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Back to School: The technological legacy

During lockdown, we saw rapid advances and innovation in the use of education technology by schools, teachers and students. What will the legacy of this be? How should teaching and learning change? This guide considers what lessons we have learned and the issues schools should be considering in the months to come...

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Making remote learning work

As the fight against coronavirus continues, remote learning is here to stay and must now be adapted and embraced as part of our range of teaching and learning approaches...

No school expected to be plunged so quickly into remote learning, with teachers and students separated from their peers and working from home. The learning curve has been steep – and it is on-going.

On the plus side, thanks to increased amounts of ed-tech and devices in schools, many teachers and students have been able to remain connected and learn within a virtual version of their in-school classes. We have seen how important this can be over an extended time in terms of maintaining a routine, trying to minimise learning gaps and even simply continuing the habit of learning when all other routines fell away.

Remote learning is not a natural or ideal scenario for either students or teachers. But with the pandemic rumbling on and on, it is one many will need to adapt to and embrace.

We are perhaps a bit late to the party, but blended and remote learning will likely be a part of the education landscape across the world from here on in.

What is different about remote learning?

Unlike a class environment where students can get support from each other and check things with their class mates, remote learning means that they suddenly need to become more self-reliant and proactive with their online questions to the teacher if they need clarification.

This is a huge change and one that risks the students simply “tuning out” if they do not understand. So lessons need to take this into account, as well as considerations such as screen exhaustion (RCPCH, 2019), the fact that not every student has a computer and may instead be accessing lessons via a small phone screen, reduced concentration and a lack of supervision (especially needed to help younger pupils remain focused).

Teaching comes first

Although the technology needed to

make remote learning happen is important, the teaching still comes first.

According to a research paper by the Education Endowment Foundation (EEF, 2020; SecEd, 2020), the thinking behind the structure of the lesson is the key: “Ensuring the elements of effective teaching are present – for example clear explanations, scaffolding and feedback – is more important than how or when they are provided.”

“Although the technology needed to make remote learning happen is important, the teaching still comes first”

Schools can help create more space for their teachers to focus on this more intricate mode of lesson planning and delivery by adopting straightforward, dedicated remote learning solutions that are easy to use, rather than complicated technology that could be a source of stress or distraction.

Visible and reachable

A sense of connection is important for students’ continued motivation and engagement, and technology provides teachers with a variety of ways to do this remotely. If their technology allows them to run “live” lessons by broadcasting their webcam and audio out to students, that is a great start.

But visibility can be more than just via webcam or video – the teacher can reinforce their connection to students by giving audio feedback, for example, or by using stickers or bitmoji and so on.

It is also beneficial for students to have the chance to initiate contact with their teachers, so it may be that they can make themselves available in a “break-out room” on a set day and time, where students can drop in and interact.

Build independent learning skills

The increased tech-driven environment is actually a great opportunity to help students gain the independent skills they will need for remote learning, now and in the future. Teachers can model the use of calendars, schedulers and reminders so students know when a specific learning activity (e.g. a “live” interactive session) is coming up or when assignments are due. They can also encourage the use of messaging and chat features to ask questions and share ideas – as well as teach the metacognitive strategies needed for resilience and perseverance, helping students to help themselves if they get stuck.

Peer-to-peer

Making provision for students to interact with their peers is vital. With nobody at their side to ask things like “what did Mr Smith say we had to do for question 3?”, creating an opportunity for students to communicate not only provides that support, but means they can connect with their friends and class mates for a while, albeit virtually.

Providing chances for peer interaction for activities such as discussions, collaboration, sharing and giving feedback can also go some way to sustaining engagement, especially when students are physically distanced.

Stay safe, protect students

We must all practise good digital citizenship. Age-appropriate internet controls, filtering and context-based keyword monitoring are all devices used within schools to keep students safe online. And with the right technology in place on school devices, most of those protections should be able to continue as students use them at home.

However, it is the teaching behind the concept of being online that enables students to develop good digital citizenship skills for themselves. Regularly reinforcing e-safety messages reminds them of the implications of their online interactions, as it is easy to feel

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protected from everything when separated from friends and peers while in isolation or lockdown at home (see Kingsley, 2020).

The digital divide

A major contributor to exacerbating the achievement gap between advantaged and disadvantaged students is the lack of access to technology – and it is an issue that schools do not have the capacity to solve alone. Simply providing school devices to students will not bridge the gap if families cannot afford broadband, so it is here that remote learning needs to diversify to help ensure students are not left behind.

Whether it is spreading the word about where those with school devices can go to access free internet connectivity (libraries, community centres etc) or pre-loading content onto devices to enable students to continue to learn offline, or providing paper-based learning resources, planning and delivering lessons is a much more significant task than in “normal” times.

FURTHER INFORMATION

- ▶ EEF: *Best evidence on supporting students to learn remotely*, April 2020: <https://bit.ly/3autoH1>
- ▶ Kingsley: *Creating safe digital ecosystems learning*, SecEd, August 2020: <https://bit.ly/31IMYOD>
- ▶ RCPCH: *The health impacts of screen time*, January 2019: <https://bit.ly/3kZKaN9>
- ▶ SecEd: *Research review outlines five keys to effective remote learning*, April 2020: <https://bit.ly/2VtRPA7>



Lockdown ed-tech: The good, the bad and the ugly



What have we learned about ed-tech during the lockdown? What worked? What didn't? What makes remote education effective? What teaching approaches should we keep?

We are facing up to a new school year and re-opening for all pupils. However, while classrooms are once again filling up, we need to accept that remote learning practice and technology will continue to play a part in pupils' learning for the foreseeable future and, rather than reluctantly trying to make it work as best we can, we should now embrace it and focus on how we can weave it effectively into our teaching and learning practice.

However, I have a confession: I have never really been a fan of blended or flipped learning. I think technology can often detract from learning and that the best teaching comes when an educated, experienced expert – a human being – stands at the front of class and engages in effective teacher explanations and modelling.

Having said this, there are undoubtedly advantages to blended and flipped approaches, and the experience of lockdown has brought these to the fore. It has, of course, also brought some of the challenges to the fore, too.

So, tenuously drawing on the Sergio Leone masterpiece *The Good, The Bad and the Ugly*, let us explore some of the advantages and disadvantages of ed-tech and what role it may play in teaching and learning in the months to come.

The good, the bad and the ugly...

Ed-tech has been ubiquitous during the lockdown – but that is not to say that all technology is equal or that the use of technology is always preferable to more traditional forms

classroom allows for more active learning. For example, the teacher can increase pupil engagement through online polling or asking quiz questions with instantaneous results. Digital textbooks that embed links to relevant materials or pupil-maintained course wikis can also make information more dynamic and engaging.

Second, technology helps promote fuller participation. Online polling and other tools help to engage all pupils, including shy pupils who would not normally

“We must consider the long-term goals for ed-tech post-lockdown. If we do not then opportunities could be missed and we will simply default to business as usual”

of teaching. The challenge for schools is knowing when to invest in tech and when to say no. The arguments are perhaps familiar...

The good

First, using technology in the

raise their hand. Online engagement systems allow the teacher to check-in with pupils at regular intervals in order to receive feedback on their learning.

Third, at the beginning of the lesson technology can be used to

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help the teacher gauge pupils' prior knowledge and understanding of a subject. For example, a quick, anonymous on-screen quiz can inform and direct what the teacher needs to focus on next. Setting the same quiz at the end of the lesson allows pupils to gain a sense of the progress they have made and allows the teacher to assess the effectiveness of their lessons.

Fourth, “gamification” – the use of competitive scenarios and the distribution of points and rewards – can make the classroom more fun and engaging and more relevant to young people's lives outside of school. Games also encourage pupils to accept challenge without fear of failure, because they instinctively know that gaming means learning from your mistakes.



Fifth, technology affords pupils instant access to new, up-to-date information. There is much value in having high-quality, expertly edited textbooks and other printed materials. However, information online is usually more up-to-date and young people are used to search engines.

The bad

For all these advantages, however, we are wise to remember that ed-tech can also be damaging.

Laptops or tablets in the classroom are shown by some research to be a distraction. Pupils learn less when they use computers or tablets during lessons than when they rely on more traditional resources such as class debates, textbooks, and pen and paper (Dynarski, 2017). Technology can disconnect pupils from social interactions and it can also foster cheating in class and on assignments.

Crucially – and as we have seen starkly in recent months – pupils do not have equal access to technological resources outside of school, often due to socio-economic differences. This must be addressed

if a school is expecting all pupils to use technology for remote learning, flipped learning or homework.

As Robert Halfon MP, the chair of the Education Select Committee, said in the House of Commons in June when he pushed the government on the progress of its free lockdown laptop scheme: “We know that about 700,000 disadvantaged children are not doing school homework and 700,000 do not have proper access to computers for the internet – so what (is) the government doing to help those disadvantaged children to learn again and avoid an epidemic of educational poverty?” (see *SecEd*, 2020a).

Finally, technology poses safeguarding concerns that cannot be ignored and we must ensure access for all pupils, including those with SEN or learning difficulties.

The ugly truth?

Technology can be a highly effective tool, but that is all it is – a tool. In today’s hyper-connected world, sensible use of technology can enhance education, but if used poorly or without appropriate instruction and supervision, it is

harmful and detracts from learning. The key to technology in the classroom is the teacher-pupil relationship, because that is where education happens – in the space between a teacher and their pupils.

“Should remote learning focus on the consolidation of pupils’ existing knowledge or should we be teaching new content?”

Technology is not meant to replace the teacher. And indeed, we do not yet know enough about approaches such as flipped learning to say conclusively that they work, or work as well as traditional instruction.

Ultimately, the success of educational technology depends upon how technology is applied to keep pupils engaged and active and how it can support new

experiences, new discoveries, and new ways of learning and collaborating.

Lessons from lockdown

We must consider the long-term goals for ed-tech post-lockdown. If we do not then opportunities could be missed and we will simply default to business as usual.

If we decide to embrace some form of remote teaching and learning in the longer term, then we might do well to reflect on what worked best during the spring and summer terms.

Could we, for example, make better use of digital resources for homework and independent study? Could we “front-load” some teaching by providing instructional videos for pupils to watch outside of lessons and therefore dedicate more class time to interactions with pupils in the form of discussions, questioning, redrafting work in response to feedback, etc?

The recording of such videos seems to have been one of the success stories of lockdown, with schools building up banks of resources. We can see the potential for reducing teacher and school



staff workload once these resources have been created.

Could we provide more retrieval practice activities online or in learning packs to aid long-term learning but without losing too much curriculum time?

Research evidence

The Educational Endowment Foundation (EEF) has examined existing research from 60 systematic reviews and meta-analyses for approaches that schools could use to support the remote learning of pupils (EEF, 2020; see also *SecEd*, 2020b).

When implementing strategies to support pupils’ remote learning, or supporting parents to do this, the EEF found that the key things to consider include the following:

- Teaching quality is more important than how lessons are delivered.
- Ensuring access to technology is key, especially for disadvantaged pupils.
- Peer interactions can provide motivation and improve learning outcomes.
- Supporting pupils to work independently can improve learning outcomes.
- Different approaches to remote learning suit different types of content and pupils.

Monitoring the progress pupils are making during remote learning is also key and peer interaction is identified as one way of increasing the impact of remote education. Approaches might include peer marking and feedback, sharing good work, or opportunities for live discussions.

The EEF’s report adds: “The value of collaborative approaches was emphasised in many reviews, although notably many studies involved older learners. Different approaches to peer interaction are likely to be better suited to different age groups.”

Elsewhere, a study by the National Foundation for Educational Research (Lucas et al, 2020; *SecEd*, 2020c) found that schools using a VLE to deliver remote learning saw levels of engagement eight percentage points higher than schools with no VLE use. This increases to 13 percentage points among disadvantaged pupils.

Schools using telephone or video calls to inform pupils about learning

“Could we make better use of digital resources for homework and independent study? Could we ‘front-load’ some teaching by providing instructional videos for pupils?”

activities had levels of pupil engagement three percentage points higher.

But schools using their websites to communicate with students and parents saw lower engagement levels (by five percentage points, dropping to eight for disadvantaged pupils).

The most common method of engagement reported by the schools was text message and email. And many school leaders, especially those in deprived areas, said they were delivering or posting out materials because of the problems with ICT access.

In terms of teaching and learning approaches, the report finds that schools delivering content to pupils via “online conversations” saw higher engagement, especially among poorer pupils. Also effective was setting activities involving consolidating previous learning or revising.

Teaching quality

For me, one of the key research findings for us to keep in mind when planning for the year ahead is that teaching quality is more important than how lessons are delivered.

The EEF concluded that pupils can learn through remote teaching but that ensuring the elements of effective teaching are present – for example clear explanations, scaffolding and feedback – is more important than how or when they are provided.

The EEF finds that there is no clear difference between teaching in real time (so-called “synchronous teaching”) and alternatives (“asynchronous teaching”).

For example, teachers might explain a new idea live or in a pre-recorded video, but what matters most is whether the

explanation builds clearly on pupils’ prior learning or how pupils’ understanding is subsequently assessed.

I would agree. It may be possible to make a success of video-conferencing in which the teacher delivers a “live” interactive lesson, but it can be hard to get this right, whereas pre-recorded video can be used effectively to deliver teacher explanations.

These videos usually work best when they are short, focused on a small amount of information at a time, given in clear steps, and when the explanations are concise. To complement and extend our video explanations, we might also share models of excellence with pupils, perhaps in the form of worked examples.

These can be shared via video, say by us producing a model on a virtual whiteboard or as additional written resources. Remember, no matter what the technology permits us to do, good models demonstrate what works and/or what does not.

Independent study skills

Another key finding is the value of strategies that help pupils to work independently. For example, prompting pupils to reflect on their work or to consider the strategies they will use if they get stuck have been highlighted as valuable.

The EEF’s report adds: “Pupils learning at home will often need to work independently. Multiple reviews identify the value of strategies that help pupils work independently with success. For example, prompting pupils to reflect on their work or to consider the strategies they will use if they get stuck have been highlighted as valuable.”

Wider evidence pooled by the EEF related to metacognition and self-regulation and suggests that disadvantaged pupils are likely to particularly benefit from explicit support to help them work independently, for example, by providing checklists or daily plans.

As such, once pupils have “attended” a webinar or watched an instructional video, they should be required to write about what they have learned. We might support this process by providing a knowledge organiser in advance, or perhaps just a simple, partially pre-populated Cornell note-taking pro-forma. Writing about your

learning is a form of self-explanation which is an effective study aid.

We also need pupils to practise the learning. We can support this by helping pupils to engage in self-quizzing, elaboration and generation, among other approaches.

And finally...

In planning the use of ed-tech for the longer-term – and when considering what forms of remote learning should be here to stay – it may be helpful to discuss the following questions in your school:

- What level of access do our pupils have to devices and connectivity?
- How much can we ask of our parents and families?
- How much can we ask of our staff and how will we balance the provision of online learning with classroom-based lesson planning and teaching?
- Should remote learning focus on the consolidation of pupils’ existing knowledge or should we be teaching new content?
- Is some form of remote learning desirable and sustainable for everyone over the longer-term?

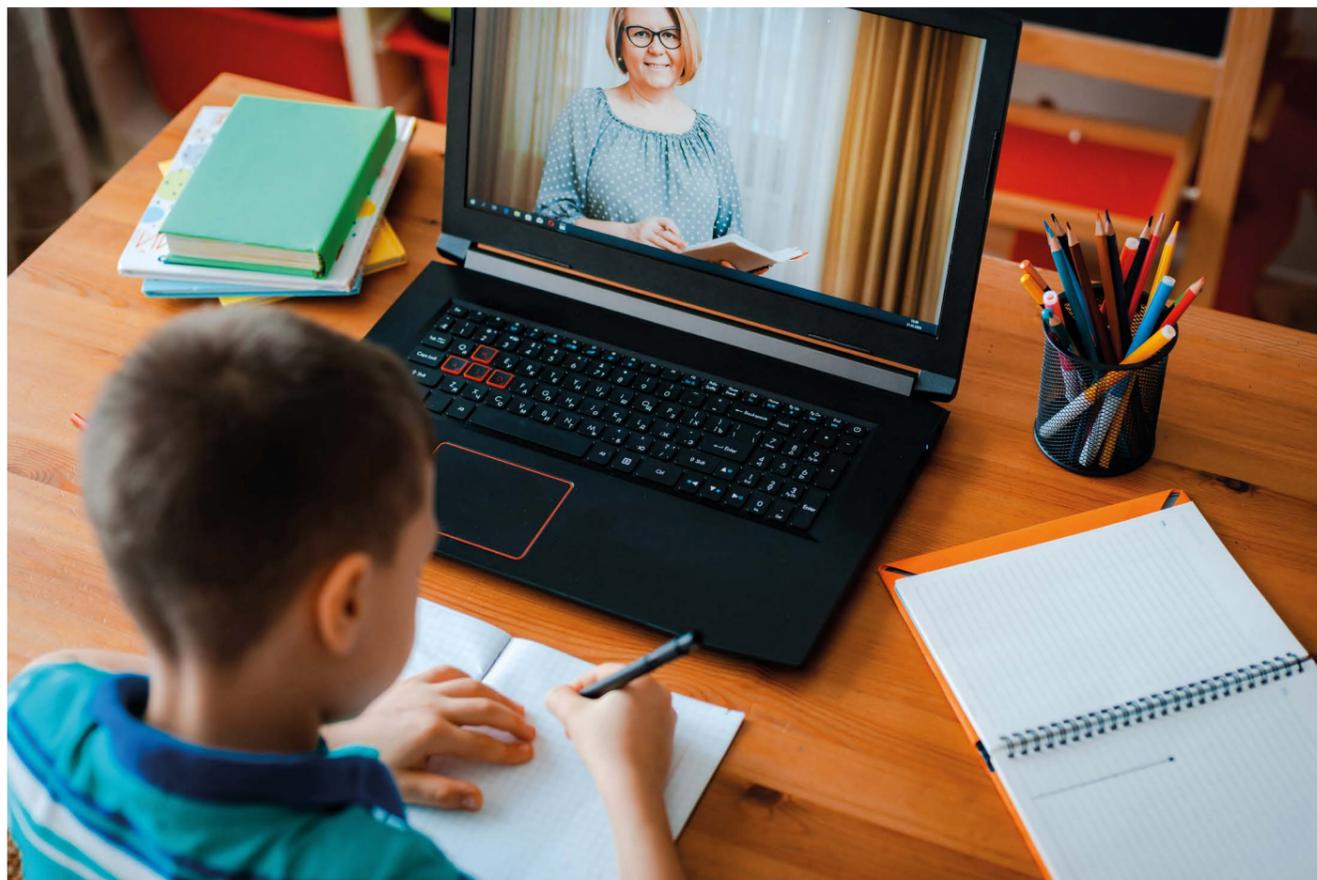
FURTHER INFORMATION

- ▶ Dynarski: *Laptops are great. But not during a lecture or a meeting*, *New York Times*, November 2017: <https://nyti.ms/2CaubSq>
- ▶ EEF: *Best evidence on supporting students to learn remotely*, April 2020: <https://bit.ly/3autoH1>
- ▶ Lucas, Nelson & Sims: *Schools’ responses to Covid-19: Pupil engagement in remote learning*, NFER, June 2020: <https://bit.ly/30ljCzL>
- ▶ *SecEd: Coronavirus: Williamson faces MPs’ questions over extending FSM vouchers and free laptops*, June 2020a: <https://bit.ly/2V3zsBa>
- ▶ *SecEd: Research review outlines five keys to effective remote learning*, April 2020b: <https://bit.ly/2VtRPA7>
- ▶ *SecEd: Study reveals most effective remote learning approaches*, June 2020c: <https://bit.ly/3hxqjig>



Five lessons from lockdown

Modelling, assessment, revision, parental engagement – technology has supported a number of advances in teaching and learning practice which look set to stay as schools re-open fully



A alarm goes off an hour later. Plug in the laptop. Check emails. Chase students. Speak to parents via Zoom. Pastoral meeting. Mark some work electronically. Deliver a lesson via video. Provide test feedback via video. Another lesson. Check emails. Close laptop. All in a day's work...

In a profession where we rely on physically interacting with so many people over the course of a day, in recent times it has been a tainted experience: me, my laptop and I. Technology has enabled us to stay connected, continue learning and has given us the opportunity to try new things.

So, as we face up to a new term in a world of Covid-19, what can we learn from our use of technology during the lockdown and how will this affect the way we now deliver the curriculum?

As already mentioning in this guide, during the lockdown, the Education Endowment Foundation (2020) examined existing research on ways school leaders and classroom practitioners could support the learning of pupils remotely.

Underpinning this literature review was a range of research into a variety of virtual learning methods and uses of technology to deliver remote learning:

- Chauhan, 2017: Encouraging peer interactions during virtual learning can accelerate progress and promote self-reflection.
- Cui and Zheng, 2018: Technology is a barrier for disadvantaged pupils and professional development for teachers is crucial when implementing new approaches.
- Poirier et al, 2019: The use of

blended learning – combining aspects of online instruction with classroom teaching – is beneficial and could improve learning outcomes.

- Chen et al, 2019: Shared online workspaces can support learning, particularly for secondary-age pupils.
- Batdi, 2015: Computer-assisted instruction (whereby pupils receive instruction through digital technology) is best used to scaffold/model a concept and provide feedback to students.
- Chen et al, 2018: Games for learning – games designed for educational purposes – can be used when scaffolding or specifically learning a foreign language. Last year, the EEF also published some useful guidance on how we can use digital technology to

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improve learning (2019). This is designed to support leaders and practitioners to make better, more informed decisions. The four recommendations are:

1. Consider how technology will improve teaching and learning before introducing it.
2. Technology can be used to improve the quality of explanations and modelling.
3. Technology offers ways to improve the impact of pupil practice.
4. Technology can play a role in improving assessment and feedback.



Lesson 1: A clear rationale

Throughout these past few months, we have had the opportunity to try different approaches using a variety of technology – some familiar software packages, some subscriptions that we forgot we had, and some completely new digital technologies.

A key lesson has been to ensure that we understand why we are using a certain technology.

It is of course useful to try new ideas with classes – even if it does not work the first time – but it is also important not to force an idea if there is no clear rationale for how the technology will improve learning.

The same goes from an organisational point of view. For example, many schools have seen positive gains from delivering virtual training sessions or taking part in governor meetings or community hub meetings online – anecdotally this has raised attendance and participation rates.

Lesson 2: Modelling and explanations

Providing high-quality explanations and modelling enables teachers to introduce new ideas to students in an effective way that is accessible and clear.

I realised (through trial and improvement) that students preferred different methods of lesson delivery. I recorded some live Q&A sessions using an interactive whiteboard to model how to answer certain questions and provided live feedback to students. These recordings were uploaded to a central file share and are available for playback at a later date.

Feedback from students was that they liked hearing their teachers' voices and it helped focus their attention as if they were in class. Other students benefited from watching linked videos on YouTube.

Going forward, this could be helpful. By using flipped learning, whereby students are introduced to a key concept prior to the lesson and classroom time is used to target support or provide collaborative learning opportunities, we can enhance independent learning.

Using collaborative workspaces (Microsoft Teams or Google Classroom) is a perfect way to centralise documents for future use and recordings of slides can be used for revision purposes and to assist

with the recovery curriculum this term.

Additionally, home learning activities could be uploaded as a slide, including verbal instructions on how to complete the task, which may allow accessibility for learners with additional needs.

Lesson 3: Practice and revision

We all know how important it is to give students the opportunity to practise a concept. This takes time and the timing needs to be right to ensure maximum retention.

- Technology can be used to increase the quality or quantity of practice – either in the classroom or at home. It has been simple to create quizzes for students to test certain skills, such as vocabulary in Spanish, dates in history, or key terms in business studies.
- Students have told me that they like the competitive edge of beating their score each week, they like that their scores are hidden from their class mates (low-stakes), and they find it an engaging way of learning.
- From a teachers' perspective, data is easily downloadable and quick to analyse. Any misconceptions can be rectified during or after a lesson.
- Research shows that increased pupil practice is more effective if spaced out (Dunlosky, 2013). I have found that students have improved their performance when they are given an online retrieval task every week based

on the previous week's work. Also, students can be assessed on a previous unit's topic, not the most recent one.

Lesson 4: Assessment and feedback

We use assessments to gauge students' progress and confirm how well they have learnt a specific skill or topic. Meaningful feedback is important to give advice on how well students have succeeded and opportunities to improve.

Technology can help to reduce teacher workload by making assessments more efficient and effective. Examples include providing whole class feedback orally alongside slides, talking through exam reports and student exemplar solutions. This can be delivered at home and lesson time can be used to target support to students who need it. Technology can also be used during lessons to provide teachers with immediate feedback via online quizzes or diagnostic questioning.

We also found that using technology to improve communication with home meant that when providing feedback to pupils, we were able to involve parents and carers much more easily – talking of which...

Lesson 5: Parental engagement

During these past few months, I have certainly reflected on how I engage with parents and the frequency of communications. Simple ideas include copying in

parents to my messages to students about overdue work or when praising outstanding work. Feedback has been that parents and carers appreciate being kept in the loop and have been more engaged with their child's learning. Could this become the norm? Many schools have also found success with virtual parent conferences – could this boost attendance for parent evenings?

FURTHER INFORMATION

- ▶ Batdi: *A meta-analytic study concerning the effect of computer-based teaching on academic success in Turkey, Educational Sciences: Theory and Practice* (15), 2015.
- ▶ Chauhan: *A meta-analysis of the impact of technology on learning effectiveness of elementary students, Computers & Education* (105), 2017.
- ▶ Chen et al: *The role of collaboration, computer use, learning environments, and strategies in CSCL, Review of Educational Research* (88), 2018.
- ▶ Chen et al: *A meta-analysis examining the moderating effects of educational level and subject area on CSCL effectiveness, Knowledge Management & e-Learning* (11), 2019.
- ▶ Cui & Zheng: *A meta-analysis of the peer evaluation effects on learning achievements in blended learning environments. In Blended Learning*, Cheung et al (eds), 2018.
- ▶ Dunlosky et al: *Improving students' learning with effective learning techniques, Psychological Science in the Public Interest Supplement* (14), 2013.
- ▶ EEF: *Best evidence on supporting students to learn remotely*, April 2020: <https://bit.ly/2VPFOt0>
- ▶ EEF: *Using digital technology to improve learning*, March 2019: <https://bit.ly/2BK4WGf>
- ▶ Poirier, Law & Veisapak: *A spotlight on lack of evidence supporting the integration of blended learning in K-12 education, International Journal of Mobile and Blended Learning* (11), 2019.





The future is blended

Do you remember the VLE revolution? Well the Covid-19 lockdown could be the first step on the path to a future of BLEs – blended learning environments...

Nothing drives progress like necessity. Schools have embraced digital home learning wholesale since the lockdown on March 23. Indeed, digital learning was the only way to efficiently deliver education en masse.

But let's not get too ahead of ourselves. This is nothing new. Twenty years ago, schools began operating virtual learning environments (VLEs as they were known) that were safe, enclosed learning spaces that children could access just as easily in school as at home.

Sadly, the technology was too-often cumbersome and VLEs failed to take hold. But the idea and the potential was there.

What is happening today is that schools have shattered the status quo. There is now a tangible bridge between home and school. The path to a future of blended learning approaches can be seen clearly.

So, what has allowed this to happen so rapidly? It all comes down to some key ingredients, including better understanding of the technology and scalability.

We are at a point now in most schools where most members of staff are naturally tech-savvy (many have been brought up with technology). This was not the case 20 years ago.

Furthermore, with the bloom in smart devices and the ever-falling price of things like iPads, Chromebooks or tablets, the ready resources are easily available in school and at home (I will come to the digital divide later).

And nowadays much of the technology that we use in schools is not that complicated. Home learning programmes such as Mathletics, Accelerated Reader, My Maths or Spellodrome have been around for many years. Coupled with Microsoft Teams or Google Classroom and you suddenly have familiar apps partnered with powerful tools.

Very much like the original concept of VLEs, schools require some sort of common space for

The power of BLEs is that they combine key elements of school life in one place: resources, communication and feedback ”

groups or classes of pupils to populate. These platforms, that are intentionally designed to imitate a school, are increasingly referred to as Blended Learning Platforms (BLEs).

A BLE is not so very far away from a VLE. It is likely that over the last few months your school has adopted either Google Classroom or Microsoft Teams (Apple's cloud is very effective but has the price tag to match) to act as your school's BLE. Both offer a core package of tools that cover classroom essentials.

In Microsoft Teams, for example, students and teachers have access to Word, Excel and PowerPoint. Google Classroom provides similar applications through Google Docs, Sheets and Slides.

These online tools make it simple for teachers to send class materials, mark learning, conduct assessments and monitor pupil progression. Meanwhile, pupils can seamlessly collaborate with class mates, submit learning digitally and access class materials at home. Arguably, Google has stolen the march on this for two core reasons; time invested in developing its platform along with the range of resources and cost.

The power of BLEs is that they combine key elements of school life in one place: resources, communication and feedback.

Recently, a friend of mine shared a story of their youngest daughter, who was chatting to her friend on one device while they completed a presentation on another.

Both of these young people were

working on the same piece of learning and chatting about it as they would in class. The distance was irrelevant. As far as my friend's daughter was concerned, her friend was practically beside her while they worked.

Schools understand this. We are communication hubs; everything we do is about imparting information. It is for this reason that we have seen a bloom in virtual meeting spaces.

I ran a training programme recently on Zoom for parents, introducing them to the school's BLE. One parent shared her concerns about being able to use the technology. I asked her if she had ever used Zoom before the Covid-19 lockdown...

The technology is the same, it is just in a different format and is now combined with the range of tools needed to operate a classroom. It is not necessarily complicated, it is just unfamiliar.

Both were working on the same piece of learning and chatting about it as they would in class. The distance was irrelevant ”

For children, the reverse is probably true – which may create other problems in the short to medium term, because many children have taken to remote learning extremely well and will not want to go back to “business as usual” in the classroom this term. This should give us all pause for thought.

This blend of a learning environment is now very familiar. Pupils expect to be able to switch seamlessly from a YouTube video, to Class Satchel or Google Classroom. They expect to have the whole of the internet at their fingertips for research purposes. Or they expect a White Rose Hub or a Khan Academy

Tackling this clear and present danger will be the biggest challenge facing both schools and education policy-makers in the next decade.

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video to help explain their maths problem and then to be able to apply their learning immediately. They will expect to continue working this way when they return...

And of course, what all this potential does, unfortunately, is expose the digital divide. If a BLE approach is to work then the thousands of families across the nation who do not have access to devices or the internet must be catered for.

There is another divide, too. Schools have had very poor digital investment over the last 10 years and the funding situation is not likely to get better any time soon.

What this crisis has done is expose two things: how reliant the country is on teachers buying their own computers or managing on ageing devices (my PC literally takes 10 minutes to boot-up); and the significant percentage of the population that does not have access to reliable devices at home.

It is here that we see the greatest divide. We assume that if a parent has a smartphone then they will have a larger device at home, but what this crisis has exposed is that this is a false assumption for many and something we have chosen to ignore for many years.

For some pupils, sadly, their learning did stop on March 23, and while we have heard a lot about one-to-one tutoring and catch-up, this will not address the real problems. More than ever before, if a pupil does not have access to the right resources their potential will be limited. And even more so in a future of blended learning and a combination of remote and in-class education.

Tackling this clear and present danger will be the biggest challenge facing both schools and education policy-makers in the next decade.



Digital strategy post-Covid

With the future still uncertain, digital plans for schools have taken on a new significance and we must ensure that ed-tech can be used effectively both in-school and remotely...

Whether you are starting a digital strategy from scratch or simply adapting it, the first thing to do is reflect. As well as identifying the areas that are digital priorities, it is also necessary to look backwards to get a clear picture of the technology currently used in your school – and if or how that has changed during the lockdown. You can then decide which solutions are effective and are delivering impact.

The word “impact” itself can sometimes be a barrier as it may give the impression that everything must deliver measurable evidence of progress. However, it can be more than that. It is about saving time. It is about saving resources. It is about promoting wellbeing – and much more. Some of those things are less tangible when it comes to measurement.

For example, recent months have shown that using tools like Teams, Hangouts and others has significantly helped with peer-to-peer and teacher-to-teacher engagement and collaboration. Those kinds of benefits are not things that necessarily filter through to school data and results.

At the heart of your digital strategy are students and teachers. The core areas to consider are:

- Enhancing learning outcomes and supporting pedagogy.
- Increasing staff, student and parental engagement.
- Allocating training time to ensure teachers are confident with using the tools (especially important when thinking about trust-based operations, where staff are potentially required to work in different locations).
- Implementing collaborative technologies.
- Thinking about how, as a school or trust, technology can be used to promote digital wellbeing.
- Employing sustainable, cost-effective solutions.

It is worth noting too that a clear digital strategy can deliver additional benefits for a MAT or federation of schools. For instance,

there are significant economies of scale when it comes to buying technology collectively in bulk, rather than piecemeal as standalone schools. Standardising solutions across all schools in a group, as well as centralising their control and maintenance, can also help achieve better value for money.

Three golden rules

Be clear: First and foremost, keep it simple. Complicated strategies (and/or revisions) are often less flexible and more likely to disenfranchise the whole school community. It is much easier to concentrate on one or two key changes and ensure sufficient time for CPD to build staff confidence than it is to try to introduce lots of changes at the same time.

Recognise when tech is needed – and when it is not: It is important not to fall into the trap of using technology for technology's sake. The question to ask that gives you maximum insight into your school's IT situation is: would anyone notice if it was gone? It is important to recognise that technology is not the panacea for everything, it is simply there to support good teachers in delivering great lessons.

Work within your budget: Start by looking at where your existing technology can multi-task and bring you savings (in time, money or both) and also at technologies that you are paying to lease or maintain, but which you are not really using. You can then redirect the money saved to a different area of your strategy. Ensuring your plan is sustainable over time and that your existing technology will continue to add value will provide consistency for everyone.

Ed-tech post-Covid

How has Covid-19 affected how we think of a school digital strategy? We all know that the method of delivering teaching and learning has changed fundamentally in the last few months and, for many, there is no going back. There is now a new

emphasis: the requirement for schools to consider what technology will work best for them both inside and outside of the classroom.

Blended learning

The biggest change is undoubtedly the use of the blended learning model and I believe that this is here to stay. I have heard countless stories of its benefits, particularly regarding engagement, and it offers greater flexibility for both teachers and students. For example, it could be used on snow days so that students do not miss a day of learning, or for delivery of revision classes during the Easter holidays, so students and teachers do not have to come into school.

Of course, more technology-based remote learning throws up its own challenges – namely, the digital divide. Technology itself cannot fix the challenge of students either having no access to it at home or access that is limited or shared with parents and siblings. So, with that in mind, blended learning is likely to be best employed as a supportive platform alongside more traditional methods.

Other tech possibilities

At the core of every digital strategy is the need to make evidence-based choices about classroom technology that supports pedagogy. However, we also need to consider whole-school technology, particularly the role it can play in student safeguarding and pastoral care, on and off-site.

The ability for teachers to use technology to maintain one-to-one relationships with their students – whether in the classroom or over a remote connection – will remain vital in the months to come, especially for quiet or vulnerable children. It will be important in order to build normality into their schedules as well as to provide reassurance where it is needed.

Now that the blended model has come into play, another thing to think about is ensuring that teachers have the tools to create

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and distribute resources effectively – and that students can return their work just as easily. Choosing the right technology can really streamline this process and prevent an unnecessary extra burden for teachers.

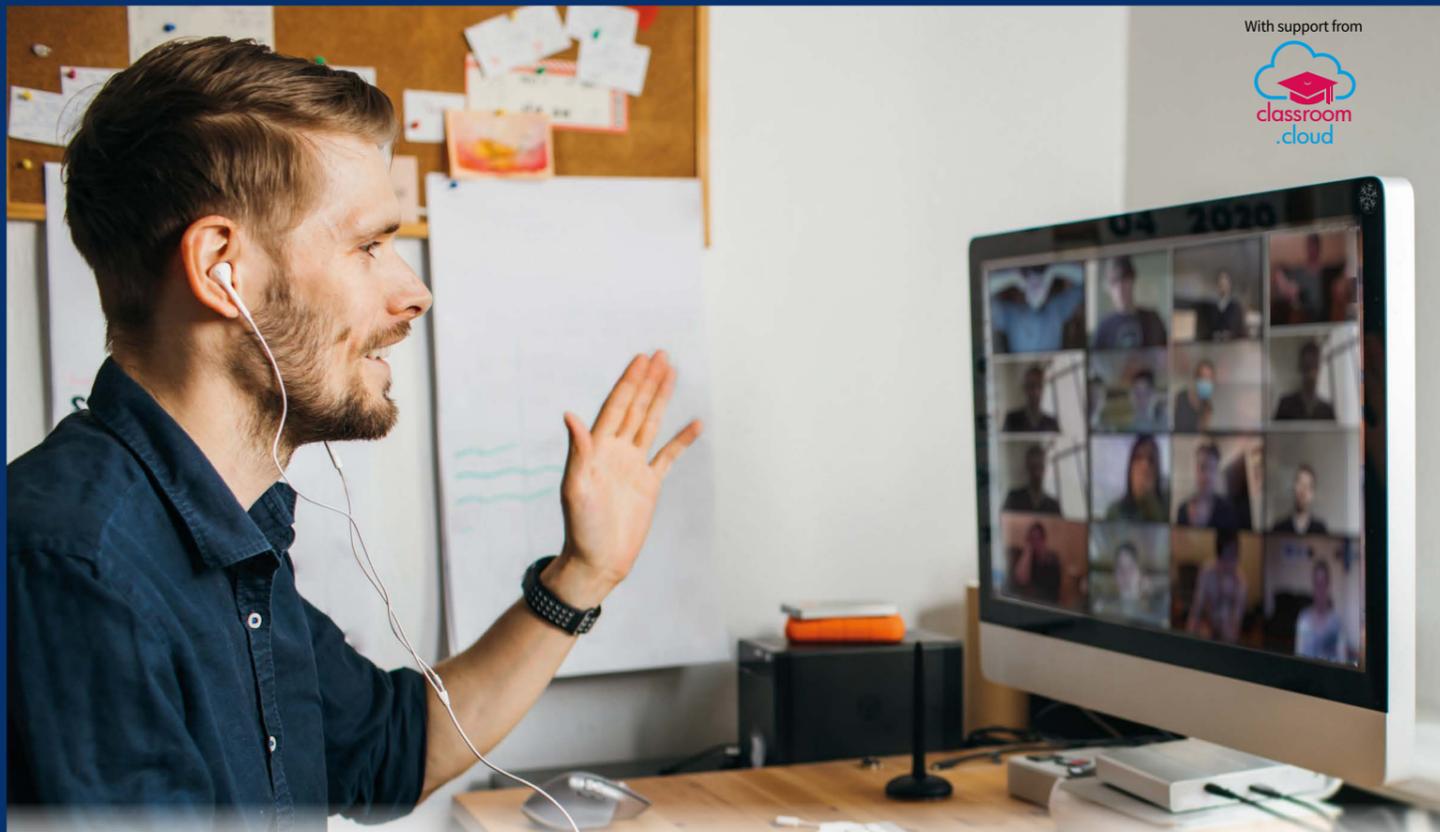
In addition, ed-tech that enables teachers to provide timely feedback to students about their progress is critical to maintaining learning momentum and motivation (especially for remote learners) – and tools that can help provide enrichment activities also need to be on the list for consideration.

Reflect and revise

For many schools, Covid-19 has been a catalyst to start the conversation about digital strategy. Some were already some way down the path; others less so, and they have had to catch-up quickly. What needs to happen now is that the areas that have benefited from an online approach through necessity (e.g. collaboration, communication and pedagogy) are not lost as “normality” returns. There are ways that many of those facets can be incorporated into the standard methods of delivering teaching and learning in classrooms.

FURTHER INFORMATION

- ▶ Al Kingsley has co-authored a guide to creating a digital strategy in education: www.schooldigitalstrategy.com
- ▶ Al Kingsley was among the guests on SecEd's best practice podcast, Technology & Digital Strategy in Schools (July 2020): <https://bit.ly/3eRqXkH>



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Changing working practices

From flexible working and CPD to workload and staff wellbeing, the lockdown innovations in working practices must not be forgotten as schools re-open fully...

A British Psychological Society report entitled *Back to school: Using psychological perspectives to support re-engagement and recovery* (2020), says that “research following other community crises have highlighted the importance of clear, open and decisive leadership in building resilient communities”.

The basic principles of good leadership, the report says, are as follows: listen, learn and then act. I would contend that listening and learning are particularly important while we are in the process of rebuilding our schools following the coronavirus lockdown.

Despite the many obvious negative consequences of Covid-19, we must also try to find some positives. Indeed, post-traumatic growth theory highlights the potential for positive growth and development as a consequence of trauma and challenging experiences (Tedeschi et al, 2018).

members. Indeed, schools at times have been several steps ahead of government, for example when finding ways to feed disadvantaged pupils or in providing ICT kit to pupils in need.

Build back better

Behind the concept of post-traumatic growth theory is the idea of Build Back Better, which is an approach to post-disaster recovery aimed at increasing the resilience of nations and communities to future disasters and shocks.

As a guiding principle, it was adopted by the UN Member States as one of four priorities in the UN's Sendai Framework for Disaster Risk Reduction 2015-2030.

The concept has since broadened to represent a wider opportunity, not just to restore what was damaged or lost to the impact of disasters, but to build greater resilience in recovery by systematically addressing the root causes of vulnerability.

So, what can schools learn from the coronavirus crisis about the ways in which they operate? What can be “built back better” in terms of their working practices? And,

more specifically, given the rapid advances we have made in terms of education technology, how can schools harness these innovations to improve teaching and learning and professional practice in the long run?

These are some of the questions I posed via social media recently. I asked: what new working practices have been effective during the lockdown and should be retained when schools return to normal?

Top of the list was remote meetings via video technology, both with colleagues and external partners. It is anticipated that this will save on travel and time in the future. Another development that you can expect to see is the flexibility to actually work from home should you need to.

Also, online, on-demand CPD has been a revelation for some. Linked to this, remote training has been “a great way for our team of part-time staff, who work in different places, to keep in touch”.

So, let's take a closer look at what we have learned about these three areas – meetings, flexible working and online CPD – and how they might develop going forward.

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Virtual meetings

Donna Tandy, deputy CEO of the Focus Trust, which runs 15 primary schools across West Yorkshire, Greater Manchester and Cheshire, said that the experience of Covid-19 has helped her MAT to appreciate the possibilities to connect with staff from across their schools in more effective and convenient ways.

She told me that weekly Zoom meetings between the trust team and the principals and heads of academy, virtual governing body meetings, and fortnightly sessions with staff from all year groups have really helped. These meetings have also “supported teaching staff to connect and professionally develop”.

Using technology in new ways during the lockdown has also, Ms

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Tandy explained, “increased engagement with our families and communities, via Twitter and Facebook daily challenges, films from school staff with positive messages, welfare telephone calls home, and working with local welfare charities”.

She continued: “Ironically, by having virtual meetings, we have ‘met’ with more staff and really enhanced the feeling of being part of the trust as well their own academies. (Lockdown) has allowed us to be more efficient with time and costs on meeting face-to-face, as no travelling time means more contact can be made with more people – and no travel expenses”.

Shazia Khan, director for humanities and head of religious studies and citizenship at the Feversham Academy in Bradford, an all-girls’ secondary school, also told me that meetings have improved during lockdown because her school has come to realise that many of them “can be done online and can be done at various hours, (which is helpful) when people have families and need to get off after school”.

Online meetings “allow parents like me to have the pleasure of collecting their own children and family time” and a positive consequence is that participants are often “fresher for the meeting”, Ms Khan added.

Flexible working

Facebook has said that it is planning to shift towards a more remote workforce as a long-term trend, reportedly telling staff that it is “aggressively opening up remote hiring”.

Flexible working policies suit staff who are anxious about returning to offices while giving breathing space to companies as they introduce new social distancing measures, but it can also help retain good staff who wish to work more flexibly for a range of reasons, not least childcare. Our recent experiences of lockdown have the potential to lead to changes to our school day and to working patterns for our staff, too.

For example, many schools can harness the technology they have invested in during lockdown, such as virtual meetings and online on-demand CPD, to ensure that part-time staff are not at a

disadvantage and can participate fully in school life. What's more, this may lead to more schools recruiting part-time staff or allowing existing staff to work more flexibility.

Flexible working, including part-time working and job shares, has been identified by the NFER's workforce research as one key to resolving the current teacher retention crisis (see *SecEd*, 2019).

And the Department for Education-commissioned report *Factors affecting teacher retention* tells us that flexible working and part-time contracts are generally viewed positively by teachers and likely to improve recruitment and retention. Some teachers in the research viewed these as a way to secure a better work/life balance (DfE, 2018).

A majority of primary teachers are female (75 per cent according to the DfE's latest figures) and many have young children – 54 per cent according to a survey from Teacher Tapp, 40 per cent of which have children under the age of eight. As such, flexible working can be particularly impactful in primary schools.

In another Teacher Tapp survey, 42 per cent of teachers said that they would like to reduce their hours, with 78 per cent saying they would prefer a four-day week. There is little doubt that technology can help support the move to flexible working and therefore boost retention and recruitment in schools.

Professional development

One casualty of the lockdown has been teacher CPD in the sense that face-to-face training, such as school INSET days, conferences and open courses, have been cancelled or postponed.

However, in the place of these, new ways of professional learning have emerged. Many of these are not actually new, of course, but were rarely used in the past as most schools and teachers stuck with what they knew best – a face-to-face training course.

Face-to-face courses are often highly valuable and a way of networking as well as learning from the trainer. But they are also time-consuming and expensive, not least in terms of lesson cover.

Now, thanks in part to the lockdown, many more teachers are engaging in online on-demand CPD,

BACK TO SCHOOL WORKING PRACTICES

virtual conferences, and CPD in other forms such as reading research and engaging in online networks. On-demand training provides greater flexibility and can be accessed and worked through at a time and pace suitable to the teacher, making it much more personalised.

Online CPD does not impact on teaching commitments, either, making it less disruptive and less costly for schools. Indeed, Fiona Aubrey-Smith wrote an excellent article in *SecEd* and *Headteacher Update* suggesting online CPD ideas during the lockdown (2020).

Ms Khan, meanwhile, told me that, while she and her colleagues missed face-to-face contact with colleagues and pupils in schools, the lockdown undoubtedly brought about a number of positive changes to their CPD practices and staff wellbeing.

She explained: “We have embraced the many under (or unused) features of Microsoft 365 and Teams to improve our efficiency and impact positively on workload.”

“This will definitely continue. One of the key aspects of the new technology has been its use to engage with all staff at all levels across a wide geographical spread, certainly for teaching assistants and support staff, meaning we can offer high-quality CPD.”

Staff wellbeing

Our experience of lockdown could help us improve our approach to staff wellbeing and welfare. And of course staff wellbeing will be more important than ever in the coming months because the coronavirus crisis has put teacher's mental health and wellbeing under intense pressure, just as it has for students.

Recently, more than half of primary school teachers (59 per cent) and 49 per cent of secondary school teachers told a YouGov TeacherTrack survey, commissioned by the charity Education Support, that they were experiencing higher than usual levels of stress and anxiety because of the lockdown. And more than half of the calls to the Education Support confidential helpline are currently related to coronavirus, the charity says (Howells, 2020).

Education Support says that this is because teachers have been struggling to juggle online learning

with school rotas and many have also been trying to home-school their own children.

Technology can help here, too, by providing more flexibility in the way teachers work and facilitating a healthier work/life balance as a result. Staff can also use tech to help keep in touch with each other and to offer support to colleagues. Tech can be used to provide helpful information, too. Many schools have, for example, used tech to create social gatherings for staff so that they have been able to connect on a personal level with colleagues and alleviate some of the stresses of lockdown.

Back at the Focus Trust, Ms Tandy told me that her MAT has used technology to run “staff wellbeing activities (such as) quizzes, bingo, physical challenges” and so on.

Conclusion

So as schools begin to return to some sort of normality, we must keep asking what that new normal should look like. What can we stop doing? Which working practices common before lockdown have proven unnecessary or unhelpful? Conversely, what working practices adopted during lockdown have proven effective and helpful and should therefore continue? And what can we do differently as we return to the new normal?

FURTHER INFORMATION

- ▶ Aubrey-Smith: *Ideas for teacher CPD during lockdown*, *SecEd*, April 2020: <https://bit.ly/3BLyf35>
- ▶ BPS: *Back to school: Using psychological perspectives to support re-engagement and recovery*, May 2020: <https://bit.ly/2DNZMtw>
- ▶ DfE: *Factors affecting teacher retention*, March 2018: <https://bit.ly/2klz9Nd>
- ▶ Howells: *Supporting school staff worried about the impact of Covid-19*, *SecEd*, May 2020: <https://bit.ly/30hOzSM>
- ▶ *SecEd*: *Schools given strategies to help boost part-time working*, June 2019: <https://bit.ly/30glFSP>
- ▶ Tedeschi et al: *Post-traumatic growth: Theory, research, and applications*, Routledge, 2018.



Safeguarding and technology

It is likely that children’s lives and learning will remain at least partly focused online for months to come and schools will have their part to play to ensure that pupils stay safe

Technology provides incredible opportunities. For one, it allowed us to shift learning and teaching online at a time of national emergency. Our connected world has helped many children to stay in touch with their learning. It has also made it possible for them to stay in touch with their friends at a time of physical isolation. There are lots of examples of young people interacting with technology in inventive, positive and supportive ways.

But with many children’s lives and learning likely to remain focused online – at least in part – there are risks which they and their teachers and parents need to be aware of – headline risks such as grooming and online bullying, as well as boredom (which can lead to risk-taking).

Schools and parents of course have a responsibility to ensure that our young people are spending that time online in the right way. However, it is just as important that youngsters feel empowered to make the right choices too.

It is easy to take a top-down view about these issues, but we see that many young people are concerned about the issues around managing screen time too, and looking after themselves and their friends online. We need to be doing everything we can to give young people the skills

they need to manage the online risks they face so that they can look after themselves and others.

Schools need support to help children and young people navigate these risks. This is why Childnet and EduCare started working together last year to develop an online safety course to help teachers and leaders. The course is designed to help teachers and support staff understand how technology is changing, the nature of the online world for children and young people, the risks they face, and how to work with them to develop a safe online culture.

It is clear that there has been a huge appetite from teachers and support staff across the country for this kind of support since the start of the pandemic. During the first months of 2020 an average of 3,000 school professionals were completing our online safety course every month. This shot up to an average of nearly 11,000 a month in April and May.

While training, support and information is crucial to help our young people through this extraordinary period we also need to look further ahead. As schools finally return fully there will be a great focus on helping pupils make up for lost time in the core curriculum areas. And we believe that online safety has to be one of the fundamentals as we go forward.

Keeping safe online has been a theme running through the lives of schools and their pupils since before the lockdown began and it is so important that this continues, particularly given the current environment. And we know that this education works best if it is present throughout the curriculum and the whole school community.

Schools and policy-makers have made progress in this area in recent years. For example, the statutory guidance *Keeping children safe in education* has specific duties for schools and colleges in England on teaching about online safeguarding, as do the statutory requirements on teaching relationships and sex education (RSE) and health education.

A partnership like ours is a good example of how schools can be supported to play a more active role in online safety. We all need to continue to work together and be careful not to be complacent because the online society that is such a prominent part of the lives of children and young people today will continue to rapidly change as it charges ahead, perhaps at an even faster rate in the future.

Advice for schools

It is vital that all those working with children and young people:

- Have an awareness of the risks and trends online.

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...is a pastoral care specialist at EduCare: www.educare.co.uk

- Have appropriate online safety training.
- Work with and learn from young people about what they are doing online.
- Are aware of their digital footprint.
- Make sure that any technology used within the organisation is used appropriately.
- Have appropriate routes to support and report.

Online awareness and safety should be embedded into the school’s ethos and delivered through the curriculum. It should be relevant, current, engaging and embedded. All schools should have:

 - Clear reporting procedures.
 - Monitoring systems.
 - An acceptable use policy.
 - An online safety policy or inclusion of this area within a curriculum policy.
 - An anti-bullying policy, including online bullying.