare them for the workplaces of tomorrow, and provide a jumping off point for thoughtful class discussions of how it could and is being used (and also perhaps how it *shouldn't* be used).

Schools will need to engage in a significant amount of planning to ensure that their implementation of AR technology is both appropriate and suitable – but once this has been done, the rewards will follow.

AR development is far from being 'finished'. I believe there's still much more to come, which I'm sure can only be a good thing for educators.

ABOUT THE AUTHOR
Rob Wraith is head of learning technology and digital learning at NCG – a group of seven colleges across the UK; for more information, visit ncgrp.co.uk

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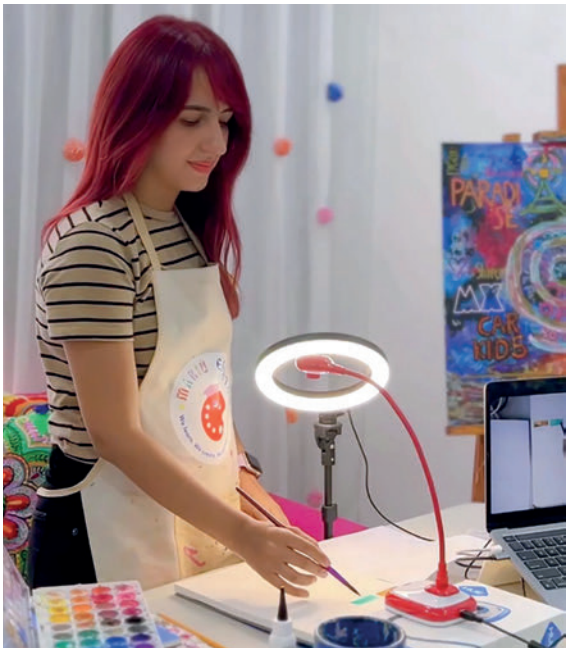

2 FLIPPED, BLENDED OR HYBRID LEARNING

By using the camera, teachers can simultaneously project a video feed onto a whiteboard or interactive display in class whilst livestreaming to remote learners. The lesson can also be recorded for flipped learning, daily review and revision, or sent to students who are absent from class. This helps teachers save time and reduces the likelihood of lost learning. By recording and sharing lessons, demonstrations and experiments as videos, students can pause, rewind and learn at their own pace.

3 MODELLING MADE EASY

Whether you subscribe to the 'Building Thinking Classrooms' or 'I do, We do, You do' theories, all students will at some point need to see how the 'magic' is done before the scaffolds are removed. With the HUE HD Pro, teachers can share exercise books, worksheets and real world objects to model mathematical equations, practical demonstrations, literary analysis or revision techniques from their desk, while at the same time facing and engaging every single student.

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4 LIGHTWEIGHT AND FLEXIBLE

Small and lightweight, the camera can be used without its base by plugging the neck directly into a USB port, providing teachers with an ultra-portable solution when moving from class to class, or between class and home for remote teaching. The camera's flexible neck can be rotated 360˚ for a multitude of uses right across the curriculum; angle it straight ahead for use as a facecam, position it downwards to view documents, or bend the neck in real-time while examining objects.

5 SEE THE BIG PICTURE

With its focus range of 1cm to infinity, the HUE HD Pro can be used as a simple microscope, to display a full A3 page or even film student presentations in the classroom. Featuring crystal clear resolution, it's perfect for practical demonstrations where it may be difficult or dangerous in certain situations – during a science experiment, for example – for everyone to watch at the same time. By enlarging small objects or text, it can also help students with SEND and visual impairments to fully participate in lessons.

Key Points

Easy to use – the plug and play HUE HD Pro requires no installation or specialist training, and is fully compatible with the Windows, macOS, Linux and Chrome OS operating systems.

Interoperable – use it in conjunction with IWBs, various software applications and browser apps – including Zoom, Google Meet, MS Flip and the camera functions built into Windows and Chrome.

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Headlines and HOMOPHONES

Fiona Easton recalls how casting around for media materials outside of her school's rapidly ageing textbooks helped to inject new life and urgency into her MFL lessons

As a newly qualified MFL teacher, I remember wanting to use foreign media materials in my lessons right from the start – but when you're training, you don't have enough time to spend hours poring over news articles in an effort to find something useful.

It was therefore something I brought in gradually. By the time I completed my second year of teaching, I'd resolved to use an authentic and topical news article in my classroom at least once a week.

This impulse initially grew out of my frustration with the textbooks we'd been using. I could tell that they would have been perfectly fine when first published, but that their contents had very quickly gone out of date. Teaching students with the help of material that they could also see had visibly dated was quite difficult, because it was hard for them to engage with.

Refining the process

Incorporating various media materials into lessons is something you would expect all MFL teachers to be doing to a certain extent, but in my experience, it rarely involved direct collaboration. When using a particularly good article, I might possibly share it with a departmental colleague – though at my last school, I'd typically be teaching one topic while my colleagues taught something else, or a different language entirely, so a media clipping that was useful for my lesson might not have been as relevant for what they were doing.

That said, we did find that centrally posting the articles we planning to use in class was quite useful. It soon got me wondering why I wasn't seeing other language teachers consistently sharing article finds of their own online and via social media, which is what eventually inspired me to start sending out a regular newsletter (see 'Inspiration to your inbox').

> *"Media materials are essentially base texts you haven't had to produce yourself"*

Ultimately, it helped having just one topic per week that I needed to focus on. As someone who generally consumes news quite often, I'd usually be up on buzzwords and have a fairly good sense of what was going on. Combining up-to-the-minute and trending keyphrases with Google's 'News' filter meant that sooner or later, I'd usually come across something appropriate that I could use.

At first, these searches could take quite a long time. Fairly soon, however, I developed a feel for which foreign news outlets and media channels were going to have useful material, and which would be less helpful. I began conducting larger scale, but less time consuming searches, and got into the habit of saving multiple articles to a hard drive so that I could refer back to them and use them in class when needed. There were many different ways of refining the process.

Endless options

Back when we were still using those dated textbooks, I remember how we once covered the topic of 'everyday idols' in our Spanish lessons – these being singers, musicians, actors and fashion models, the latter of whom were now of significantly less interest to young people than perhaps they once were.

I wanted to instead find something involving YouTubers and influencers, since they feature in young people's lives far more prominently, and ended up using an article that discussed how some young content creators had become extremely rich during social media's early growth years.

This was helpful for bringing the classroom discussion round to something students could relate to more closely. It turned out to be a good conversation prompt, while also being highly relevant to the topic we were studying.

There are many ways to approach using media materials in class, since they're essentially base texts that you haven't had to produce yourself. I'd sometime use written news media by way of a starter activity, and task students with hunting for examples of certain grammatical items.

There's also the potential to create translation activities using the vocabulary drawn from certain example texts, or summary activities – different A Level exam boards will often set tasks that require students to read longer texts and attempt to summarise them in, say, 90 words. If you can find a media outlet that's a reliable producer of audiovisual material, you could try creating your own listening activities – the options are pretty much endless.

Palpable enthusiasm

Over time, I saw how regular use of media helped to improve students' engagement levels, but also the chances of productive spontaneity occurring within lessons. By using our own selections of up-to-date media examples and written materials, we could base activities around absorbing topics that were relevant to what was going on in our students' lives, and things they'd already be talking about with their peers outside of class.

INSPIRATION TO YOUR INBOX

A while ago I started The MFL A Level News project – a weekly newsletter aimed at MFL teachers containing several links to news articles that could be effectively used to support your lessons. The project is still going, but has temporarily changed to a biweekly newsletter, owing to my work and study commitments.

When putting the newsletters together, I'll cycle through a selection of different topics, pick one for a given week and share three to four links to news articles, each accompanied by a short description of the article in question, and frequently an idea or suggestion as to how it might be used effectively in a lesson.

I've received really positive feedback from readers thus far. It's been nice to give something back to the MFL learning community, while hopefully also saving teachers valuable time.

For more information and details of how to sign up for MFL A Level News, follow @NewsMfl

This had a noticeable impact on their willingness and ability to take part in speaking activities and wider class discussions.

Unsurprisingly, they were much more likely to engage with lessons and contribute their opinions when not referring to news, fashions or developments that were last considered 'current' some five years ago…

It's also worth pointing out that many teachers assume A Level language topics have to be quite dry, but that's not the case. Don't be afraid to search for and use material that actually interests you, as well as your students. Your resulting enthusiasm for the material will be palpable, and help to motivate them.

More broadly, this can usefully feed in to the requirement for A Level MFL students to complete an element of independent research. Ideally, they'll want to choose an area they're actively interested in learning and writing about. By introducing them to more diverse conversation topics and examples of foreign culture, you'll be broadening their horizons and introducing them to concepts and ideas they might otherwise have never known existed.

Properly engage

When it comes to specific sources, in my case there are the obvious mainstream media outlets operating in France and Spain that come up a lot – *Le Monde* and *El País* for news, France 24 for rolling video news. But whichever sources you use, you should never find an article, quickly read the headline and think *'That'll do.'*

You always need to have thoroughly read through and understood any media examples yourself, and properly engage with the material before deciding whether or not you can use it at a level that's appropriate for the students you have.

You might have a class of three kids, all of whom are native speakers aiming for A*s, or you may have a group of 13 spanning a wide range of abilities. It's down to the teacher to make sure that any media material you use is relevant, age appropriate and pitched at the right level.

ABOUT THE AUTHOR
Fiona Easton is an A Level teacher of French and Spanish, and currently head of A Level for the MFL resource provider Languagenut; for more information, visit languagenut.com

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KS3 English Coordinator, Claremont High School

"English teachers have a huge amount of marking to do, so to know these have been self-marked, and that we're then able to see where, as a class, our strengths and weaknesses are, is huge."

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"It's a colourful, bright and vibrant resource, and contains prescient materials that pupils relate to, so [they] are becoming really passionate about the lessons taking place."

English Teacher, St John Fisher and Thomas More Roman Catholic High School

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ASUS Education is spearheading a monumental shift in the way students learn. It's not just about keeping pace in the market; its focus is setting the pace. Traditional boundaries are vanishing, and education is no longer confined to the four walls of a classroom.

One of the most seismic events shaping education today is the widespread adoption of online and hybrid learning models. The pandemic was the catalyst that accelerated this transformation, demolishing geographical constraints and liberating learners to access a rich tapestry of resources and experiences – a transformative journey in which ASUS Education has played a pivotal role.

By seamlessly integrating technology into the educational landscape, ASUS empowers educators and students alike to reach new heights of knowledge and achievement in a variety of ways.

WHAT'S THE IMPACT?

Take, for instance, the partnership between ASUS and Sandringham School in St Albans. The school's transformative shift towards a one-to-one device program required a reliable, versatile solution, and in 2022, ASUS was chosen for the robust, modular design of its laptops. The models in question – with their 360° hinged form factors, world-facing cameras and sturdy construction – promote independent and continuous learning. The school's vision is for effective teaching that prepares students for the future, supported by digital tools that enable self-directed and continuous learning beyond the confines of the classroom.

Central to this vision is personalised learning, which is greatly reinforced by a synergy between data analytics and artificial intelligence. This allows for a more adaptive approach to education, whereby algorithmically tailored content and learning experiences will be better suited to each student's unique individual needs. It's an evolution that has significantly boosted student engagement, encouraging them to embark on tailored, yet exploratory journeys that align with their individual learning preferences.

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WHAT'S NEXT?

ASUS, in collaboration with its esteemed partners, recognises that the days of a one-size-fits-all education model are behind us. Leveraging adaptive algorithms, ASUS now meticulously curates educational content and experiences tailored to students' individual needs.

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As the educational technology landscape continues to evolve, ASUS Education can offer scalable, cost-effective solutions that break down barriers to access and will ensure equitable learning opportunities are available to all students, regardless of background.

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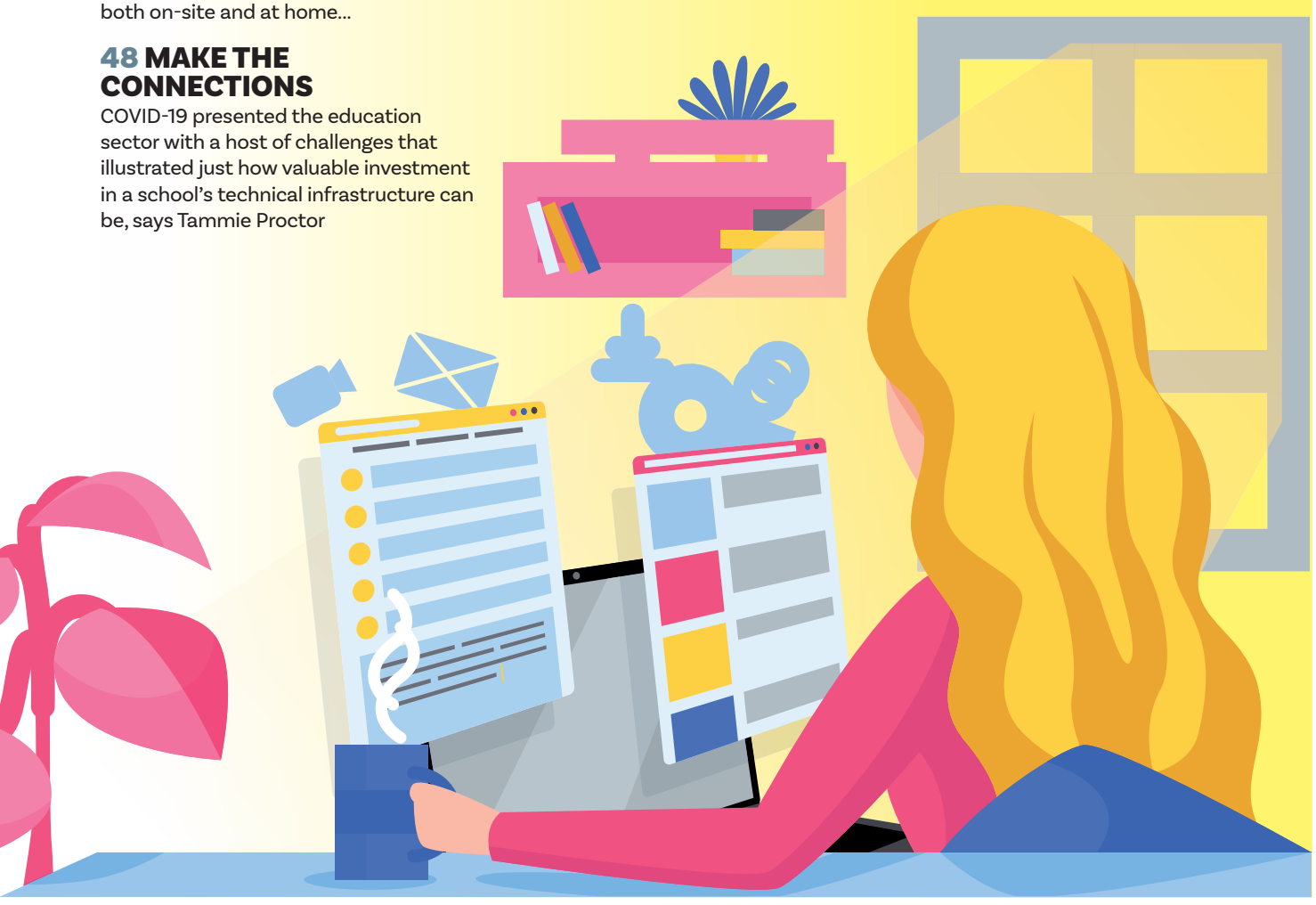

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Stress test your safeguarding provision with the help of The Safeguarding Company and its forensic Mentor Safeguarding Self-Assessment tool and Audit services

[WHAT IS IT]

Introducing Safeguarding Audits and Self-Assessments from The Safeguarding Company – bringing together industry-leading technology and practices with a sustained focus on child protection, while also delivering expert safeguarding solutions, training and consultancy. With over 200 years combined safeguarding experience, safeguarding audits form part of our 'total safeguarding solutions', including the Queens Award-winning MyConcern.

WHAT'S HAPPENING?

Safeguarding is a rapidly evolving field, with new recommendations and updates being constantly released. Keeping up with these changes and ensuring the safeguarding procedures you've put in place are successful in protecting the people in your care can be challenging.

Children and young people face a growing number of problems and difficulties, so it's important to regularly review and update your current systems to ensure they are still relevant and functional, and that all staff members are following the procedures you have in place for handling any safeguarding concerns. After all, everyone has a duty to protect children and vulnerable adults.

WHAT'S THE IMPACT?

Ofsted inspection outcomes show that schools are not meeting safeguarding requirements. A recent review undertaken by Mike Glanville via The Safeguarding Company showed that 22.85% of schools were rated Requires Improvement in this area, and 9.2% Inadequate, with the failings coming predominantly from 'Record and Case Management'.

The report further found that, "Some record-keeping is incomplete because leaders are not consistently logging and analysing the actions taken to keep pupils safe. This means pupils who may be at risk of harm are not always getting the support that they need." The report also highlighted the importance of proper training, as "Leaders and staff do not always recognise safeguarding incidents for what they are."

Determining your training requirements, as our audits do, can help your organisation use its existing safeguarding software to its fullest potential, and enhance overall organisation-wide safeguarding.

WHAT'S NEXT?

The Mentor Safeguarding Self-Assessment tool and Audit services have been developed and delivered by our expert in-house Safeguarding Team, and are available in a range of options best suited to your needs, budgets and timeframes. Whilst the self-assessment is self-guided and easy to complete, the audits offer a more thorough review of your safeguarding practices.

Our audit services can help your school comply with regulatory advice, including the inspection frameworks used by Ofsted, Estyn, and the ISI, and ensure it's following industry standards for child safety appropriate to the setting. The audits provide thorough reporting and policy evaluations, and can identify any risks or holes in your safeguarding procedures that could leave you exposed, or in the worst-case scenario, put the children in your care at risk.

THE SAFEGUARDING COMPANY

Contact:
thesafeguarding company.com/mentor

GET INVOLVED

The self-assessment tools and audits include an executive summary, bespoke recommendations and considerations supported by evidence, with enhanced options available for larger organisations – such as 'deep dives' into your use of safeguarding software, spanning reporting systems, triaging/assessment of concerns, dashboard management and more. These safeguarding audits are for everyone, everywhere and can include existing Safeguarding Company software like MyConcern and Clarity, as well as other recording and case management products.

A lesson in new PERSPECTIVES

Jo Heathcote explains what teachers can gain from thinking more holistically and ambitiously when it comes to the KS3 English curriculum

KS3 English is an adventure. It's a journey that ultimately steers students towards KS4, lightly touching on exam specifications while granting practitioners a rare freedom.

At this stage, English teachers will find themselves working with a curriculum that allows creativity and imagination to thrive, enabling them to deliver exciting and engaging lessons, while inspiring purpose and a love of language amongst students.

But as with any other subject, teachers must also navigate the fine balancing act of delivering a curriculum that challenges students without overwhelming them. The curriculum should embrace diversity in texts and ideas, while also respecting the limitations of pupils' understanding, as well as any budgeting and time constraints staff may face.

Reading over writing

Many of the English departments I visit as part of my consultancy work are struggling with recruitment and staff retention. According to recent school workforce data released by the DfE, almost 40,000 working-age teachers left the profession in 2022. Maths and science subjects have experienced the fallout of this for a number of years, but now English is feeling the effects too.

The significant impact these staff shortages are having can be readily seen in the way educators are now tending to prioritise KS4. This has left KS3 students lower down the pecking order, receiving less attentive practice than GCSE and A Level pupils. In some cases, understaffing has even resulted in non-specialist teachers leading their educational journey.

In my experience, I've often seen writing overshadowed by reading in the KS3 curriculum. Despite the former's importance for helping students learn how to communicate effectively and confidently express themselves, the teaching of written skills – and creative writing in particular – will frequently play second fiddle to reading-based learning.

And yet, KS3 forms the very foundations upon which students' later GCSE and A Level success will be built. It's an important time in which young adults will get to develop their knowledge, become acquainted with independent thinking and flex their analytical skills for the first time, all of which will set them up for greatness later on in school and beyond.

As the education world stands at the precipice of unprecedented change – with pupil numbers growing, even as staff headcounts diminish – it's essential that the demands of the KS3 curriculum be properly addressed. Our pupils must be able to hit the ground running as they enter those crucial examination years.

KS3 delivery

KS3 is when schools should be prioritising students' needs and aspirations. Where are pupils at with their education capabilities? Where do they need to be?

Teachers who take time to really reflect on those questions will be able to craft a comprehensive curriculum that aligns with students' current level of understanding, while also paving the way for their future growth.

A comprehensive KS3 English curriculum will need to cover a wide range of skills and knowledge, while also ideally encompassing a diverse array of engaging texts. It ought to strike a balance between introducing students to classic literary works and familiarising them with contemporary literature across multiple forms – novels, plays, poetry.

The challenge here is for educators to effectively

"The ideal curriculum should go beyond practicalities by also delivering inclusivity and embracing diversity"

manage their contact time so that these different aspects can all be properly covered. Students will need enough time to engage deeply and creatively with texts, and explore ideas, themes and issues through meaningful discussions. Through a combination of wider reading, creative writing, performance and affording opportunities for individual expression, teachers can develop strong, confident readers who will become adept critical thinkers and communicators.

This is where digital resources and online materials can be hugely beneficial. Platforms like GCSEPod – to which I have previously contributed – can take on a useful content creation role, helping teachers map out their KS3 English curriculum. GCSEPod lets you deliver punchy and engaging audiovisual content in bite-sized, three- to five-minute chunks, in a format that's well-suited to both classroom learning and homework assignments.

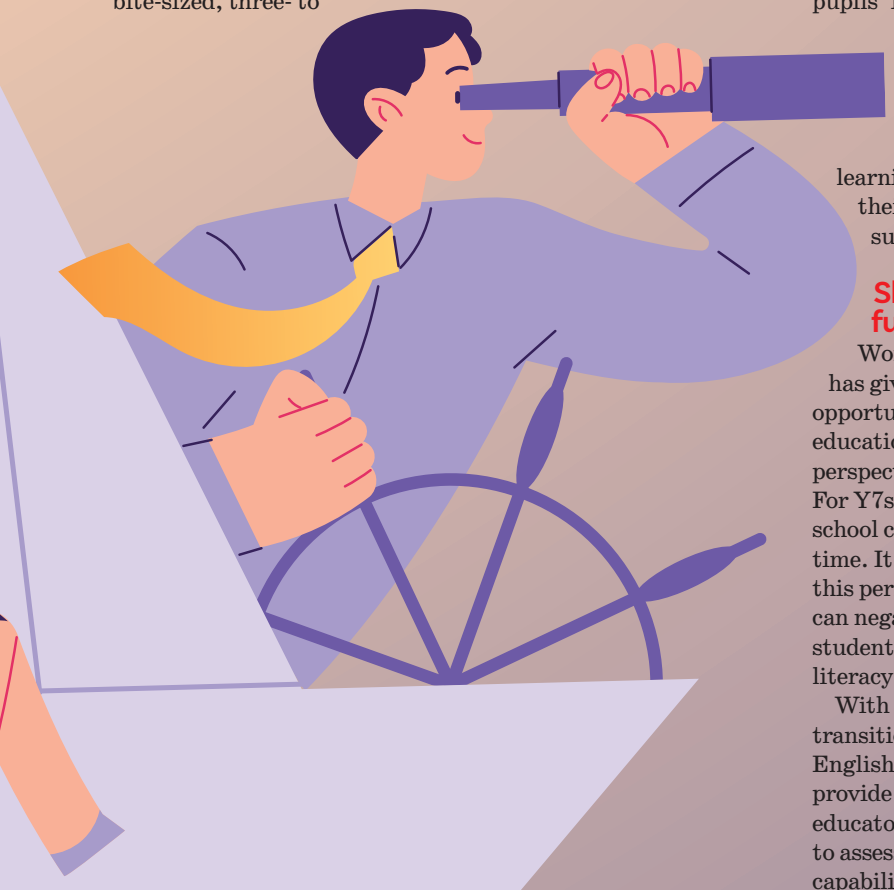
A holistic experience

KS3 should act as a logical stepping stone for KS4, empowering students to move seamlessly up to the next level. At a practical level, a good curriculum should therefore establish all the skills a student will need to call upon if they're to thrive at KS4. A strong KS3 education will help to alleviate those GCSE pressures, and lessen that sense of everything feeling like a race against time and the looming exams.

However, the ideal curriculum should go beyond practicalities by also delivering inclusivity, embracing diversity and helping students recognise the uniqueness of certain authors' voices. KS3 English can provide a vital bridge between pupils and a whole host of different texts, distinct perspectives and creative outcomes.

A holistic approach to KS3 teaching will see the curriculum as a kind of connective tissue, linking various subjects across the broader educational spectrum. As a subject, English has an unrivalled ability to create meaningful connections across different areas of study, enabling students to see how their knowledge can be interwoven with other disciplines.

Rather than delivering context in a didactic manner, I knew it was important to instead contextualise texts for my students. When piecing together my own GCSEPod KS3 English roadmap, I therefore aimed to build a curriculum around direct connections with other humanities subjects, such as history and geography. This approach ensured that the pupils' English education seamlessly aligned with their broader academic experiences, seeped into their everyday learning and benefited their outcomes across all subjects.



Shaping the future

Working with GCSEPod has given me the opportunity to offer the education sector a new perspective on KS3 learning. For Y7s, entering secondary school can be a daunting time. It's been shown that this period of displacement can negatively impact students' attainment in literacy and numeracy.

With that in mind, transition assessments for English and maths can provide a valuable tool for educators that they can use to assess pupils' individual capabilities before diving into the curriculum. These assessments, when combined with structured content designed to optimise engagement, quick knowledge checks and formative assessments, will enable teachers to tailor their approach to students' individual needs.

End-of-unit assessments and mastery activities – intended to stretch students' learning and provide chances for them to apply their skills and knowledge – will further ensure that they're adequately prepared for the challenges of KS4.

Detailed course reporting will additionally allow students to track their progress and take ownership of their educational journeys, while providing teachers with valuable insights into a cohort's performance.

KS3 English is a crucial phase in students' educational journeys, and as such, requires a thoughtful and comprehensive approach if teachers are to deliver the best results. By addressing recruitment challenges, balancing the curriculum and leveraging digital resources like GCSEPod, educators can shape a brighter future for the next generation of learners, empowering them to excel in school and beyond.

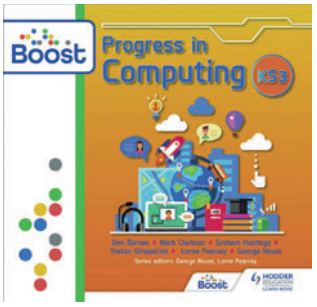
ABOUT THE AUTHOR
Jo Heathcote is an experienced English practitioner, consultant, author and former principal examiner for a major awarding body

For more information about GCSEPod and its new KS3 content launching this November, visit theaccessgroup.com/education

What's New?

Our pick of the latest software and online solutions for secondary education

1 Digital know-how



Hodder Education has listened to how you teach computing at KS3 and designed a fantastic toolkit of digital and print resources around you, containing everything you'll need to confidently deliver the National Curriculum in computing and develop your students' skills in both ICT and digital media.

Progress in Computing: Key Stage 3 combines ready-to-use lesson plans, presentations, videos and animations, multimedia assets, interactive resources, quizzes and assessments with an expert written Student Book. Visit **hoddereducation.co.uk/PiC** to register for a free trial of Progress in Computing: Key Stage 3: Boost and request an eInspection copy of the Student Book. For more details, contact **computing@hoddereducation.co.uk**

2 Computer science, flipped

Craig 'n' Dave is a comprehensive package of GCSE and A Level computer science resources designed to be delivered via a flipped-classroom learning model. The contents include schemes of learning, student workbooks, supporting videos, model answers, end-of-topic tests, programming activities and more besides, thus helping to reduce teachers' planning and preparation time.

The package's resources aim to facilitate self-starting lessons and get students engaging immediately. The included homework activities meanwhile encourage students to demonstrate independent learning, helping them to grow in confidence and take ownership of their unique learning journeys. To find out more, visit **craigndave.org** or contact **admin@craigndave.co.uk**

3 Well made

Established in 1944, Denford is a leading supplier of manufacturing equipment to educational organisations, specialising in the production of Computer Numerical Controlled routers, lathes, and milling machines. The company is also the proud founder and sponsor of the global education challenge, F1® in Schools, which inspires and promotes STEM learning.

For more information, visit **denford.co.uk** or **f1inschools.co.uk**

4 A bigger bite

KS3 teachers – we've got you! BBC Bitesize continues to support teachers and students with new and updated KS3 guides in English, maths, biology, chemistry, physics, history and geography.

All-new courses include video, quizzes and infographics for greater interactivity and engagement, supporting progress from Y7 through to Y9 with step-by-step and structured content. The content is perfect for homework and classroom tests, not just end of year revision.

Also available are two interactive games for history (History Detectives) and science (Atomic Labs, pictured), with games for geography and maths too.

For more information, **bbc.co.uk/bitesize** and click on the 'Secondary' button.

5 Mental health monitoring

STEER Tracking tracks and improves the mental health and self-regulation of students aged 8 and 18 – self-regulation being the ability to respond appropriately to life's everyday challenges.

Via an innovative online assessment carried out three times a year, the tool alerts schools to students who may have emerging mental health risks, but are yet to show visible signs of vulnerability. It also identifies students who may be hiding safeguarding concerns.

Schools are provided with guidance tailored to each student, allowing them to act early to prevent problems escalating.

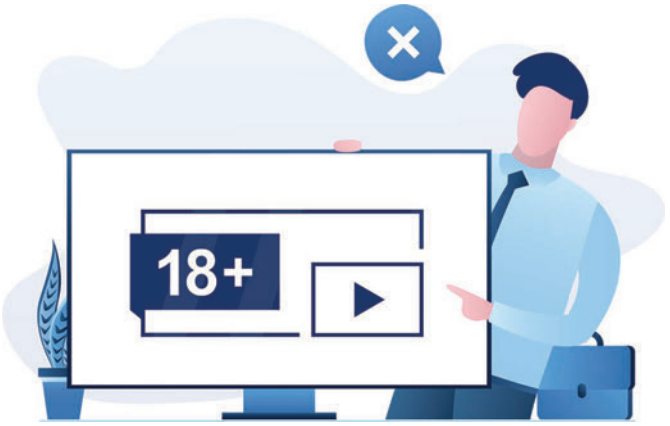
Find out more at **steer.education**

How will the Online Safety Bill affect schools?

Mark Bentley considers whether the government's recently passed Online Safety Bill will do enough to allay many schools' concerns regarding their students' technology use, both on-site and at home...

In 2018, The NSPCC launched its Wild West Web campaign. At the time, it stated that "*For over a decade, social networks have repeatedly failed to protect children from abuse,*" going on to accuse said platforms of being "*cavalier when it comes to keeping children safe.*"

Some are now hoping that's about to change, following the recent passing of the government's Online Safety Bill. But will it?



Transformative change

Education professionals will be used to watching for announcements from the DfE and Ofsted, but over the past few months, it's been worth also keeping an eye on the press releases concerning online safety that have emerged from the Department for Digital, Media, Culture and Sport. This new legislation will directly affect how we approach protecting children and young people as they use the internet, and in turn, how we support students and young people in our care.

So what's set to change? The bill's overall aim is to make activities illegal online if they are illegal offline, and afford the same protections to children and other vulnerable users in the online space that we would expect offline.

I personally believe that the most transformative change we could make to students' online experience would be to restrict them from accessing apps, websites and games intended for over 13s or over 18s. Pornography is the classic example here, which is something the bill covers with respect to commercial providers and social media platforms.

True user identification

Various studies have shown the scale at which online porn is being viewed by students, and the harms occurring as a result. Much of the content in question is extreme in nature, portraying harmful sexual behaviours that are, in effect, being 'taught' to our young people via their internet connections.

The bill paves the way for the introduction of mandatory age verification systems to prevent underage users from making unlawful purchases. Not the classic 'enter your date of birth' or 'grab your parent's credit card' fields, but *true user identification*.

Some parties have raised privacy concerns in relation to this, but the last few years have seen the development of some great BSI standards on how such systems could be implemented, without requiring individuals to share their personal information with tech companies and verification providers.

That's important, because a similar approach is expected to be adopted in relation to social media use more widely. This may ultimately lead to more age-appropriate and child-friendly apps and platforms thriving, if they no longer need to compete with large, established platforms nominally aimed at older users, but which are in practice used by large numbers of children.

In time, this may help schools, and indeed parents, promote messaging around the requirement for students to only use age-appropriate sites and platforms.

Parental controls

It's interesting to note that the bill doesn't specifically cover parental controls. With the passing of the bill, we will see Ofcom assume independent regulatory oversight of online safety, so I'd hope that the codes of conduct soon to be unveiled by the regulator will cover parental controls and make them more effective. More can certainly be done here, such as having them enabled by default and making them easier to use.

Schools can, and do already perform work in this area, pointing families to the controls included in different devices and services. Putting in a little effort before providing children with new devices, or granting them access to new apps and games, definitely pays off in the long run, so it's worth regularly reminding parents of such settings and other measures they can take.

You can find examples of how to do this, plus tips on how to talk to students about online harms, at parentsafe.lgfl.net.

The bill was never going to be perfect. It remains to be seen how Ofsted will fare with its implementation and enforcement – but anything that helps keep students safe online should be welcomed, and it's great to see us ultimately moving in the direction of creating a safer internet.

ABOUT THE AUTHOR
Mark Bentley is Safeguarding and Cybersecurity Lead at the edtech charity LGfL – The National Grid for Learning; for more information, visit lgfl.net or follow @LGfL

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ASK THE EXPERT

Centralise your MAT broadband services

Louisa Mason describes her journey with Schools Broadband as they centralised their 16-school trust's broadband, filtering and security service

Why was it necessary to centralise broadband services across your trust?

The primary reason for centralising services is to reduce the time and resource involved in procuring good value, high quality services across multiple schools. Having a single managed service provider for our broadband means we remove unnecessary procurement pain from our individual schools. This leads to increased efficiencies and improved service all round.

We also know that when all our schools are connected, each one of them will meet our cyber security standards and comply with DfE safeguarding standards.

How did you choose your broadband provider?

We knew we needed a specialist provider, like Schools Broadband, with experience in working with MATs. They understand the various safeguarding, web filtering and cybersecurity requirements within schools.

Our chosen provider additionally needed to be OJEU-compliant. Schools Broadband is listed on The Yorkshire Purchasing Organisation (YPO) OJEU compliance framework, which made accessing their service much easier. We carried out a Direct Award through YPO.

What advice would you give to other MATs planning to centralise their broadband services?

Collating technical information about existing broadband services from 16 different schools was very challenging. Don't assume your schools necessarily know what type of broadband connection they have.

If you're a medium to large trust planning on centralising your broadband services, you will likely have multiple schools in multiple counties with multiple providers. I would say you would probably need a project owner with admin support to manage this. Smaller trusts will be less complex.

EXPERT PROFILE

NAME:
Louisa Mason

JOB TITLE:
Chief Operating Officer, The Good Shepherd Trust

CUSTOMER OF:
Schools Broadband

AREA OF EXPERTISE:
Using technology to deliver central services across multiple trust schools

What lessons did you learn?

The Good Shepherd Trust is upgrading all its schools to leased lines, and we underestimated the additional timescales because of this. These installs are dependent on both your broadband provider and wholesale contractor, but be warned – councils won't let wholesale contractors operate at the same time as other contractors in the area, so roll-out can take longer.

Schools Broadband did everything possible to expedite the build and put contingency connections in to cover the delay. My advice would be to start the install process at least six months in advance of services going live.

What qualities should you look for in a specialist MAT broadband provider?

One experienced in working with MATs, and which understands safeguarding context around broadband. Choose a provider who will speak your language. Schools Broadband placed great emphasis on speaking ours, so make sure your provider is similarly accessible. We continue to have monthly meetings with Schools Broadband, and I know I can call them any time. Schools Broadband's customer service level and quality of service are both excellent, which counts for a lot.

ASK SCHOOLS BROADBAND ABOUT

IMPROVING STANDARDS - How to connect your MAT's schools to the same network, regardless of location, with a Secure Wide Area Network.

CENTRAL CONTROL - How to ensure all schools across your MAT meet the DfE's Keeping Children Safe in Education safeguarding and Prevent Duty compliance.

COST-EFFECTIVE GROWTH - The ease of connecting new schools to your network as you grow your MAT, ensuring all schools meet trust-wide safeguarding and cybersecurity standards.

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Make the CONNECTIONS

COVID-19 presented the education sector with a host of challenges that illustrated just how valuable investment in a school's technical infrastructure can be, says **Tammie Proctor**

Virtually all sectors and forms of work have been impacted one way or another by COVID-19, but among the hardest hit has been the education profession.

This wasn't just limited to the UK, course.

Reporting by the Turkey-based Anadolu Agency (see bit.ly/ts112-nw1) showed the extent to which educators across Europe were initially caught off-guard and impacted by subsequent events. Approximately 94% of all learners across the continent had to contend with school closures and switching to being homeschooled by their parents – many of whom in turn had to juggle the responsibilities of their day jobs.

As soon become clear during those initial months, most parents were ill-equipped to dedicate the time needed to help schools remotely deliver the thorough education their children required, particularly those working towards GCSEs, BTECs, A-Levels and other crucial assessment stages.

From static to agile

One of biggest factors in this lack of preparation and subsequent disruption was the situation concerning schools' technology infrastructure. The extent of the impact varied according to the size and resources of different schools, as you'd expect – but a common thread among those settings that struggled at first was that they'd previously given little thought to remote learning, and thus hadn't invested in the software and hardware necessary to support it.

The onset of the pandemic instantly forced what one could have described as fairly 'static' institutions into becoming agile organisations overnight, but without the necessary infrastructure already in place, putting together a robust remote learning provision on the fly within a matter of days was always going to be very difficult to achieve.

At the time of writing, the immediate health threat posed by COVID-19 may have receded, but its long-term

impacts will be with us for years to come. The pandemic's successive waves left the education sector in a highly vulnerable position with respect to pupil attendance and staffing numbers, forcing schools to rapidly facilitate the en masse teaching of pupils remotely, often at very short notice.

Solving underlying infrastructure issues will go a long way towards helping the sector deliver more thorough, safe and robust remote learning experiences in future, at whatever scale required. Here, then, are the areas schools and academies should be thinking about when reviewing their existing technical infrastructure, and what the benefits of investing in it further are likely to be.

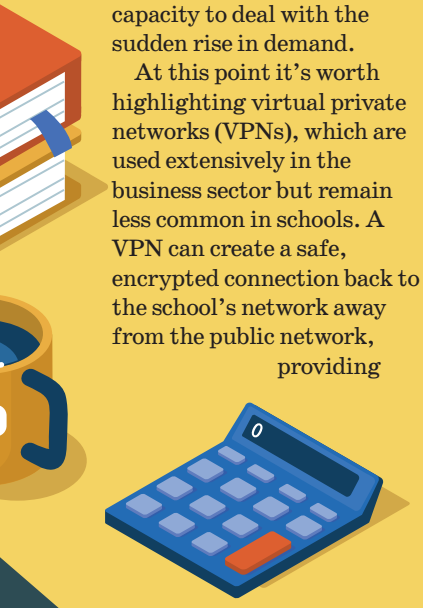
Scalability

While the majority of schools are now at the point where they can provide adequate remote learning solutions for those students that need them, the experiences of the pandemic look set to continue driving demand among educational users for solid and scaleable infrastructure solutions.

Tools that were already seeing frequent within schools and elsewhere, such as Microsoft Teams and WebEx, rapidly came under strain, but their owners were quick to introduce extra capacity to deal with the sudden rise in demand.

At this point it's worth highlighting virtual private networks (VPNs), which are used extensively in the business sector but remain less common in schools. A VPN can create a safe, encrypted connection back to the school's network away from the public network, providing greater privacy than users would have from simply connecting via a secured WiFi hotspot.

Having a VPN in place enables staff, teachers and students to remotely and securely log in to the school's systems, while allowing administrators to control who is able to access what files and tools. This helps to establish a great deal of control, particularly in situations where a student or member of staff may have left a school, but still retain access to its network even years later.



"The onset of the pandemic forced what one could have described as fairly 'static' institutions into becoming agile organisations overnight"

It can also assist with schools' efforts to protect students from harmful online material, alongside whatever content filtering and safeguarding systems they might already be using to keep students safe online.

Network access control

Network access control (NAC) has already changed the face of higher education in recent years, and now the time may have come to introduce it to schools as well. At its simplest, NAC refers to a system feature that enables very tight control over who is able to enter a network and what resources they have access to.

Without it, the process of monitoring users' network activities can be strenuous for IT teams who are already stretched to their limits. NAC-enabled systems help to streamline this process, providing those teams with much greater visibility when it comes to monitoring how the network is being used and how secure it is.

Again, however, scalability is something to consider. If your school uses multiple external VPNs, this could potentially cause a firewall to become overloaded – something that few schools are likely to have experienced before.

The million dollar question is whether schools currently possess sufficient online bandwidth and security protection to educate their students remotely at a moment's notice. Following the events of the past several years, it seems all but certain that digital education will play a much larger part in schools' learning provision going forward, so it's worth preparing for.

Future essentials

Another area to consider is secure access. This can relieve a huge burden from teachers' shoulders by allowing them to remotely and securely access their resources and documents wherever they are. This applies to students too, allowing schools to virtually expand their infrastructure offering into peoples' homes.

All it requires is a secure connection – usually established via a software client installed on the remote user's device – without the need for any fiddly adjustments on the part of the user.

That said, low income families are going to need additional support if they're to cope with any further moves towards digital learning. This might involve supplying some families with 4G devices on a temporary break/fix basis, enabling them to make those kinds of secure connections to the school network.

However, given the difficulty of predicting what learning provision in schools will even look like in the long term, the government should carefully consider how it can assist these low-income families and children. There is certainly technology available that can help them, which can be deployed rapidly and at low cost.

Final thoughts

School leaders and staff don't want to see a repeat of what they went through during the Delta and Omicron waves – a period that presented huge logistical challenges. The hope is that the profession learned valuable lessons during those difficult months of 2020 and 2021, but if the pandemic taught us anything, it's that we simply don't know what lies around the corner – and that it's therefore always best to be prepared.

If schools and academies wish to avoid the worst impacts of a future COVID-19 variant or some other pandemic next time – whenever that might be – they'll stand a much better chance of doing so with a robust technical infrastructure in place.

By implementing technology that's scalable, secure and streamlined, teachers, students and families will be much more able to cope with the complex demands involved in remote learning, and better positioned to ensure it's never faced with such a predicament again.

ABOUT THE AUTHOR
Tammie Proctor is business development manager at the specialist WiFi consultancy Performance Networks; for more information, visit performancenetworks.co.uk or follow @PerformanceN

Heading into the DIGITAL AGE

Tight school budgets and the pace of tech advancement mean your school needs a digital strategy, says **Sue Birchall**...

Many schools approach digital and ICT innovation with caution – partly because of the financial commitments involved, but also due to lack of experience in what's a fast-changing industry.

Support from external experts is abundant, but there's no doubting that 'going down the wrong path' is an expensive error to make. School business professionals like me are often the voice of caution, citing value for money, sustainability and renewal concerns amongst the reasons for taking a moment to pause and think carefully.

However, there is no denying that our young people are increasingly exposed to the latest ICT and all that entails in their day-to-day lives, and that as educators, we need to be in tune with this.

Government policy in 2019 highlighted the need for schools and colleges to embed technology effectively, and pledged to support them in the effective adoption and use of edtech, outlining both the opportunities and barriers.

The DfE then commissioned CooperGibson Research (CGR) to conduct a study to establish the state and usage of technology across schools in England (available at tinyurl.com/SchoolsTechnologysurvey), which produced some interesting findings – more on which later.

Fit for purpose

In the past two years, schools have been challenged by circumstances to take a big leap into the world of ICT, which has since become essential for the continued delivery of teaching and learning.

This quickly highlighted how our students have hugely varying levels of access to ICT, with the government stepping in to try and provide laptops and internet connections to those without. After all, you can't launch a new digital initiative without the appropriate equipment to support it.

The same is true when it comes to children's and staff's knowledge of ICT. You can only introduce a technological transformation if the people who are supposed to deliver it have the necessary basic skills.

This was pointed out by CooperGibson Research, whose report found that the education sector is still in need of significant support with the fundamentals when it comes to developing ICT within their settings.

The digital unknown

The key question is this: is there desire within schools and academies to look at how we can develop our ICT – not just as means of delivering the curriculum, but also in order to expose our students to the vast range of new technologies now available?

Is there also a need to look at upgrading our school systems – including offering remote access for staff, with all the security and accessibility features this would require – now that our experiences of the pandemic have highlighted the benefits of flexible working?

In both cases I believe the answer is 'yes'. It may well be time for us to venture into the digital unknown, but not without caution.

> **"Stepping into an edtech transformation is pointless if those who deliver it cannot access improvements through a lack of basic skills"**

Balancing spending

Firstly, there is a balance required here. Education institutions aren't cash rich, and aspirations of this nature will need careful planning if they're to be sustained beyond initial implementation.

The funds we have available at school level are often barely sufficient to even cover the upgrades and replacements identified as being needed in our existing ICT development plans, therefore providing little capacity for the purchase of new technologies that might form part of more ambitious initiatives.

This, then, requires a funding strategy which at present isn't supported by financial investment on the part of government.

The 21-22 CooperGibson Research survey identified this, along with the need for more central support and guidance on planning, procurement, training and sustainability. It's clear that academies and newly built schools are a few steps ahead, at least in terms of their digital infrastructure and planning.

The question then has to be whether we simply sit back and wait for a central digital plan, or whether we start to plan locally, so that we can overcome the increasing digital divide between education and the wider world.

Where to start?

As with all projects, we need to begin with a business planning model. Starting with your aims and purpose, you need to decide what this looks like for your setting.

We all know that every school is different – not just within phases but also in locality, cohorts and environment. That's not to say you should be limited in your aims; all students need to be exposed to a variety of learning opportunities. Who knows, you may well be educating the next globally famous tech billionaire…

The next step would be to match these aims to your school or academy development planning. Any innovations should support your school's vision for the future, and will need to be incorporated into whole school planning.

In my school, we have an ICT development plan which – according to the report from the 21-22 survey – isn't as common as you might think. If you don't have something similar in place, I would suggest that ICT planning ought to sit alongside the budget, and that SIP / ADP would assist in avoiding any costly purchasing mistakes.

Bang for your buck

As with all purchases within school, we must be aware of value for money in terms of the anticipated outcomes. Technology that supports school operations does, generally speaking, help to generate savings thanks to increased efficiencies, which in turn will typically free up funding for other initiatives. But that's only the case if the purchase is timely, and adds value to your core purpose.

Financial planning is imperative for all ICT purchases, and especially around any new projects. Aside from the initial purchase, sustainability must be considered; your planning should incorporate both immediate and long-term costs, such as any money that will be needed for repair and eventually replacements. This becomes especially pertinent once new innovations are embedded into the school's practice.

Managing risk

Risk management also needs to be part of your business planning. We're all aware of the current, and sometimes sudden increases in school running costs, so you need to consider and include alternative planning to take such unexpected expenses into account.

For instance, should you have spare devices on hand in the event of any becoming damaged? Is it worth taking out insurance? What would be the impact to a school's systems in the event of a breakdown, or loss of service?

Also, be aware that if you're purchasing new technologies, the likelihood is they will be upgraded, improved or replaced at a fairly rapid rate, and that you need to plan for this.

There are always risks for schools when it comes to investing in new technologies, but without doubt, it's a risk worth taking. We're charged with educating our young people and readying them to take part in the wider world – and ICT is a huge part of that.

ABOUT THE AUTHOR
Sue Birchall is Director of Business and Outreach at The Malling School

LANSCHOOL

Proven solutions. Successful student outcomes.

As a pioneer and innovator of classroom management software, **LanSchool** helps teachers connect with students to create more meaningful online experiences, both in the classroom and remotely.

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12M customers

15 languages

> We have been using LanSchool for a number of years now and absolutely love it. It has proven to be an invaluable tool for teachers to monitor and assist pupils whilst in IT rooms. From a technical point of view, it's been so easy to deploy and manage.
>
> **Colin Dean, Network Manager Ferndown Upper School, Dorset, UK**

Lenovo

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ASK THE EXPERT

"Technology can present distractions"

Lenovo's Coby Gurr explains how LanSchool can empower teachers when it comes to digital learning

What differences have you observed with schools' use of technology pre-and post-pandemic?

One obvious change is the widespread adoption of 1:1 devices. Many schools previously had 1:1 for certain grade levels, but the pandemic forced them to figure out how to get devices into more students' hands, which often required them to be resourceful. Lenovo is working with schools to help where we can. We're currently running an 'Equity Program', whereby every Lenovo device purchase results in a small donation towards helping underprivileged children gain better access to technology.

One interesting outcome of distance learning is that teachers and students have become much more comfortable and skilled with using technology. Another is the growth of more innovative lesson planning. Those speak to the fact that technology will remain a staple in the classroom going forward, and that people are generally more accepting of that now.

Where do you see LanSchool fitting into this new edtech landscape?

Introducing new technology into classrooms can present distractions and various other challenges for teachers. It can be hard for teachers to know exactly what students are working on, especially with remote learning. LanSchool gives teachers more oversight of this, so they can guide students' digital learning both in class and when they're at home. Teachers can glimpse what students are seeing on their screens and message any who seem to be losing focus, and there are some built-in safety features for limiting the websites students can visit.

How easy is LanSchool to roll out?

There are two versions of LanSchool. LanSchool Classic is a self-hosted software application schools can use on campus, while LanSchool Air is a cloud-based version that works both on campus and at home. 'Classic' has to be installed and hosted locally on school devices, but the process is straightforward and it's very easy to manage once installed. It also includes enterprise-level data collection, allowing IT teams to see how the software is being used and spot where teachers might need help. LanSchool Air can be implemented remotely by simply sending links to teachers and students and is fully maintained by LanSchool, so there's no IT infrastructure needed on the school's part before they can start using it. Our software integrates well with Google Classroom, Clever and Azure AD, making classroom rostering extremely easy, and it even supports the importing of CSV data.

EXPERT PROFILE

NAME:
Coby Gurr

JOB TITLE:

General Manager, Lenovo Software

AREA OF EXPERTISE:

How edtech innovation can improve learning outcomes

BEST PART OF MY JOB:

"Creating digital solutions for schools that have a direct impact on the lives of teachers and students."

LanSchool is partly designed to reduce teachers' workload – can you tell us more?

LanSchool allows teachers to see when students are off-task or performing tasks incorrectly. Teachers can discreetly reach out and correct students before they require additional supervision, and also save time when guiding students by pushing content to all devices or blanking screens as needed.

ASK ME ABOUT

CONNECTIVITY – and how LanSchool's classroom management software is an effective complement to digital learning in connected and virtual classrooms

SECURITY – in relation to us partnering with online safety specialists to provide LanSchool's safety features, making it easy for schools to adopt a multi-pronged approach to their digital security

CONVENIENCE – and how LanSchool includes support for the single sign-on integrations used by Google Classroom and Azure Active Directory

lanschool.com/gb

Learning at a DISTANCE

Virtual CPD can perform a valuable role in schools' training offer, says **Adam Riches** – so long as leaders recognise its distinct strengths and weaknesses compared to in-person sessions...

There's no escaping the fact that COVID was a hugely difficult experience for everyone in education. Across the teaching sector, as with many professions, educators were forced to adapt their working practices to fit the new normal.

Of course, this 'normal' didn't bed in for some time – but having since begun to regain some semblance of normality, we can now reflect on what, as a profession, we've been able to learn from working at a distance.

One key feature of the post-COVID landscape is the now common offer of virtual CPD for teachers. This has provided teachers with vastly more accessible and convenient avenues for specialist training, while also allowing schools to significantly reduce their CPD costs in terms of time and money.

However, given the wider pool of potential providers and (with relatively little vetting in place), virtual CPD has to be managed effectively if its positives are to be realised. So what can teachers and leaders do to ensure they make the most of it?

Session content

With CPD, it's sometimes a good idea to start with your end goal and work backwards. If you're looking at delivering sessions in-house, decide first if a virtual CPD solution is really your best option, or if the content would be better delivered face-to-face.

Subject-specific CPD tends to be more suited to in-person delivery due to the intricacies involved, and because it typically requires a fair amount of reactivity on the part of the person delivering the course.

> ***"With CPD, it's sometimes good to start with your end goal and work backwards"***

Online CPD is a better fit for content delivered in short, sharp bursts. It's no secret that people's concentration levels tend to be somewhat shorter when they're online rather than in the same room, so keep that in mind when deploying virtual CPD as part of your teacher development program.

If your intention is to build on key skills, knowledge or understanding introduced previously, virtual CPD may be a good option.
This type of content is typically more suited to being delivered in chunks, allowing shorter sessions to accessed remotely and giving staff the option to access internal CPD sessions in their classrooms or offices, if preferred.

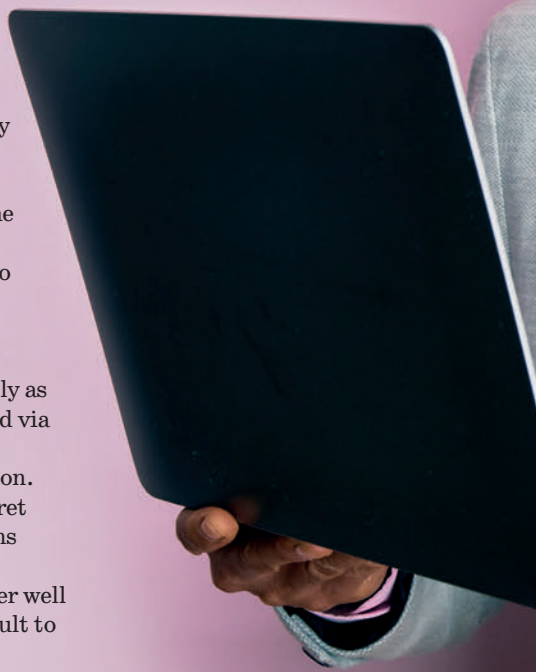
Online interactions

The swift adoption of virtual teaching during COVID meant that teachers and educators had to rapidly upskill themselves in the use of online platforms for content delivery. A by-product of this, coupled with the speedy development of new online teaching tools, is that virtual teaching is now widely considered as much more viable and effective than in years gone by.

Virtual teaching for CPD purposes can now include engaging interactive elements via the functions offered by some learning platforms, with quizzes and breakout rooms really adding to the session experience. Facilitators will need to know what they're doing, though. The advantages presented by virtual CPD will only be effective if the facilitator has specifically designed the session with online delivery in mind. It's no good taking content originally intended for in-person delivery and expecting it to be equally as effective when delivered via screens without due planning and preparation.

Of course, it's no secret that online CPD sessions can't help but lose that 'human factor', however well run they are. It's difficult to capture the sense of natural networking that comes from being in the physical presence of other teachers, and the unique form of engagement that comes from having participants gathered together in same room.

That said, a huge advantage of online CPD is the sheer breadth and scale of the networking and discussion it can enable. Your professional development efforts needn't be limited to participants from within your school or local area, but can now just as easily involve participants and experts from different regions, or even different countries.



Format considerations

Something we all learnt during lockdown is that increased reliance on digital devices can and will result in screen fatigue. If your virtual CPD session will be a long one, emphasise the format of the session from the start and factor in regular breaks so that your attendees stay engaged.

It's almost more important to ensure that tasks are completed and chunked clearly when delivering remotely than in person, since you don't want people wandering off for a cuppa or a snack. You need everyone to remain involved in the session.

In many ways, the format of virtual CPD offers more intensity in short, sharp bursts than may be possible in a face-to-face session.

"Quizzes and breakout rooms really add to the session experience"

Cognitive load

Something else that's always at the forefront of our minds as teachers when delivering content to children is cognitive load. When sitting in CPD sessions, I'm often astounded by how often presenters seem to forget that adults have limited working memories too!

Whether delivering face-to-face or at a distance, CPD facilitators must ensure they keep the extraneous load low.

Virtual CPD offers a different set of challenges in this area compared to traditional CPD. Teachers are less likely to be distracted by other professionals when learning virtually, but the temptation to slyly catch up on some work, or the distractions presented by, for example, family members will be far higher. Shrewd use of interactive elements will ensure that virtual CPD participation and engagement levels remain high.

Another point to consider with respect to cognitive load is that many will be undertaking an online course after finishing work for the day, or during the school day itself. We all know the fatigue that can follow a full day of teaching – and also the way in which colleagues will pop their head round the door at any given moment.

Virtual delivery that utilises well-chunked resources will let you better guide the process. Remember that visuals are hugely important, and don't overwhelm your participants with presentation slides that are dense with text. If you need to show them detailed information, circulate this as an accompanying resource document so that it's easier for them to maintain concentration.

Participant feedback

Of all the trade-offs that come with virtual CPD, one of the hardest for facilitators is the loss of human feedback immediately after a session's conclusion.

While it's not quite the same, you can still give online participants a chance to leave feedback after sessions, allowing you to make adjustments to future sessions. A simple anonymous feedback questionnaire can help you quickly glean information about how a session went and rethink things, if necessary.

Similarly, if staff are attending externally-hosted sessions, asking them about their experience and how effective they thought the sessions were can help you safeguard future investments of time and money.

Virtual CPD is ultimately a valuable and hugely flexible resource to have as part of your development offering, whether delivered internally or externally. It is, however, important to choose the right type of CPD delivery for the right topic.

Take time to consider which types of content might be best suited to online sessions, and be sure to carefully examine how your virtual CPD is being facilitated, to ensure the time is being utilised in the best possible way.

5 STEPS FOR VIRTUAL CPD SUCCESS

- Ensure that your topic and course contents are appropriate for virtual delivery
- Keep sessions engaging by using interactive platform tools
- Chunk up content
- Keep your visual stimulus clear and uncluttered
- Listen to what staff tell you about the online courses they attend

ABOUT THE AUTHOR
Adam Riches is a senior leader for teaching and learning; follow him at @teachmrriches

A digital future?

The future of school assessment is clearly going to be fully-digital, reasons **Anthony David** – so let's make sure we realise all the attendant advantages...

Education has spent a considerable amount of time in the spotlight over recent months. Not so much because of what students are learning, but more with respect to teacher workload and related questions of why we're doing what we're doing.

Alongside this has been the burgeoning popularity of artificial intelligence programs (ChatGPT, Bard, Microsoft Co-Pilot, to name but three), and while few believe these can solve all our workload issues in the short term, they have at least prompted us to think about how we could be using our existing IT set ups in better and more effective ways.

Related to that has been a steadily growing transformation in how schools approach their management information systems. SIMS has dominated this space for decades, with over 90% of schools using the company's offerings at one point. More recently, however, it has been arguably dethroned by more nimble, cloud-based competitors such as BromComm, ScholarPack and Arbor – the latter of which is now the MIS of choice for a third of schools across the country.

The change has been rapid – so could this new breed of information systems support our assessment of learning via more smarter and more efficient means?

Online assessment

Of course, digital assessment is hardly a new concept. Companies such as O-Tracker, Pupil Tracker, Target Tracker (and indeed many other products and services with the word 'tracker' in their name) have been around for at least a couple of decades, and the manner in which they're used has remained largely the same over that time – students complete work, teachers input data, leaders analyse the results.

Yet this process, whilst well-intentioned, is broken in that it's *linear*, rather than *cyclical*. Any assessment must inform students' learning, and there's an ever-present risk that the cycle won't complete. So what role can computers play in strengthening this process?

Well, if secondary schools transition their assignments and assessments to an online format, they can significantly streamline their submission and grading procedures. As many readers will know, learning management systems (LMS) enable teachers to upload assignments and make them accessible to students remotely – one positive development of the pandemic being the accelerated adoption of such systems by schools nationwide.

In 2023, Microsoft Teams effectively dominates the secondary LMS space, while Google Workspace does the same for primaries. One key advantage of the LMS model is that students can submit their work digitally, eliminating the need for physical documents entirely and thus reducing the risk of anything untoward (loss, damage) happening to students' completed work.

The more far-reaching benefits of online assessments include the ability to monitor progress, track student performance and identify trends across classes and cohorts much more easily. Digital submissions additionally allow teachers to deploy electronic plagiarism detection tools to maintain academic integrity.

> ***"I was previously wary of peer assessment – but when fused with technology, it's a whole other matter"***

When working at optimal capacity, a modern LMS can perform tasks older trackers never could, simultanously providing school-wide information for leaders and granular support for students.

Formative assessment

The key word there, however, is 'optimal'. Attaining that requires a certain degree of training and IT literacy, and also entails a deep review of a school's curriculum. There can be little doubt that a well-configured LMS is the future where schools' assessment duties are concerned, but it's arguably not here quite yet. We'll see all higher education centres completing the transition soon enough – but if my 16-year old-son's books are anything to go by, the handwritten word is still reigning supreme.

Formative assessments play a crucial role in gauging students' understanding of concepts and identifying those areas requiring further attention. To that end, most LMS solutions will provide a suite of formative assessment tools catering to different learning styles and preferences. Interactive quizzes, polls, and games can keep students engaged, while at the same time providing

teachers with genuine real-time insights into student comprehension.

Formative assessment tools further allow for ongoing evaluation, reducing the pressures involved with traditional end-of-term examinations. More importantly, this evaluation can be dynamic and produced in real time.

What I find interesting is how integrating an LMS into a MIS such as Arbor enables individual assessments to form part of a wider pastoral picture. Such is the power of digital systems – they can gather and process information from a wide set of data points in ways that would otherwise be impossible. For now, this approach is still largely the preserve of 'superuser' schools, but will inevitably become more widespread over the coming years as good practice is shared more widely.

Peer assessment

The area where this technological power can be most readily seen is with peer assessment. I myself have previously been wary of peer assessment, but when fused with technology it's a whole other matter.

Through tech-facilitated peer assessment and collaborative learning, students can evaluate each other's work and provide constructive feedback in ways that would never have previously been viable. Peer assessment can lighten a teacher's marking load, of course, but will also nurture a sense of responsibility and accountability among students as they engage more actively in the learning process.

Collaboration tools, such as Google Workspace, enable students to work together on group projects, facilitating effective communication and teamwork. Such activities will help students develop essential interpersonal skills, while at the same time showcasing their collective knowledge and abilities – in effect, genuinely preparing students for the modern workplace.

I can recall once observing two students sat at opposite sides of the classroom, both working on the same website project. They could have easily been in different rooms, buildings or even countries – it didn't matter, and wouldn't have hindered their communication. That's quite the change.

21st century collaboration

Formative assessment tools allow for ongoing evaluation, while online assessments let us carry out more comprehensive assessments of students' skills.

To that, we can now add peer assessment and collaboration tools that empower students to take charge of their learning and develop vital 21st century skills. I frequently work on Google docs with colleagues situated miles away from me, and expect most readers can say the same.

By smartly utilising tech-driven assessment methods, schools can create more efficient, engaging, and interactive educational environments – ones capable of fostering holistic growth and preparing students for success in the ever-evolving wider digital landscape.

Some parts of this picture still have some way to go; others are firmly here, but perhaps need more intentional planning to get the best out of them. What's certain, however, is that how we assess can save time.

With the developers of modern MIS solutions doubtless keen to use teacher-inputted data for the purposes of training AI, we may well find ourselves moving from a position of interrogating our data to questioning it. And increasingly, it's those questions we ask that are key to improving outcomes, not necessarily the data itself.

IN BRIEF

- Automated marking systems can save teachers time and provide immediate feedback on objective assessments.
- Incorporating online assignments into digital classrooms such as Microsoft Teams or Google Workspace can significantly streamline your submission and marking processes
- Formative assessment tools can be used to engage students while enabling ongoing evaluation, thus producing valuable learning data outside of traditional, exam-style assessments
- Peer assessment and collaboration tools develop critical thinking and interpersonal skills.
- Embracing technology-driven assessment helps to create more richly interactive educational environments that can better prepare students for success in a technology-driven world

ABOUT THE AUTHOR
Anthony David is an executive headteacher

REASONS TO TRY...

4 EasyReader App

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EasyReader App works in partnership with RNIB Bookshare to provide UK students with free books in accessible formats – including textbooks currently on the UK curriculum. Every book is free to download and read in EasyReader App.

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At a glance

+ Empowers students with dyslexia or visual impairments to read independently

+ Provides access to over 900,000 books in the RNIB Bookshare Education Collection

+ Free to use in class and at home – on smartphones, tablets and laptops.

REASONS TO TRY...

4 Edulink One

Management and engagement software with a host of solutions for engaging teachers, learners and parents

1 IT'S ALL-INCLUSIVE

Edulink One's portal provides all the functions a school needs, including registers, mark sheets, messaging, data collection, parents' evenings and more, avoiding the need for separate expensive software purchases. It integrates with SIMS, creating a user-friendly experience on any device, and can be easily customised according to a school's needs.

2 MONITOR YOUR REGISTERS

The combined seating plan and register feature is a favourite amongst schools. Teachers can create their own easy-to-read table layouts (pictured) and 'drop' learners into these, adding learner tags and assessment data where needed.

The registers can also be used for more than just attendance, featuring the ability to add tags, meal options, behaviour and achievement points, and even homework assignments!

3 MANAGE YOUR HOMEWORK

Set up and submit assignments via the portal's homework area, and use the notifications function to ensure students receive automatic deadline reminders. It also integrates with Google Classroom and Microsoft Teams, pulling through homework assignment details and status, enabling parents, students and staff to see them in Edulink One. Department heads can also view homework set by staff.

4 MANAGE CLUBS

Use the app to manage club activities and access your registers on the go. Parents and learners can sign up to clubs themselves in the app, or teachers can assign students to them. A club attendance report in the Analytics section helps track club impact, which can be useful for reporting Pupil Premium spending.

edulinkone

Contact:
For more information and resources, visit **overnetdata.com**; new customers can contact our sales team at **sales@overnetdata.com**

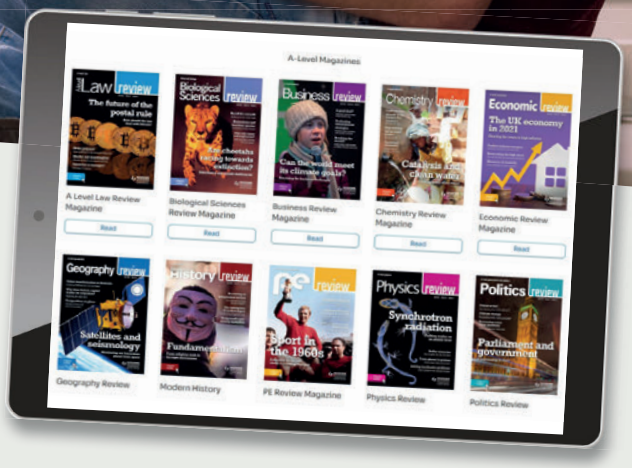
At a glance

+ Edulink One is designed and supported by former school staff; they understand what schools want

+ They value and listen to customers, refining features based on schools' suggestions

+ Edulink One is affordable – you can replace multiple systems with one that does it all!

Help your students get the edge



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Mr G. Simmons, Wilmington Grammar School for Girls

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TECH IN ACTION

Stories of the impact technology is having in the here and now

THE AGENDA:

The car's THE STAR

Tim Brotherhood recalls how an ambitious STEM project involving Scalextric cars was a great success in its day, and is now ripe for a revival, given schools' access to modern edtech...

As the pupils gather in the digital design and manufacturing studio after school, there's a buzz of excitement in the air.

At the last session, they tested out the performance of their Scalextric cars on a tight and twisty test track. After some exciting races, they recorded a wide range of parameters for each car, including the motor position and layout, gearing, key dimensions, lap times, and how each car coped with the track's layout.

Today, the pupils will be using the data captured at that previous session to inform what will be their first design. At the same time, they'll be needing to ensure throughout that their designs comply with a set of competition rules that they've been studying at home.

Designing in 3D

Students Tony and Alice open a web browser and log into Onshape (onshape.com) – an online CAD platform that's free to access for schools. Tony proceeds to open the starter assembly from their team's digital workspace, before choosing the preferred motor layout and changing the design's dimensions according to the measurements of the track, wheelbase, and slot guide position. The assembly updates in seconds, allowing him to then start creating the chassis of what will be their car.

Alice then opens the same assembly on her phone, seeing instantly the design elements Tony has configured, and begins modelling the car body that will enclose the components in a strong, light and streamlined shape.

Elsewhere in the group, Rhi is busy using graphic design software to produce information packs aimed at generating interest among local businesses in sponsoring her team. Once the sponsors are finalised, Rhi will set about designing graphics for team's uniforms, as well as transfers containing logos and other graphics for the car, once its shape and design is finalised.

Nicole and Tom, meanwhile, are planning out the digital manufacture of their car with the aid of a virtual workpiece, which will be machined on a computer-controlled router in order to form the mould they'll use to vacuum-form the car's body.

Having researched the mechanical properties and sustainability characteristics of Acrylonitrile Butadiene Styrene (ABS) and Polylactic Acid (PLA) polymers, Tom now loads PLA into the 3D printer, ready to purge the previous material. His first print will aim to test that everything's working properly, while also producing standard shapes that his team can use for impact and tensile strength tests.

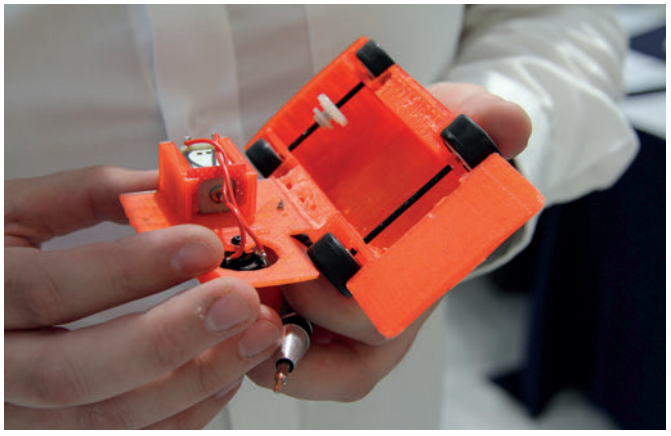
As the weeks go on, the students carefully follow and iterate upon their designs, testing as they go, in an effort to improve their car's performance at each stage.

All the above describes a typical scene in schools that have opted to run the Scalextric4Schools Challenge (S4S) as an after-school STEM club project.

Applied knowledge

S4S was borne out of a KS3 project originally developed by Edgecliff High School in Staffordshire in partnership with Hornby, commercial owner of the Scalextric brand. Brokered by the 3D modelling software supplier PTC, S4S was first launched in 2009 as both a KS3 project and a competition. Hornby's contribution included giving students access to its designers and engineers, examples of commercial slot car designs and supplying cost-price components and track, as well as various competition circuits and prizes.

Students taking part in S4S got to design, make and race their own slot cars, following the same processes used by professional product designers and engineers. The project called on students to demonstrate a scientific understanding of materials,



Pupil design for a Scalextric4Schools chassis and body

Pupils at Bishops' Blue Coat High School in Chester, working on a CAD model

"Students followed the same processes used by professional product designers and engineers"

control systems and motion, and apply their knowledge to the development of fast and efficient racing cars. Students also had to apply maths skills to quantify their car's virtual performance and physical motion on the track.

The result of all this testing then guided the students as they sought to improve their designs over a number of iterations – while also having plenty of fun, racing the cars they had created against each other.

I was working for PTC at the time, and helped develop the rules for the competition while also authoring accompanying guides to the software, design and manufacturing processes involved. The S4S Challenge ran for several years, with the finals eventually finding a home at the Royal Air Force Museum Cosford. Teams from across England and Scotland took part initially, later with schools from Russia also taking part. Spin-off challenges were latterly run in Australia and Dubai.

Over the course of the competition's run we offered two additional challenges. One was a 'Bloodhound Land Speed Record Challenge', which saw pupils attempting to break the speed of sound at 1/32 scale, plus an Eco Challenge centred on designing a new form of efficient transport for people or goods. Over the two years in which the Eco Challenge was offered, however, no schools opted to enter. Sadly, 2014 was the last year in which I worked for PTC, and the final year in which the competition was held in its original form.

Fast forward to late 2021, and a Facebook group set up around the original challenge initiative suddenly burst into life. By Christmas 2021 it had attracted hundreds of new members – albeit mostly D&T teachers. The original curriculum guides can now be found there, alongside a wealth of new resources submitted by others and some lively discussions. To find it, simply search Facebook for 'Scalextric4Schools'.

Virtual testing

With schools now routinely using externally produced resources to support their lessons, there are fewer barriers than ever for teachers who are keen on helping their students to tackle ambitious design challenges.

As can be seen by our previous success with S4S and the continued interest in the project, schools have it in their power to offer their students rich, yet highly cost effective STEM learning experiences. PTC's Onshape remains available in a free, browser-based version accessible by schools on almost any digital device, including mobiles. With no software installation required, classes don't even have to run the security gauntlet of their school's computer networks.

Moreover, many more schools now possess the kind of desktop manufacturing equipment – such as CNC routers and 3D printers – needed for projects like S4S to be properly realised. When taught well, D&T can offer pupils highly engaging and memorable STEM experiences – not ones based on single-subject tasks, but far-reaching, multidisciplinary projects that are relevant to their interests and suitably challenging.

Technological advances since the initial run of S4S challenges mean that students can now use analysis software to test the performance of their virtual designs in simulated wind tunnels; explore the heat build-up in small electric motors; use kinematic and dynamic motion simulation to measure gearing, acceleration and cornering; and Finite element analysis to identify areas where chassis material can be removed without compromising strength.

This virtual testing can result in even greater improvements before committing to physical manufacture, further testing and improvement – the very same processes that design and engineering professionals will follow every day.

ABOUT THE AUTHOR
Tim Brotherhood is a STEM ambassador and former head of D&T, now working as an education programme manager for a global software company

Digital haves AND HAVE-NOTS

Les Hopper examines the current extent of digital inequality in secondary schools, and what some staff are doing to mitigate its impacts

"The average amount of time a UK teenager spends on a screen each day is 7.5 hours. There's no such thing as an average teenager; some will spend far more or less time on a screen, but there's no denying that digital technology has a huge impact on the way that young people interact and learn."
– Pete Dring, head of computing, Fulford School

As the role of technology in education continues to grow, so too do concerns over digital inequalities. Our 2023 Pearson School Report (see go.pearson.com/DigEq23), based on the views of over 6,000 educators, shows that 63% of secondary school teachers expect to see even greater emphasis on digital and tech-enabled learning in the next 10 years.

The benefits of this could potentially include greater accessibility tools for learners with SEND, increased collaborative and personalised learning, and new ways of reducing teacher workload – but as things stand today, there are some significant disparities in what schools have access to.

The extent of these inequalities and how they could be overcome have been discussed in multiple research reports and debates in recent years. Here, we're going explore some further findings and perspectives on the steps that can be taken to help all learners and schools realise the benefits of edtech more fairly.

The infrastructure

"WiFi is the biggest barrier to embracing digital equitably. If we could solve this problem, we would see a huge and rapid shift."
– Secondary school teacher

The cost of setting up reliable infrastructure that can support digital solutions within education settings is a barrier that Pete Dring, head of computing at Fulford School, believes stretches budgets *"Beyond most people's definition of what allows for sustainable strategic investment in technology."* The digital divide between those who possess reliable, individual access to digital technology at home, and those who don't, represents a fundamental challenge.

"Only 50% of secondary schools reported having access to reliable WiFi across their entire site"

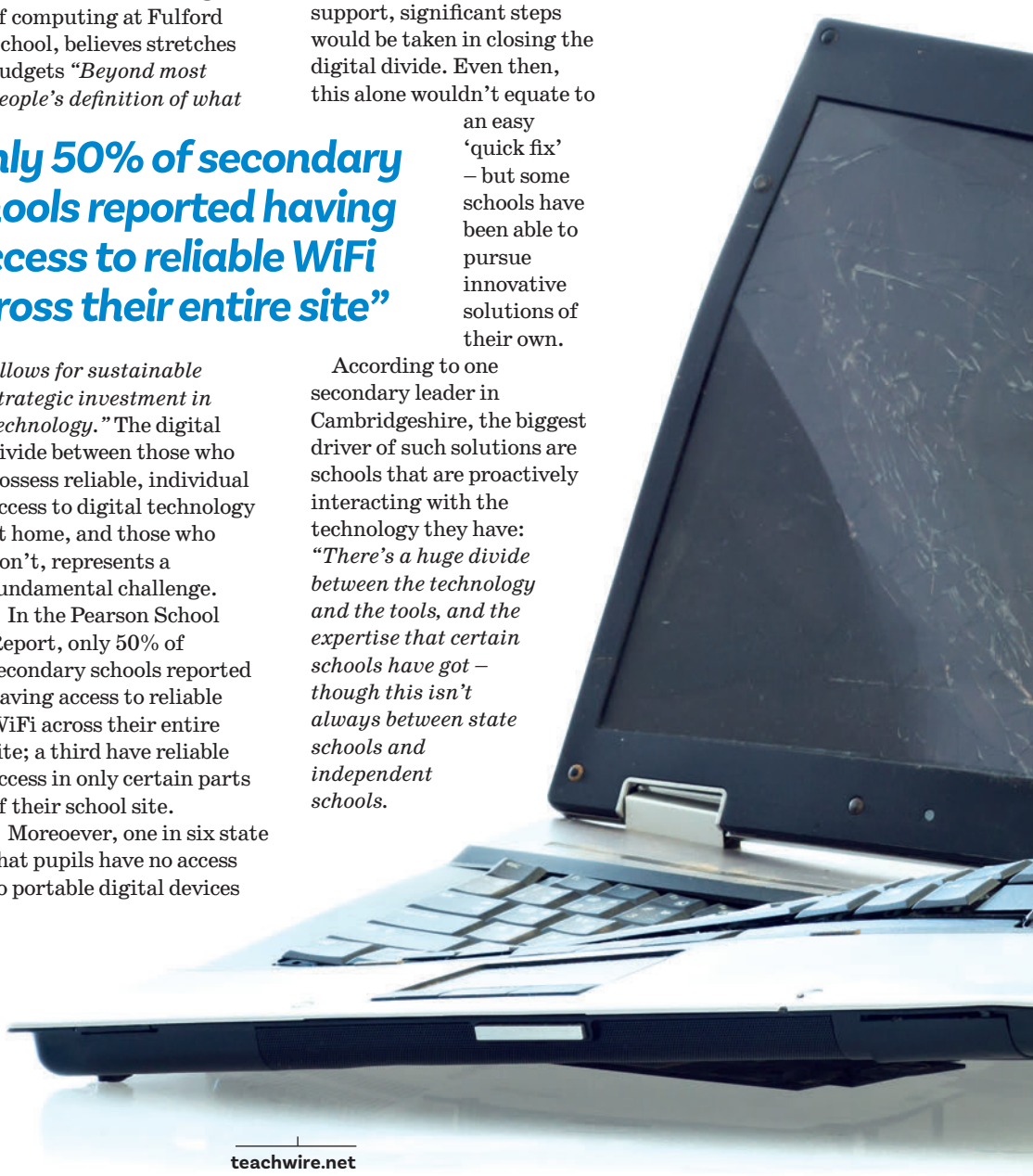
In the Pearson School Report, only 50% of secondary schools reported having access to reliable WiFi across their entire site; a third have reliable access in only certain parts of their school site.

Moreoever, one in six state that pupils have no access to portable digital devices (compared to just 1% of primaries), and fewer than 1 in 10 have ready access to assistive technologies like screen and Braille readers for use by students.

There's no question that if the playing field could be levelled so that every learner had access to at least one WiFi-capable device both at home and in school, along with access to suitable tech support, significant steps would be taken in closing the digital divide. Even then, this alone wouldn't equate to an easy 'quick fix' – but some schools have been able to pursue innovative solutions of their own.

According to one secondary leader in Cambridgeshire, the biggest driver of such solutions are schools that are proactively interacting with the technology they have: *"There's a huge divide between the technology and the tools, and the expertise that certain schools have got – though this isn't always between state schools and independent schools. Some state schools have developed great partnerships with companies like Microsoft and Google, or local partnerships to support investments, for example."*

Change is also being driven externally. Organisations like the Digital Poverty Alliance and The Learning Foundation frequently run campaigns that advocate



for the embedding of digital technologies across all stages of education.

However, Emma Darcy – director of technology for learning at the Chiltern Learning Trust – believes that securing access to infrastructure is just one part of the picture: "*Equipment alone won't transform teaching and learning, or children's life chances.*"

Digital skills

"Literacy and numeracy are rightly considered to be the most important skills that students learn in school. I don't think it's too controversial to argue that digital literacy is becoming equally significant to a student's future life chances." – Pete Dring

To help ease the digital divide, many schools are now starting to place greater emphasis on supporting learners' digital skills in the classroom. Emma Darcy and the SLT at Denbigh High School previously identified a gap in the curriculum for the teaching of 'digital character'. This prompted them to introduce a 'period 6' into their curriculum once a week, dedicated to cultivating such skills among students.

As Darcy explains, *"It's not just about staying safe online, or being prepared for your future careers. It's having digital character skills, so that when you have access to all the technology-based tools out there, you know what to do with them and how to make the right choices."*

Along similar lines, staff at Fulford School in York last year developed and introduced 'Digital life skills' as an informal qualification, through which students can learn to properly apply the essential digital skills they'll need to thrive at home, school and work. This year saw the school follow that with the introduction of its 'Digital Literacy' support for Y7, targeted at those students who would benefit most from additional support in accessing online tools, plus additional timetabled computing lessons.

The school additionally runs an award-winning STEM club, which prioritises access to under-represented or disadvantaged groups, and regularly incorporates diverse career role models into computing lessons and homework activities, so that every student feels they can aspire towards a successful tech career, regardless of their own background.

Of the changes, Dring says, *"We've got a long way still to go, but we're working on creating routines and resources so that students who don't have the same level of access to digital support at home can still thrive without feeling singled out."*

Training and support

Our research shows that just 15% of state schools have access to regular training on digital learning tools, though a number of schools are working to change this. Some are now running regular 20-minute group training sessions, while others are setting up digital steering groups to tackle emerging trends, such as AI.

In Emma Darcy's view, *"This is where an effective digital strategy is crucial, as it can give headteachers and senior leadership teams a roadmap of priorities to address and in what order. It's not possible to do everything at once, but if you've devised a digital strategy created in conjunction with your school improvement priorities, the actions you take will have real impact.*

"If every school was required to have a digital strategy, we could all then work to further explore and overcome the digital barriers facing our staff and students. If Ofsted came in and asked to see a digital strategy, for example, most schools would prioritise this, because they have to."

There may be a pressing need to address the digital challenges facing schools and their learners, but at the same time, it's important to remember that not everything has to move at lightning speed. Darcy points to initiatives like Digital Leaders (digileaders.com) and the Apps For Good Programme (appsforgood.org), both of which allow schools to demonstrate that they're taking their digital strategy seriously, while waiting for investment to catch up with aspiration.

Like many, Darcy believes that the most important thing schools and the wider education community can do is continue to be outward facing, learn from others and decide where they want to be in the coming years.

ABOUT THE AUTHOR
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For more insights from The Pearson School Report, and to explore how Pearson are working with the sector to promote digital innovation and equality, visit go.**pearson.com/DigEq23**

3 things we've learnt about ... SMARTPHONE USE IN SCHOOLS

As the government floats the idea of banning smartphones in schools, Teacher Tapp finds out how educators' own previous attempts have fared...

1 What policies are in place?

In July this year, a UN report (see bit.ly/ts126-NL1) expressed concerns over how smartphones were being used in schools, going so far as to recommend they be banned from school sites to reduce disruption. It's not a new debate in England though, with many schools already having some kind of ban in operation.

Back in 2018, fewer than half of secondary teachers stated that phones weren't to be used in school under any circumstances. Today, that figure stands at 60%. The extent to which these rules are consistently enforced, however, is a different matter.

More than a third of secondary teachers say that smartphone rules aren't consistently enforced by all staff in their school. Headteachers are notably the most likely to think that rules *are* being consistently enforced, demonstrating a clear contrast between the views of leadership and classroom practitioners.

2 Do bans actually work?

Where schools afford students relative freedom regarding their smartphone use (allowing them to be used at breaktimes, or even in lessons when directed) 47% of teachers say that students also take them out without permission. At the other extreme, where phones aren't used at all, 27% have observed students using them without permission.

This may be a case of correlation rather than causation – but still, it paints an interesting picture. We shouldn't overlook that 27% of teachers is still a huge number who are reporting that smartphones are being taken out in lessons.

In general, the smartphone issue in schools does appear to be getting worse. So far this year, 38% of of secondary teachers have seen students taking their phones out in lessons without permission, which is up two percentage points compared to last year alone.

3 How are less experienced teachers responding?

It's widely accepted that if you're new to the profession, learning how to manage student behaviour is one of the more difficult challenges you can expect to face during those first few years.

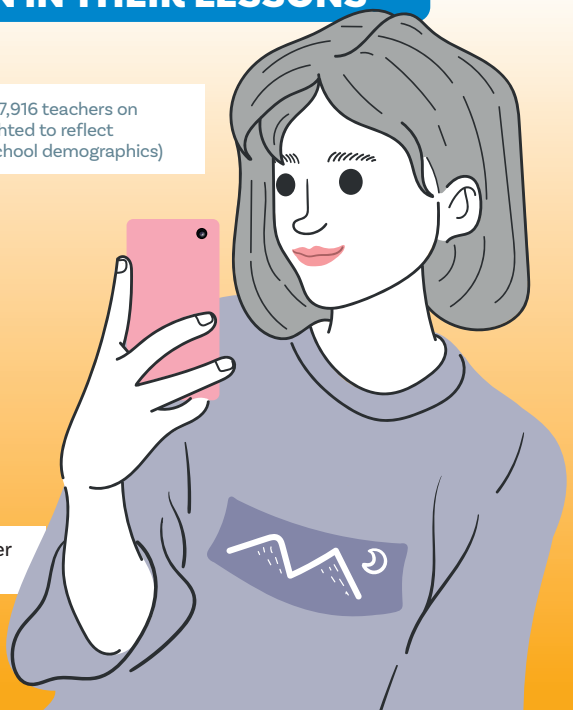
The need to carefully manage students' smartphone usage is especially pertinent here, with almost half of those secondary teachers with less than five years' experience saying that on any given day, a student will take their smartphone out without permission.

More experienced teachers can find themselves contending with this too, but to a significantly lesser extent, with just 29% expressing similar sentiments. As is the case with other behaviour-related disturbances, the profession's less experienced teachers have frequently expressed wanting more support to help them with these kinds of disturbances.

Returning to our main question, then, is there evidence that smartphone bans work? Yes, a bit – but bans alone won't solve the problem.

PROPORTION OF TEACHERS STATING THAT STUDENTS HAVE TAKEN OUT SMARTPHONES WITHOUT PERMISSION IN THEIR LESSONS

Question answered by 7,916 teachers on 04/05/23 (results weighted to reflect national teacher and school demographics)



For more snappy insights like this, and to be part of the panel, please join in via the free Teacher Tapp app available to download for iOS and Android. You will learn something new every day.

(CR1100F)

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