

HEADTEACHER

UPDATE



Embracing digital learning and innovation

As we look ahead, technology has the potential to enhance teaching and learning experiences like never before.

We're committed to empowering schools and their communities by inspiring digital confidence so everyone can make the most of their learning journey.

Whether it's by sharing top tips for online learning, hosting digital services used by millions of learners worldwide or working alongside you to explore what's next for edtech, we're here to help.

Discover more: go.pearson.com/TechHTU

Image © Shutterstock / DGLimages

PEUK80936 | Version 1.0 | UKS | Nov 2021 | DCL11-Public

Guide to... The Future of Digital Learning

Inside this guide

- What next for digital learning and edtech, post-pandemic?
- A new era of blended learning and how Pearson can support schools
- CPD to improve digital learning
- Parental engagement: Building on the lessons of Covid-19
- Assessment and homework practices
- How Pearson can support digital learning

GUIDE TO...

The Future of Digital Learning

The classroom of the future

The Covid-19 pandemic has, of course, been a difficult time for all of us, but it has also been a time of innovation. We have changed the way we communicate; we have changed the way we work; and crucially we have changed the way we teach and the way our pupils learn.

Digital learning, though certainly not new, has been brought firmly to the fore. Teachers and school leaders have worked tirelessly to adapt to a “new normal” which for most has consisted of a blend of pedagogic approaches including:

- Traditional classroom teaching.
- Live lessons delivered via video-conferencing software.
- The submission and assessment of work using online file-sharing platforms.
- Retrieval practice achieved through interactive tests and activities.
- Pre-recorded instructional videos available to watch at a time and pace that suits pupils.

Pearson has been working alongside schools and families to understand the impact of Covid-19 on digital learning, not least via its *#DigitalClassroomSurvey* which involved 6,817 educators and was published in February (Pearson, 2021). The survey revealed the profession's thoughts on this new normal. It explored the benefits of online learning, but also the challenges teachers have had to overcome and what they think the future of schooling might look like. It found that:

- More than three in five educators (64 per cent) felt that pupils' digital skills had improved as a result of the shift to online learning.
- Thirty-five per cent said that pupils' independent learning had improved during lockdowns.
- Eighty-one per cent said they thought that digital skills among staff had improved due to delivering more online lessons.

Teaching reflections

How will my teaching change in light of my experience of Covid? How will I embrace digital technologies to extend learning and help my pupils to become increasingly independent?

Leadership reflections

How will my school's recent developments in digital learning be integrated into our long-term whole-school planning and embedded in our practice?

- More than a quarter (26 per cent) said the move to online learning had led to increased creativity in lesson delivery and content.

What next?

Covid-19 has not yet been consigned to the history books. Although schools in the UK are now fully open and the majority of pupils are attending in person, the pandemic continues to cause disruption, with many pupils being forced to self-isolate or shield (around 250,000 at the time of writing). And a government directive makes it a legal requirement for schools to provide remote education to any pupil unable to attend school in person due to Covid regulations.

But even when this directive is removed, it is unlikely schools will ever completely return to previous ways. Indeed, the new normal for schools will be a case of building on what has been learned during the Covid-19 pandemic and giving more choice to teachers and pupils about how and when to learn.

As such, schools are now poised to embrace a more blended approach whereby classroom



teaching is complemented by various forms of digital learning – be that in the guise of pre-recorded instructional videos, interactive tests and quizzes, or on-screen assessments.

The *#DigitalClassroomSurvey* found that 59 per cent of secondary school teachers and 36 per cent of primary school teachers expected to see an increased use of on-screen assessment in the future, while 34 per cent of teachers predict that technology will drive-up parents' engagement with their children's learning in the years to come.

And more than one in three teachers (36 per cent) think there will be greater flexibility in teaching roles in the future, such as working from home or job-sharing, thanks to the use of digital technologies.

A plan for digital learning

This all means that it is important for schools not only to embed new ways of working digitally this year but also to begin planning for a longer term digital future.

A successful digital learning strategy requires forward-planning. Indeed, the lessons learned during the pandemic, if they are to be embraced and embedded, must form part of your current school improvement plan and be properly scoped, resourced and funded.

An important question for school leaders to ask now, therefore, is: How will our recent developments

in digital learning be integrated into our long-term whole-school planning and then be embedded in practice? Key to answering this is an understanding of how schools will ensure that the technological advances and successes seen during Covid are safeguarded and embedded effectively across the whole school rather than in isolation. In short, consistency will be key to the success of a school's digital strategy.

Vital questions for teachers to ask, meanwhile, are: How will my teaching change in light of my experience of Covid? And: How will I embrace digital technologies to extend learning within and beyond the boundaries of my classroom and help my pupils to become increasingly independent in preparation for their futures?

These questions anticipate a balanced response – that school leaders and teachers will want to retain as many of their “old ways” as possible while

The HTU Podcast

An episode of the *Headteacher Update Podcast* accompanies this guide, offering practical advice and tips for digital learning. Find this from December 1 via <https://bit.ly/htu-podcast>



complementing them with the “new ways” that worked best during the pandemic.

The term “new normal” is, therefore, a misnomer – rather the future will be a combination of old and new.

No-one is suggesting, for example, that we abandon classroom teaching or indeed printed resources altogether. Learning can be improved by combining effective classroom teaching with online learning and on-screen assessment, thus improving the effectiveness of homework and helping pupils to become increasingly independent and self-regulated as learners.

Nor is anyone suggesting that parents/carers never cross the threshold of the school gates again – but online parents’ consultation evenings have been a revelation for many schools, making parental engagement more convenient, timely and efficient. And what works for parents works for staff and governors too: video meetings and online CPD look like they are here to stay.

Tweak to transform

Most leaders know that the future is not about transformation; rather, it is about making tweaks in order to achieve marginal gains. Change must be incremental if it is to be effective. And thus, in terms of digital learning, the future is about embracing what works best and doing so in a balanced way.

In this guide, we will explore what such a balance might look like in your school.

We will explore the use of digital resources to improve and support school communications (including with parents/carers), data and tracking, and of course teaching, learning and assessment. We will also explore what this means for teacher CPD.

But we will do so while acknowledging the continuing importance of “traditional” methods of teaching, and this includes the use of printed resources.

Put simply: the future of the classroom is not about solely digital teaching and learning, as some might suggest, but rather it is about harnessing the best of both worlds – using technology to enhance traditional in-class teaching and learning and print resources to ensure pupils can learn wherever and whenever possible and be better prepared for a future that also embraces the digital world.

The guide has been produced in partnership with Pearson, a global learning company that provides high-quality digital content and learning experiences, as well as assessments and qualifications that help people to build their skills.

Les Hopper, director of digital and assessment at Pearson, estimates that despite the challenges of the pandemic, we have made three to five years’ progress with edtech since the first lockdown as education was transformed by online learning.

As for the future, Pearson believes that technology is here to stay – especially as 75 per cent of school leaders and teachers feel more teaching and assessment should be supported through technological solutions (Cuddihy et al, 2021).

And pupils agree: 90 per cent of UK learners surveyed in Pearson’s *Global Learner Survey* (2020) believe online learning will become a permanent part of education.

And the choice is now in educators’ hands. Pearson’s research shows that digital-only is not the approach schools are taking. Instead, the emphasis is now on how digital tools can enhance teaching and learning experiences, as well as how technology influences in-school communication and engagement with the wider school community.

Mr Hopper added: “Given the exposure to a plethora of tools, schools have become much more discerning and rightfully demanding in what they expect to see as standard. From Pearson’s perspective, it’s built a momentum that schools want to continue with and we want to support them in enhancing learning wherever and whenever it happens, but also boosting the skills students need for the future.”

References & research

- ▶ Cuddihy et al: *The future of qualifications and assessment for 14 to 19-year-olds*, Pearson, June 2021: go.pearson.com/QualsFuture21
- ▶ Pearson: *#DigitalClassroomSurvey*, February 2021: go.pearson.com/DCS21
- ▶ Pearson: *Global Learner Survey 2020*, August 2021: go.pearson.com/GLS20

More from Pearson

- ▶ For Pearson’s Digital Learning and Innovation Hub, see go.pearson.com/DLIHub

A new era of blended learning

Blended learning is a slippery term as it means different things to different people. For the purposes of this guide, we will define blended learning as a mix of in-class learning and digital learning, be that synchronous or asynchronous.

One aspect of in-class learning we will explore below is the use of print media but, otherwise, our focus will be on the use of digital technologies to extend the boundaries of learning beyond the school gates.

During the first lockdown in spring 2020, with only the children of key workers and vulnerable students attending school in person, most teaching moved online. For many schools, this formed a blend of:

- Live lessons delivered using video-conferencing software.
- Pre-recorded instructional videos either filmed by a school’s own staff or sourced from external platforms.
- Online games, tests and quizzes.
- On-screen assessments.

Put simply, we went from using technology in the classroom to using technology as the classroom.

While some aspects of remote learning necessarily remain in place this year for pupils unable to attend school due to continuing difficulties posed by Covid-19, many schools are committed to retaining some aspects of blended learning much further into the future.

Online learning is not only a means of delivering the curriculum more flexibly, of course, it is also a means of better preparing young people for the future.

The *Global Learner Survey* (Pearson, 2020) found that more than three in four people believe that education will fundamentally change as a result of the pandemic, with online learning becoming a key part of experiences for learners of all ages and economic uncertainty driving more people to upskill and reskill for job security.

Pearson has a strong heritage of supporting blended learning in ways that do exactly this. Their



Teaching reflections

How will you take advantage of blended learning this year? What are the different pedagogical considerations between different modes of delivery?

Leadership reflections

How will blended learning be used across your school in the future and why? How have teachers/leaders been supported in blended learning? What have we done so far and how could this be developed further?

research and conversations with teachers and pupils show that online learning has become and needs to carry on being more versatile – what’s on the screen needs to do more for teachers and pupils, blending interactive learning experiences and formative assessment and insights.

Les Hopper, director of digital and assessment at Pearson, explained: “This is something that ▶

Pearson has done for years in our ActiveLearn service, and we'll continue to incorporate it into our services as they evolve and the expectations of increasingly tech-savvy teachers and students evolve too."

Mr Hopper said that remote learning during the pandemic proved to be possible but it has also shown us that "lots of extra support is needed". He continued: "The pandemic was a crash course, now it's about making sure it's appropriate. The emphasis is on teachers to choose and use the mediums and the modes of delivery that work best for them and their students."

Of course, every school is different and thus one size cannot fit all. Pearson's range of resources is intentionally varied to support teachers, pupils and parents in choosing and using what they believe is best for them. They are, for example, world leaders in virtual schools with offerings such as Harrow School Online, Pearson Online Academy, and Connections Academy supporting more than 110,000 students across the globe.

Looking to the future, Pearson plans to simultaneously support multiple modes of delivery in class as well as remote, asynchronous learning. A key emphasis will be on the power of personalisation – which technology can undoubtedly unlock.

This has already begun with Maths Flex (an AI practice service) designed to complement classroom learning. The AI constantly adapts to the pupil's strengths and weaknesses, helping teachers to manage a wide range of abilities in a class while vastly reducing the time required to set practice tasks.

As the AI learns, it gains further insights into a child's learning and adapts the learner pathway so that it always recommends the most effective topic for the learner to study next.

"It's time to build on the current momentum for tech-enabled learning and personalisation," Mr Hopper said. "To do this we must all do our bit to close the digital divide and improve accessibility – that means faster and more reliable internet connections for all as well as access to suitable devices. With these combined, technology could become one of education's great levellers."

Asked what aspects of classroom teaching he

“ The emphasis is on teachers to choose and use the mediums and the modes of delivery that work best for them and their students ”

thought should be retained and what aspects of digital learning should be harnessed in the future, Paul Haigh, headteacher of King Ecgbert School – a large secondary school in Sheffield – told us that “the potential for blended learning grows as children get older”.

He continued: “Key stage 3 needs to be very teacher-led because students don't have the IT skills or the motivation and maturity to be given the freedom and flexibility technology could offer. But as students get older, we expect them to spend more time learning outside the classroom and away from the teacher.”

Mr Haigh added that the biggest potential of blended learning is for inclusion, especially in supporting those students who struggle to attend regularly, “whether that be because they can't regulate their behaviour so end up excluded or perhaps have serious mental health issues and are too anxious to attend or have conditions like autism”.

He added: “Blended learning can ensure that part-time timetables do not result in pupils missing out on their entitlement to breadth and a quality education.”

Reflecting on the primary school experience of blended learning, Anthony David, executive headteacher of St Paul's CE Primary School in London, explained how “there are many areas of our school day that fit neatly in a blended approach and can make the outcome look well-presented and professional”.

When asked how blended learning can be delivered effectively for all pupils so as to avoid perpetuating attainment gaps, and in a way that enables accessibility, Mr David said that computers can be used to ensure “text can be increased, images are clear, children can dictate their writing (rather than using an amanuensis)”.

He added: “We are barely scratching the surface of what is possible but ultimately it will come down to how creative and aware the teacher is.”

Elizabeth Jones, deputy headteacher at Drury Primary School in Wales, said that she was confident digital learning will have a strong role within her school moving forward: “We as a school have seen and felt first-hand the impact of interaction solely through screens and the effects this has on self-esteem, confidence and attitudes to learning. Children do not all learn in the same way and while some thrived in remote learning, others did not. The use of ICT transforms lessons and in 2021 it is undoubtedly an invaluable tool.”

Mr Haigh, meanwhile, said there was a pressing need to fund all disadvantaged students to have a laptop. He continued: “We've got to have help-to-buy payments and procurement at scale to help middle income families with multiple children be able to buy at low cost – ideally, they'd all get one for free.”

For educational resources to have impact, they need to be accessible. Mr Hopper said that Pearson is proud to support initiatives such as Computers for Kids, as well as to advocate for the importance of nationwide internet connectivity to “assist learning and create resources that meet accessibility standards”.

“ The AI constantly adapts to the pupil's strengths and weaknesses, helping teachers to manage a wide range of abilities in a class while vastly reducing the time required to set practice tasks ”

One way for schools to achieve this balance is to continue to invest in high-quality printed materials as well as digital resources. To highlight the continued importance of textbooks, Public First, on behalf of the Publishers Association, ran a research project testing teachers' spending on and

perception of teaching resources. The report (Public First, 2021) found that teachers were positive about the quality and range of textbook options available.

Mr Hopper said that Pearson provides a range of online and print solutions to help teachers develop blended learning approaches. For example, as mentioned above, ActiveLearn is used by millions of primary and secondary teachers and pupils across the globe, and provides personalised teaching and learning experiences in and out of the classroom, all matched to textbooks that are available as both digital and physical copies.

Pearson has also produced a mobile app for key stage 4 learning. The “Revise” app is free for schools to use to support pupils' learning. Pupils can use the app to track their progress, test topic knowledge with quick quizzes, and share their progress with teachers. There is also the option to link to relevant content in print and online Pearson Revise Edexcel Revision Guides as needed.

Looking ahead, Pearson is also launching ActiveHub from 2022 – an evolution of its digital services, designed to enhance the teaching and learning experience for teachers and students.

References & research

- ▶ Pearson: *Global Learner Survey 2020*, August 2020: go.pearson.com/GLS20
- ▶ Pearson: *Computers for Kids*: go.pearson.com/C4K21
- ▶ Public First: *How teachers use textbooks*, May 2021: <https://bit.ly/3GjFlec>

More from Pearson

- ▶ ActiveHub: go.pearson.com/AHFAM21
- ▶ ActiveLearn Primary: go.pearson.com/PAL21
- ▶ ActiveLearn Secondary: go.pearson.com/SAL21
- ▶ Harrow School Online: www.harrowsschoolonline.org
- ▶ Maths Flex: www.pearsonschools.co.uk/MathsFlex21
- ▶ Pearson Online Academy: <https://ukglobal.pearsononlineacademy.com/>
- ▶ Pearson Revise series and app: go.pearson.com/RA21
- ▶ Pearson blog: *Embracing accessible learning for SEN pupils*: go.pearson.com/GAAD21

CPD: Developing staff skills

Recent months have shown that, as technology and learning approaches evolve, so too do the skills and knowledge of teachers and students alike. As schools reflect on what worked for them and embed digital tools and learning approaches into their long-term strategies, their success will, to some extent, be dictated by the people charged with delivering them.

Thus, the provision of effective staff professional development will be crucial to the success of a school's digital learning strategy.

Pearson's report, *The Future of Qualifications and Assessment for 14 to 19-year-olds* (Cuddihy et al, 2021) found that, while teachers are keen on the use of technology in education, 95 per cent of them feel they need more support such as regular CPD to make the most of these solutions and increase their confidence in their use.

One of the key takeaways of the pandemic has been the efficiency and effectiveness of online forms of CPD. Staff have spoken positively about the ease and efficiency of online professional development solutions, and about the ability to better tailor professional learning by accessing training digitally rather than attending generic training courses in school. This allows teachers to access subject-specific support and to do so at a time and pace that suits their busy lives.

One example of effective online CPD – which itself emerged during the pandemic in early 2021 to support schools and teachers – is the Pearson Professional Development Academy. Pearson's support has evolved from free videos, blogs and free qualification support events to also offering fully facilitated CPD courses. These cover a variety of topics, including four courses covering best practice for delivery of online teaching and learning, as well as safeguarding.

This reflects changes seen in schools. For example, Paul Haigh, headteacher of King Egbert School in Sheffield, explained: "Because CPD had to be delivered during the first very strict lockdown, we had to use the technology itself as the vehicle, putting meetings (onto an online platform) and

Teaching reflections

What are your key areas for development in the context of blended learning and how would you like to be supported to address them?

Leadership reflections

What are the skills gaps across your teaching workforce that need addressing this year?

INSET activities as recorded videos which gave teachers the perspective of the student as recipients of e-learning – that in itself was genius."

The school's main approach was about using the technology to encourage and enable peer-to-peer sharing via very short video clips and they built a staff CPD area where people "dropped off ideas and peers had great chats about how best to use them".

Mr Haigh continued: "It was organic, and far more information and help was supplied in a much more personalised way than a traditional 'all-in-the-hall' INSET day ever could. We expect some of our INSET will always be delivered this way in the future."

He added that the main advantage of online CPD "was teachers working from the comfort of home, as well as the ability to capture workshops as videos to refer back to or giving access to part-time workers who weren't at the live event".

Meanwhile, Anthony David, executive headteacher of St Paul's CE Primary School in London, said that his school had planned a "drip-feed" of edtech training throughout the year: "We have been using some online CPD for several years where it is a common statutory duty but this year has seen a dramatic increase in online live sessions such as shared meetings or training. These work best when there is set information to relay and no interaction required. That said, people are getting very good at creating break-out rooms to allow discussion and debate."

He added: "Pupils are learning with the teachers.



Some children will know more than the adult in the room but there will still be children who don't and they will require additional support as they navigate this growing world."

Mike John, senior strategy manager at the Pearson Professional Development Academy, said that when the pandemic struck they discovered new ways of working. For example, all free Pearson Edexcel network events moved online and "engagement increased to unprecedented levels with an average attendance of 220 across all subjects".

When it launched, the Professional Development Academy proved popular because it provides a learning method to suit individual needs – live and on demand – which ensures staff can learn from home at a time and pace that works for them.

Mr John added: "We think it is vital to respond to the needs of schools as quickly and effectively as possible. As such, there are a wide range of courses now available from digital learning, diversity, equality and inclusion (DEI), and early years, through to specialist speech and language courses, wellbeing and SEND support.

"We also want to continue to build on our

subject-specific professional development by offering live sessions with subject experts that touch on the areas where teachers have told us they'd like more support.

"The more confident and empowered educators feel to explore the possibilities of tech-enabled learning, the more we can build pupils' digital skills too. By working together, we can encourage an on-going momentum – fully preparing students and teachers for their careers and the future world waiting to meet them."

References & research

► Cuddihy et al: *The future of qualifications and assessment for 14 to 19-year-olds: Interim report*, Pearson, June 2021: go.pearson.com/QualsFuture21

More from Pearson

► Pearson Professional Development Academy: go.pearson.com/21PDA
► For online teaching and learning tips, visit: go.pearson.com/OLT21
► For Pearson's Digital Learning and Innovation Hub, see go.pearson.com/DLIHub

Parental engagement

Digital technologies not only aid learning, but they can also improve school communication and administration. In particular, the pandemic has driven schools to engage parents and carers in ways that they hadn't tried before.

Indeed, one of the big takeaways from the pandemic was the opportunity to deliver parents' consultation evenings online. So much so that many schools have already committed to continuing the practice post-pandemic rather than returning to the traditional model of inviting parents into school.

And the advantages are not confined to parents' evening. Rather, technology can help to ensure that schools engage more fully and more frequently with parents and carers in other ways. Technology can make sure parental engagement is both timely and two-way so that parents feel informed and involved in school life and work as partners in their child's learning.

Pearson's #DigitalClassroomSurvey (2021) found that 34 per cent of teachers predict that technology will drive-up parents' engagement with their

Teaching reflections

How can you take advantage of the lessons learned during Covid to better engage with your pupils' parents/carers? How can you ensure technology is used effectively, but without breaching professional boundaries and putting work/life balance at risk?

Leadership reflections

How has your school's engagement with parents/carers changed as a result of the pandemic and why? What aspects of 'lockdown life' do you intend to retain and why? What do your stakeholders say?

children's learning in the years ahead. Meanwhile, more than one in three teachers (36 per cent) think there will be greater flexibility in teaching roles such as working from home or job-sharing – a flexibility that can, in part, be achieved by moving parental

communications and consultation evenings, online rather than running them on-site in the evenings.

The Pearson *Global Learner Survey 2021*, which sought the views of parents of school-age children in four countries, found that 91 per cent of parents planned to continue to have more involvement in their children's education post-pandemic.

Anthony David, executive headteacher of St Paul's CE Primary School in London, explained how his school ran video and phone consultations which parents found useful. They now plan to have "one face-to-face meeting a year with other consultations being by phone or video call".

He explained: "It was key that parents were trained and one of my schools ran several training sessions (via video) to ensure they were equipped. Parents found our approach to be successful."

And Paul Haigh, headteacher of King Egbert School in Sheffield, added: "Parents aren't on the learning platform like children and so using a phone app was great, as was putting videos and headteacher addresses on YouTube and social media because it helped the school to reach parents, reassure, communicate key messages and keep school alive in the family home."

To help engagement with learning at home continue, Pearson has a range of free support for parents/carers and learners, plus resources for home learning, and is also exploring parent-specific spaces as their services evolve.

Kate Kemp, head of direct to learner at Pearson, said: "As many parents, carers and families became involved in supporting children's learning in new ways during Covid-19, we learned alongside them in order to best support them.

"We got to work a lot more closely with parents – both through our conversations and research, as well as through engagement with our products. Initially, we focused on the immediate needs of families, many of whom were engaging with and facilitating home learning, providing free tips and guidance, as well as content that could readily be used by families who wanted to support their children's learning.

"We created free home learning timetables and blogs to help with home schooling, worked with the BBC to provide content for their home school support and provided our The Maths Factor service

“Technology can make sure parental engagement is both timely and two-way so that parents feel informed and involved in school life and work as partners in their child's learning”

for free. We also continued to create free support and guidance, such as guides for supporting children with SEND at home. These were provided in a specific parent and learner space on our website.”

She said that engagement was clear to see: "Children answered a staggering 99 million maths questions on The Maths Factor in the first three months alone. We're thrilled that parents, carers and families found Pearson's support useful during lockdowns and beyond. Their feedback is what's driving our future activities and support."

Looking to the future, Pearson is exploring ways to support parents and carers – from its Pearson Revise series and continuing their popular holiday clubs for The Maths Factor, to creating more free support for families as well as launching a new range of resources for home learning.

References & research

- ▶ Pearson: #DigitalClassroomSurvey, February 2021: go.pearson.com/DCS21
- ▶ Pearson: *Global Learner Survey 2021*, May 2021: go.pearson.com/GLS21

More from Pearson

- ▶ Support and resources for parents and learners: go.pearson.com/PS21
- ▶ Qualifications support for parents and learners: quals.pearson.com/PLQ21
- ▶ Home learning support: go.pearson.com/HL21
- ▶ The Maths Factor: www.themathsfactor.com
- ▶ Guide for Supporting Children with SEND at Home: go.pearson.com/GSCS21
- ▶ Pearson Revise series: go.pearson.com/RA21



Assessment and homework

As well as using digital technologies to deliver lessons in the form of live video-conferencing or pre-recorded videos, schools have also harnessed technology throughout the pandemic to mark and give feedback to pupils.

Technology has long been used in schools for data management purposes, of course – to track and monitor pupil progress and to report to parents. Effective data-tracking systems, when used intelligently, help ensure no pupil falls through the net and that interventions and support are timely and tailored.

Over the years, technology has also been used to set and collect work for assessment, and to proffer interactive tests and quizzes, as well as for more formal on-screen assessment.

This has been done on a small scale by individual teachers but also on a larger scale to help deliver higher stakes assessments including new-style GCSE qualifications.

More recently, technology has also been used for homework purposes, helping ensure work completed outside the taught timetable is effective in that it extends learning beyond the boundaries of the classroom and enables pupils to practise and consolidate prior learning, supporting progress over time.

Reflecting on his school's use of technology to aid assessment, Anthony David, executive headteacher of St Paul's CE Primary School in London, explained: "Having class sets of computers has allowed us to swiftly assess all pupils at once. While there is an argument that online assessments are not as thorough, they are rapid and teachers do not spend hours marking. Time is now spent analysing."

Meanwhile, Paul Haigh, headteacher of King Ecgbert School in Sheffield, said that "specific packages include digital assessment and teachers have learned how to use various sharing platforms to set tasks that students complete and submit online".

He added: "Where possible, we also mark

Teaching reflections

How has summative and formative assessment changed in your classroom? Which new practices do you intend to retain and why? Which pre-pandemic practices do you intend to return to and why? How has your use of homework changed? How can edtech help?

Leadership reflections

How has your school's assessment policy changed and why? How can you use digital resources to ensure assessment is timely and impactful? How has your school's homework policy changed and why? How can homework be improved via advances in digital tech?

automatically giving both teacher and student data that can inform next steps."

Pearson's online services enable independent learning outside of the classroom – from homework tasks to quizzes and tests with targeted feedback. Insights and analytics can then help with personalising learning journeys.

For example, Pearson's ActiveLearn helps teachers to see at a glance how primary and secondary pupils are performing and pinpoint where they might need extra support in their day-to-day learning. For schools taking Pearson Edexcel qualifications, there is also the free results analysis tool, ResultsPlus.

Noting the power of insights to support teachers in tailoring teaching and learning experiences, Pearson launched the Insights Dashboard for ActiveLearn Secondary which generates analysis and insights showing "what" the data is saying so that teachers can focus on what matters most: exploring "what comes next" to help their pupils make progress.

Moving processes from analogue to digital, its aim is to reduce the administrative burden by utilising automatic results, enabling quick

snapshots of class and individual performance data, and insights that can be used by individual class teachers right through to multi-academy trust leaders. Pearson will also be evolving its digital services from 2022 with ActiveHub – a family of insights-driven digital offerings.

Mr Haigh feels there is a future in on-screen assessment. He explained: "Teachers traditionally spent hours on marking but it would be far better to shift the teacher's time more towards lesson-planning."

In the #DigitalClassroomSurvey (Pearson, 2021), 59 per cent of secondary school teachers and 36 per cent of primary school teachers said they expect to see increased use of on-screen assessment in the future.

With this in mind, Pearson recently hosted a roundtable with the think-tank EDSK to bring together leading voices on primary assessment to discuss the most pressing questions around assessment practices and how schools measure progress (see further information).

At secondary, the journey has already begun. Pearson already offers a range of digital qualifications including GCSEs and BTECs to help develop these all-important employability skills, whether pupils are aspiring software developers, digital media producers, or just need to develop a broad overview of IT skills.

For example, Pearson Edexcel's GCSE in Computer Science is already leading the way in terms of on-screen assessment. The qualification features two examination papers, the second of which is about the application of computational thinking and is assessed with a practical, two-hour on-screen examination.

This is an important development because, as Tim Brady, subject advisor for computer science and ICT at Pearson, explained: "Problem-solving using a programming language is best assessed by having students actually problem-solve using a programming language ... and to do this with pen and paper in an exam hall is, at best, a compromise.

"Our new on-screen assessment will give students a practical and engaging assessment experience that can be transferred into real world skills." (For more, see *SecEd*, 2020).

Building on these developments, Pearson's report *The Future of Qualifications and Assessment for 14 to 19-year-olds* (Cuddihy et al, 2021) found that three quarters of school leaders and classroom teachers feel that more teaching and assessment should be delivered through technological solutions.

As such, the report committed Pearson to further consider: What role can technology play? How do we ensure validity and reliability of assessments? And how can we better define what knowledge and skills matter and therefore what should be assessed?

Les Hopper, director of digital and assessment at Pearson, added: "The UK's education system is widely respected. Our curriculum, qualifications, and assessment are recognised, valued, and adopted by countries around the world.

"That is the starting point for this work, and we hope this project will not just contribute to the debate but shape the evolution of the system and maintain this standing. We look forward to continuing the conversations and explorations with you."

References & research

- ▶ Cuddihy et al: *The future of qualifications and assessment for 14 to 19-year-olds: Interim report*, Pearson, June 2021: go.pearson.com/QualsFuture21
- ▶ Pearson: #DigitalClassroomSurvey, February 2021: go.pearson.com/DCS21
- ▶ Pearson: Future of Primary Assessment Roundtable with EDSK: www.pearsonschools.co.uk/FPOA
- ▶ *SecEd: Teaching the skills for a digital future*, August 2020: <https://bit.ly/2QDuqZB>

More from Pearson

- ▶ ActiveHub: go.pearson.com/AHFAM21
- ▶ ActiveLearn Primary: go.pearson.com/PAL21
- ▶ ActiveLearn Secondary: go.pearson.com/SAL21
- ▶ ResultsPlus: quals.pearson.com/RPLUS21
- ▶ Qualifications from Pearson: <https://qualifications.pearson.com>
- ▶ Pearson Edexcel GCSE (9-1) in Computer Science: quals.pearson.com/CompSci21

What next for digital learning?

Les Hopper
Director of digital and assessment
Pearson

When considering how to “move forward”, it’s natural to look back. As I write this, we are nearing International Internet Day – the anniversary of the first transmission between two computers in 1969.

I am reminded that it is “small steps” that led to the “giant leaps” towards technology as we know it today – and as we will know it in the future. This extends to the future of our classrooms too, whether learning is happening in physical and/or virtual classrooms, supported by a variety of tools.

So, to consider “what’s next” for edtech, it is important to look back. Covid-19 has forever changed the perception of technology within education. Almost overnight, how and where students learned transformed – sparking changes to curricula, mass roll-outs of devices, and new ventures into remote and blended learning.

In our work with schools, we have been inspired by the dedication to finding new ways for learning to thrive despite so many challenges. It is one of the many reasons we are thrilled to be recognising and celebrating Digital Innovators and Lockdown Heroes within this year’s Pearson National Teaching Awards.

Collaboration is at the heart of the digital upskilling we’ve seen in schools and homes over recent months. Technology has been both the cause and means for conversation, as social media threads buzzed with tips and shared experiences of online learning – from navigating the mute button to new lightbulb moments. We’ve also heard stories of this knowledge-sharing bypassing age and traditional roles, with students helping teachers develop further digital skills and experiment with remote learning.

Now that the UK’s teachers and students have returned to physical classrooms, we want the recent collaboration and explorations in edtech to

continue. We’re excited that our research, such as the #DigitalClassroomSurvey (2021), shows that there is optimism around the flexibility online tools can offer as part of a teacher’s toolkit. Through this guide and our continued conversations with the education community, we’re hopeful that schools can feel empowered to reflect on and decide how tech-enabled learning can enhance learning wherever, whenever and however it happens.

By continuing our explorations and learning together, we can also shape innovations that support every learning journey. Collaboration has driven our “blended” offerings from the early days of adding CD-ROMs with print textbooks, right through to ActiveLearn today.

And partnering with schools during the pandemic has led to new ways for us to support learning – from our involvement in the National Tutoring Programme and home learning to the creation of insights tools and the Pearson Professional Development Academy. It’s also informing how Pearson’s services evolve, as partnerships with academy trusts and schools are at the heart of ActiveHub – a family of online services coming in 2022 (see further information).

As we face the future, we should set our aspirations high. With the right tools and support, edtech has the potential to enhance every stage of education – from data management systems and personalisation within lessons, homework, assessments, to staff training during twilight sessions. Looking back over recent months reminds us that while there are still barriers to break down to realise those aspirations, we can continue to overcome challenges together.

Collectively, we witnessed the widening digital divide – an aspect of today’s classroom environments that needs urgently addressing. In our #DigitalClassroomSurvey, 55 per cent of the educators surveyed highlighted access to digital resources and technology as a challenge for their students during lockdowns.

This increased to 74 per cent reporting it from schools with the highest proportion of students

eligible for free school meals. Given the experiences of recent months, it is unsurprising then that 90 per cent of respondents to Pearson’s *Global Learner Survey 2021* shared the view that internet access is a basic human right. We agree. Access is the cornerstone for successful tech-enabled learning. For how can the whole school community thrive if some learners are left behind? As a sector and a society, we must achieve equal access to devices for pupils and equal access to speedy internet connectivity.

Educational tools and resources also need to be accessible, inclusive and engaging for all learners. At Pearson, we believe this goes beyond ensuring our online services meet accessibility standards; we help inspire underrepresented groups via initiatives like Girls in Computing and our work with teachers, students and charities informs the adaptations for special requirements within examinations. This is crucial as we seek to offer flexibility and equity in print and online learning and assessment experiences.

The importance of doing so? Future-readiness. The *Future of Qualifications and Assessments* research (Cuddihy et al, 2021) recorded the views of more than 6,000 educators, employers, parents, and learners and discovered just how highly the skills of using ICT are valued:

- Ninety-three per cent of parents see them as an important life and work skill for finding, evaluating and communicating information.
- Seventy-four per cent of 14 to 19-year-olds and 76 per cent of 19 to 24-year-olds recognise them as a vital skill for the future.

So how do we prepare now for the classroom of the future? The discussions in this guide and the accompanying podcast (available from December 1) are ones we wish to continue. Together, we can boost digital confidence and the impact of edtech by sharing successes and challenges, and subsequently driving positive change within classrooms, schools and the wider sector.

Perhaps one of the biggest “lessons” from looking back has been how the recent adoption of edtech, remote and blended learning has shown the choices open to schools and their students. With this flexibility comes the potential to support every learning journey like never before. As we look to

The HTU Podcast

An episode of the *Headteacher Update Podcast* accompanies this guide, offering practical advice and tips for digital learning. Find this from December 1 via <https://bit.ly/htu-podcast>



the future, we believe edtech is an important tool in empowering and enabling individuals to choose what’s right for them – whether they’re hosting a lesson or seeking to learn from it.

So, those next steps for us are clear: build on the new digital pedagogies from the pandemic, push for the universal right to internet connectivity for education, build inclusivity in from the start, and collaborate to innovate by embracing experimentation. And that can start in the choices we make now – from small steps to giant leaps.

References & research

- ▶ Cuddihy et al: *The future of qualifications and assessment for 14 to 19-year-olds: Interim report*, Pearson, June 2021: go.pearson.com/QualsFuture21
- ▶ Pearson: #DigitalClassroomSurvey, February 2021: go.pearson.com/DCS21
- ▶ Pearson: *Global Learner Survey 2021*, May 2021: go.pearson.com/GLS21

More from Pearson

- ▶ ActiveHub: go.pearson.com/AHFAM21
- ▶ ActiveLearn Primary: go.pearson.com/PAL21
- ▶ ActiveLearn Secondary: go.pearson.com/SAL21
- ▶ Digital Learning and Innovation Hub: go.pearson.com/DLIHub
- ▶ Pearson National Teaching Awards: go.pearson.com/PNTA21
- ▶ Live GCSE lessons: go.pearson.com/LIVE21
- ▶ Online teaching tips: go.pearson.com/OLT21
- ▶ National Tutoring Programme: go.pearson.com/Tutor21
- ▶ Pearson Professional Development Academy: go.pearson.com/21PDA
- ▶ Girls in Computing: quals.pearson.com/GIC21