

Addressing the digital divide in education

Enabling a blended learning approach for all pupils and teachers

Virtual roundtable Tuesday 21st July

Summary paper

On Tuesday 21st July, the Education Policy Institute (EPI) hosted a virtual roundtable bringing together education leaders from across the sector, focusing on the digital divide in education and the case for enabling a blended learning approach for all pupils and teachers.

This document summarises the discussion that took place and the final section on 'Supporting schools to adapt' includes possible next steps and recommendations outlined by participants.

Context:

The impact of the pandemic on education in the UK has been profound and far-reaching. The closure of schools, colleges and nurseries has forced pupils and teachers to operate remotely in circumstances for which few had prepared. The effects of these closures have been significant: pupils have received fewer learning hours, a narrowed curriculum and been reliant on access to devices and the internet at home.¹

School closures have also laid bare the stark variation between pupils' home-learning environments. Poorer pupils are likely to have more limited device and internet access and are less likely to have home environments conducive to learning.^{2 3}

The Government has taken some steps to address the digital divide, with announcements of 200,000 laptops to be distributed to pupils that need them and six-month internet passes for pupils without consistent access. Eligible groups include care leavers, disadvantaged year 10 pupils and children and young people aged 0-19 with a social worker (only secondary school pupils with a social worker are eligible for the internet passes).⁴ While this is a step in the right direction, the scale of the impact on pupils, families and teachers presents an opportunity to build a blended learning approach for the long-term.

The roundtable considered what more we can do to level the playing field and enable learners to learn and teachers to teach in this new context.

The discussion was divided into four sessions:

- Learning during lockdown focused on academic research undertaken on learning and teaching experiences during the period of school closures
- England- what has been working and not working? focused on school leaders' key reflections from the adjustment to full remote learning

¹ <u>https://www.ucl.ac.uk/news/2020/jun/children-doing-25-hours-schoolwork-day-average</u>

² <u>https://www.ifs.org.uk/publications/14848</u>

³ <u>https://www.suttontrust.com/our-research/covid-19-and-social-mobility-impact-brief/</u>

⁴ https://www.gov.uk/guidance/laptops-tablets-and-4g-wireless-routers-provided-during-coronavirus-covid-19

- International experiences focused on how other countries have adapted to remote learning and supported more equal access for pupils
- Supporting schools to adapt focused on how we can ensure equity of access to education in all environments, creating more seamless transitions from the classroom to the home

The next section summarises the key comments from each session. Within each session, EPI posed a number of key discussion questions, which contributors used to frame their comments.

1. Learning during lockdown:

Key questions:

- How has learning changed as a result of school closures?
- How has the experience for learners varied by background?

During this session, we heard the views and findings of leading academics and research experts who have undertaken or considered research on learning during lockdown, with insights from parents, carers and teachers.

How has learning changed as a result of school closures?

The closure of schools, colleges and nurseries required a pivot to remote learning, with communications between most teachers, pupils and parents taking place digitally, where possible. Teachers and pupils have communicated either via digital means (using emails, virtual learning environments and learning management platforms) or via telephone and mail. The period revealed significant variation between pupils' home learning environments, with device access, internet access, and a suitable workspace all critical for a smoother transition to home learning.

Parents and carers have become a more integral part of the learning process. It has been crucial to find a way of managing expectations (of their child, of their child's teachers and of themselves). This would require regular and ongoing communication with their child's teachers so that they could better understand how to provide effective support. However, parents' capacity to deliver home-schooling is variable, given work commitments, home environments poorly equipped for digital learning and limited subject knowledge. A <u>survey</u> of teachers by the National foundation for Education Research (NfER) found 55 per cent of parents to be engaged in their child's learning (48 per cent of secondary parents compared to 56 per cent of primary).

The speed of these unprecedented changes was a significant challenge for the sector. Not only did schools have to develop and initiate an entirely new teaching strategy, but they had to make sure that staff had both the understanding and skills to be able to deliver it effectively.

Schools with existing digital strategies adapted more easily to digital learning, even if partially implemented. Some school leaders found that the forced closures accelerated the strategies' implementation. Engagement rates appear to have been higher in schools with virtual learning environments and learning management software- notably, the NfER <u>survey</u> suggested that schools using virtual learning environments were 13 per cent more likely to have high levels of engagement amongst disadvantaged pupils.

Given that many schools do not have developed digital strategies, it is unsurprising that teachers perceive pupils as having done less work during the periods of school closures than they would have done in

school. A <u>survey</u> undertaken by the Chartered College of Teaching found that only 1.2 per cent of teachers thought that all of their pupils completed a similar amount of work during school closures and only 16 per cent believed that this was the case for most of their pupils. 43 per cent of teachers believed that only a few of their pupils completed a comparable amount of work and 14 per cent thought that none of their pupils did so.

These perceptions are supported by a <u>study</u> by UCL's Institute of Education, using data from the Understanding Society panel. The study suggested that pupils learning at home spent only 2.5 hours each day on schoolwork, as reported by parents and carers.

Ahead of the planned return to classrooms in September, one of the key challenges is establishing to what extent digital learning has offset learning that would have taken place in schools.

How has the experience for learners varied by background?

Prior to the school closures, EPI <u>research</u> established that progress in closing the gap in attainment between disadvantaged pupils and their peers had stopped. Indeed, the research concluded that by the time they leave secondary school, disadvantaged pupils in England are over 18.1 months behind their peers. This should be borne in mind when considering different pupil groups' experiences during the school closures.

UCL's <u>study</u> on schoolwork in lockdown found that one in five children- two million children in the UK- are doing less than an hour of schoolwork per day, fuelling concerns that the closures are widening socioeconomic inequalities, with the greatest learning loss suffered by the poorest pupils. Indeed, the study concluded that 24.9 per cent of pupils on free school meals were engaging for an hour or less per day, relative to 18.4 per cent of pupils not on free school meals.

School closures put pupils' home learning environments under a microscope, highlighting stark variation in access to devices, the internet and a workspace conducive to learning. Pupils without access to one or more of these pillars of remote learning will have found it difficult to engage and interact regularly with their teacher(s) and it will have been challenging for teachers to remain sensitive to the diverse individual circumstances of their pupils. For example, without a thorough audit, teachers may not realise that 60% of pupils in the poorest households do not have access to their own study spaces, as found in a <u>study</u> by the Institute for Fiscal Studies (IFS).

Variation within pupil groups has made it difficult for teachers to deliver lessons in a way that is accessible for all pupils, particularly in cases where pupils' access to devices and the internet is unclear and thus, unlikely to have been resolved. Indeed, the UCL <u>study</u> suggests that 20 per cent of children eligible for free school meals have no access to a computer at home, compared to seven per cent of other children. Similarly, a <u>study</u> by the Sutton Trust found that 15 per cent of teachers in the most deprived schools report that more than a third of their pupils learning from home would not have access to a device for learning, relative to two per cent of teachers in the most affluent state schools. 12 per cent of teachers in the most deprived schools also believed that more than a third of their pupils would not have adequate internet access and the IFS <u>study</u> found that 14 per cent of pupils were dependent on their phone for accessing digital content. This will likely be hindering the ability of pupils to complete their schoolwork and share it with their teachers for review.

For these reasons, pupil engagement has varied significantly and been quite difficult to track, with available insights limited to engagement with virtual learning environments and hours of engagement reported by parents, carers and teachers. Tracking engagement in poor areas is particularly challenging given lower rates of parental engagement- the NfER <u>study</u> found parental engagement in the most deprived schools to have been significantly lower than in the least deprived schools (41 per cent compared to 62 per cent).

The Sutton Trust <u>study</u> suggested children from deprived schools were less likely to complete the work set by their teachers and more likely to do work of a lower quality than their usual standard.

The learning losses experienced by pupils within year groups presents a catch-up challenge for learners and teachers, both in estimating their extent and addressing their impacts. There will have been significant variation in engagement by subject, too, depending on how schools and departments have structured their digital learning provision.

It is important to recognise regional variation within this context, as considered in UCL's <u>study</u>. It is concerning, for example, that 29.9 per cent of pupils in Wales, 42.1 per cent in the North East and 30.0 per cent in Yorkshire and Humberside were learning for less than one hour per day during closures, relative to 23.2 per cent in London and 18.4 per cent in the South East.

These studies shed light on challenging issues, highlighting perceptions and trends that will inform the return to school. Further studies are planned in the coming weeks, following up with the same groups of pupils. These will focus on the latter period of school closures as well as the adjustment to returning to the classroom. The planned IFS report will have a greater focus on pupils' mental health and well-being experiences.

Links to referenced documents:

- https://www.ifs.org.uk/publications/14848
- https://www.nfer.ac.uk/news-events/press-releases/new-report-looks-at-pupil-engagement-inremote-learning-during-the-covid-19-pandemic/
- https://www.ucl.ac.uk/news/2020/jun/children-doing-25-hours-schoolwork-day-average
- https://chartered.college/2020/05/07/chartered-college-publishes-report-into-potentialimplications-of-school-closures-and-global-approaches-to-education/
- https://www.suttontrust.com/our-research/covid-19-and-social-mobility-impact-brief/

2. England- what has been working and not working?

Key questions:

- What levels of engagement have we seen between teachers and learners at the school, or group level?
- How have technology packages and online resources aided the transition to remote learning and teaching?
- What has been the experience of disadvantaged pupils and what impact have measures had on engagement?
- How are schools receiving information about what works?

During this session, we heard from a range of school leaders and experts regarding what has been happening on the ground during the period of school closures.

Key themes:

Minimum expectations for all teachers

Teachers were required to pivot to digital learning with little notice. Teachers familiar with technology and digital learning practices were able to make this transition more smoothly. However, large numbers of teachers will have found the transition challenging, needing to upskill before being able to engage with their pupils regularly and efficiently. In these cases, some schools developed key expectations of teaching staff, supported by training for all staff to be able to operate remotely. Supporting all staff to pivot to remote learning at speed is challenging, but necessary to minimise learning losses and improve pupil engagement. To do so effectively, any new expectations need to be accompanied by enhanced strategies for ensuring staff well-being. Some school groups have developed this approach by forming an online repository for all teaching and learning materials, organised in such a way that all teachers can efficiently search, adapt and deploy resources from any colleagues across the group.

Minimum expectations for all pupils

Variation in pupils' learning environments is significant as is variation in the number of engagement hours between pupil groups. Where possible and particularly within classes and year groups, pupil expectations should be more uniform to avoid learning gaps and ensure that pupils are learning the same content at the same time, in order to ease the transition back to the classroom.

Some school groups overcame this challenge by developing minimum expectations for all pupils, once communication channels had been established. Examples include a set of three core tasks or lessons to be undertaken per day, focusing on English, mathematics and a third subject. School leaders have stressed the importance of provision being sustainable for pupils and teachers, given the (then) openended nature of the school closures.

Assessing pupils' progress

Assessing progress remotely is challenging, particularly where pupils have intermittent access to devices and the internet. While it is useful to know engagement hours, it does not necessarily reflect the quality of engagement or whether learning has taken place. This makes it challenging for teachers to establish where pupils' learning gaps are and to check if pupils are moving through the curriculum as they deliver the content.

School leaders report that quick check-ins with pupils in small groups at the start and end of digital lessons have worked well, with high engagement, participation, and lesson completion rates. This less formal type of communication may be a useful part of assessing progress and monitoring learning gaps.

Some schools with high rates of device and internet access have pivoted to light-touch online assessments in the form of digital quizzes or project-based assessments in which pupils can submit their response to their teachers.

Tracking wellbeing

The adjustment to full remote learning for most pupils and remote working for most parents and carers has been challenging. In these stressful circumstances, it is important to remain sensitive to the learning environments experienced by pupils. Tracking pupils' wellbeing during the period of school closures has been difficult, made more so where pupils lack regular access to their peers and teachers.

School leaders report that informal check-ins with pupils, whether at the start of the school day or to bookend lessons have helped in this regard, while centralised resources like the Oak National Academy have engaged a light-touch approach to understanding how pupils are feeling when using the platform.

Some school leaders report improved, more frequent engagement with parents and carers, particularly from those seeking guidance on how best to assist their child. These engagements can be as frequent as two to three times per week and take place digitally, enabling parents and teachers to build stronger relationships and provide more tailored wellbeing support and guidance.

Varied experiences for SEND pupils

The period of school closures has affected pupils in varied ways. Vulnerable children- those with a social worker and those with an education, health and care (EHC) plan- were able to remain in school. However, school leaders report that many of these pupils have opted to learn remotely, with regular engagement between teachers and pupils and between teachers and parents.

The majority of children with SEND, however, who receive SEND support but do not have an EHC plan, were expected to learn remotely. Schools were encouraged to consider their pupils' mental health and identify those in need of additional support as well as planning how best to support the education of high needs groups, including those with SEND. For many of these pupils, the period of school closures will have been challenging, with less structured learning and less frequent and predictable teacher engagement. However, for those with access to devices, the transition may have been eased by text-to-speech technology, speech-to-text technology, voice recognition, predictive text and support with executive function, as set out in Home Learning UK's guidance.

Indeed, school leaders report that some pupils with EHC plans have experienced accelerated learning during the closures, particularly those with autism (assuming access to a device and the internet) who may be more comfortable in the home learning environment.

Some school leaders suggest that pupils with physical needs, such as hearing-impaired children, have also experienced learning gains, possibly due to having a quiet home learning environment and device assistance.

This said, the converse is true for pupils less able to access and operate devices and suitable content, as well as those dependent on parental support and their ability to use appropriate technology.

Schools with a developed digital strategy

Just as pupils have varying home access to technology, there is significant variation between schools' digital capabilities. Some schools have a device per pupil (partially funded by the Pupil Premium), staff trained to deliver lessons digitally and virtual learning platforms for improved communication between teachers, pupils and parents. In schools where these approaches are in place, pupils and staff are familiar with the feedback loops, delivering and receiving content virtually and digital assessment. However, this is by no means the norm and more should be done to equip schools to form a tailored strategy to enable a blended learning approach, particularly important given the possibility of (further) local lockdowns. For schools in this position, <u>guidance</u> has been rapidly produced by projects like Home Learning UK, bringing together case studies of how schools have used technology to adapt to the closures as well as the continuation of the <u>Edtech Demonstrator Programme</u>.

Schools with developed strategies managed to adapt to digital learning more seamlessly than those at the strategy formation or early implementation phase. The process has demonstrated that effective blended learning is possible for both pupils and teachers- and staff's digital competence in these schools has been raised significantly by accelerated implementation. It is important to note that many schools with a device per pupil did not automatically send the device home in the first instance, opting instead to distribute devices to those without access to one at home.

While some schools utilised learning management software before the lockdown (enabling teachers to upload content and maintain a regular feedback loop with their pupils), many were trialling platforms for the first time during the school closures. This was made possible by many technology companies offering their services free of charge to schools from April until the end of the school year. Demand from schools has been high, with <u>Firefly Learning reporting</u> 13 times peak traffic compared to before the school closures. It will be useful to track how schools that have temporarily taken advantage of support from the technology sector proceed into the school year, once the support is no longer free.

The return to schools in September will require careful monitoring (and continued CPD) to embed lessons learned by schools with more advanced digital strategies within the wider school system.

Centralised resources

Many centralised resources were made available for teachers and pupils, most of which have either been developed from scratch or boosted in recent months, including <u>BBC Bitesize</u> and the <u>Oak National</u> <u>Academy</u>, founded in April this year in response to school closures. These resources have been used widely- pupils have taken part in more than 20 million lessons across 23 subjects on the Oak National Academy and it has over 220,000 daily users.

These centralised resources have been created to support and supplement lesson delivery and to be as effective as possible, teachers should be guided on how to incorporate these resources within their plans. They are being created to be used flexibly with teachers able to cherry-pick content they consider most useful. Insights from these resources will be gleaned in the coming months, which will guide how these resources evolve.

Digital learning for Sixth Form pupils

Closures have accelerated the adoption of blended learning within sixth forms and colleges and some school leaders were keen to stress that this approach should be continued after they are able to reopen to normal capacity. Pupils in these education phases divide their time between remote and class-based learning and the period of school closures has demonstrated that blended learning can drive time and communications efficiencies for pupils in this education phase, as well as provide a more flexible learning environment.

Supporting schools through local lockdowns

Further localised school closures are a real possibility for the foreseeable future. Consideration must be given to what dynamic support can be provided for pupils, teachers and school leaders in these circumstances, to enable a smoother, more flexible transition from class-based to remote learning. The crisis has highlighted that the school is not the only place education happens. Expectations of pupils and teachers must be clarified. Schools should be supported to produce digital strategies for both this short-term risk and longer-term integration of blended learning within their offer.

Links to referenced documents:

http://www.ednfoundation.org/2020/07/15/protecting-learning-how-educators-and-parents-aresupporting-student-learning-during-covid-19/

3. International experiences:

Key questions:

- What lessons can be learnt from international experiences?
- How did nations successfully adapt to remote learning?
- What are other nations doing to close the digital divide between disadvantaged pupils and their peers and facilitate blended learning?

During this session, we heard from international experts in education innovation, who shared their perspectives on how countries and governments have adapted to school closures.

Key themes:

Improving resilience

Governments and education providers around the world are seeking to minimise possible disruption caused by ongoing and expected school closures, whether at the local, regional or national level. Contingency plans are being drawn up by governments, seeking to improve device access, develop centralised resource provision and enhance teachers' digital competence. Countries able to mobilise schools, industry and government collaborations have dealt with the challenges of school closures most quickly, but many of the measures have been introduced temporarily.

For example, many European technology companies have provided their products free of charge for the period of school closures - the British Education Suppliers Association estimates that its 400 members have provided over £32m in free resources from March to May. Assuming these resources have been implemented and used effectively, they will have improved the remote learning experiences of many pupils. However, this is not a financially sustainable solution and schools will want to develop a more tailored approach to blended learning in the longer-term.

Collaborations between schools, industry and the government will be critical if blended learning is to be introduced effectively and provide resilience to education systems.

Multi-modal approaches to learning resources

Countries are establishing ways to provide access to resources for pupils of all ages. In some countries, this has included a resurgence in educational television and radio content largely targeting younger pupils. Most countries are focusing on online content for their older pupils. Both forms are designed to complement other communication between teachers and pupils, such as learning management systems, rather than replace them.

In many countries, access divides persist despite this multi-modal approach to engagement, with several countries <u>reporting</u> being unable to reach large numbers of pupils. For hard to reach pupils, governments are <u>distributing notebooks</u> and learning resources directly to homes.

Ongoing studies at the World Bank are designed to establish the most impactful combinations of modalities, capable of reaching the highest number of pupils and most effectively delivering content. This will help inform countries' delivery strategies. This engagement challenge has three key parts: firstly, pupils and their families need to be aware of content that is appropriate for their stage of learning; secondly, they need to be able to access the content; and thirdly, pupils need to be encouraged to actively engage with and be signposted to the most relevant provision.

There are many examples of governments creatively addressing the need to produce engaging content for all pupils in a variety of formats:

- Spain and <u>Kenya</u> working with children's entertainment companies and personalities to produce popular, engaging television and audio content
- Argentina bringing in industry professionals and academics to deliver content alongside teachers
- Poland introducing online games as part of the formal curriculum

Device access

In most countries, pupils' access to devices is patchy and governments have limited oversight of shortages. School closures have exposed variation in access at the school and class level. Responses to this challenge internationally have varied significantly, with some governments depending on mobile as a delivery strategy, in which shorter, modular and more interactive content is necessary due to the limited time a pupil might have access to the device.

In <u>South Korea</u>, a rapid assessment of device access revealed that 223,000 pupils were without suitable technology capable of accessing digital learning platforms and content. In the following weeks, the government created a technology lending scheme and delivered devices to all 223,000 pupils, along with unlimited free data access. These devices were partly owned by the Ministry of Education, regional education offices and schools. Similarly, the Peruvian government <u>announced</u> the distribution of over 800,000 tablets to children in rural areas and in the first and second quintile of the income distribution in urban area as well as 97,000 tablets for teachers.

In other countries, the response was slower initially, but longer-term plans have been drawn up to address the issue of device access. For example, in Japan, the government has <u>reportedly committed</u> to ensuring all pupils have a device and internet access by 2023. As mentioned above, mobile as a delivery strategy is widely considered a short-term fix, with laptop or tablet access a more sustainable solution.

Empowering teachers and parents to guide pupil engagement

In remote learning environments, many parents and carers have become de-facto teachers, particularly if pupils are not able to engage with digital learning delivered by their school due to access issues. For teachers, some countries have provided extensive guidance on how to run digital classes and share resources efficiently on digital platforms, such as the School-on resource formed in <u>South Korea</u>, but it is less common that guidance has been produced specifically for parents.

It is important to recognise the significant variation in the capability of parents and carers to deliver learning, whether due to knowledge gaps or time limitations. In some countries, studies have been undertaken to establish parents' digital skills proficiency with a view to taking targeted steps to assist pupils with less digitally competent parents.

Addressing variation in home learning hours

To an extent, variation in engagement and learning hours between pupils learning remotely is unavoidable. However, steps can be taken to limit variability, likely to ease the transition back to the classroom. In several countries, including <u>China and Croatia</u>, education departments have guided schools, parents and carers to facilitate a set number of learning hours or lessons per day, as well as limiting the number of classes available to pupils on centralised digital platforms. This is designed to level the playing field for pupils less able to regularly and consistently access devices and digital content.

Assessment and identifying learning gaps

One of the most significant challenges countries have faced is assessment of pupil learning from a distance. As with the UK, many countries have cancelled or modified national exams and have opted for alternative means of assessment. As with considerations in more normal times, there are known trade-offs between health, equity and accountability. The crisis is forcing many countries to reconsider the value of high stakes exams and the opportunities for technology to capture data for continuous formative assessments.

Examples of practice collated by the World Bank include:

- In <u>Egypt</u>, for grades 3 7 (transition years), exams will not be conducted for pupils at the end of the current school year. Instead, a research project for each subject will be completed on an electronic platform.
- Mexico has introduced "<u>portfolios of experience</u>" in which parents take photos or videos of what children are learning at home to present to teachers when schools open.
- Norway has cancelled all written examinations for 10th grade (final year) pupils in junior high school and for pupils in all three years of high school. The consequences of the cancellation are not expected to be large, as exams count for 20 per cent of the final grade, while course participation counts for 80 per cent.

Like the UK, many countries use examinations to inform or directly make decisions about an individual pupil's progress through the education system. As such, governments are working to ensure that any assessments undertaken remotely are as standardised as possible, regarding content, format, conditions, resources and grading, with a particular emphasis on supporting pupils with additional needs.

Improving infrastructure to widen access to digital resources

Governments across the world are working with mobile and telecommunication providers to expand access to online platforms, content and resources. The focus is reducing the costs of connectivity, so that households pay as low a cost as possible to support the education of children in their care. To this end, many countries are seeking to provide universal access via utilisation of public hotspots, as has been explored in the UK. The <u>South Korean</u> government worked to guarantee unlimited free access to the internet for all pupils via agreements with providers and many countries are working towards this aim in collaboration with international technology companies. Having extensive existing telecommunications infrastructure is a significant advantage, but countries like <u>Kenya</u> are finding innovative ways to address this issue.

Centralised versus decentralised approaches

International approaches to addressing the challenges of school closures varied significantly. Some education departments preferred a centralised approach, producing resource pools to be accessed freely by all teachers and pupils. However, these approaches are typically dependent on access to devices (tablets/ laptops/ televisions) and the internet, while more decentralised approaches are less dependent on devices and therefore able to reach a broader ecosystem of pupils.

In <u>China</u>, the government created two online schools, accessible to all pupils and their parents with internet access. Major technology companies based in China, like Tencent and Alibaba, have been enlisted to facilitate digital classes on their networks and provide free cloud space for pupils to use for their school work and to act as a relatively basic interface between pupils and their teachers.

In India, less centralised approaches have been pursued with the government's approval. India's national teacher platform, <u>DIKSHA</u> (Digital Infrastructure for Knowledge Sharing), is an initiative formed by the Ministry for Human Resources Development. 36 States in India have their own virtual space on DIKSHA, with the autonomy to decide the solutions relevant to them and their learners. This approach is partially necessary due to language variation across the country. In addition to this state level digital intervention, the government supported 32 different television channels that provided lessons to all pupils with television access across the country. While imperfect, due to scheduling issues and the need for content relevant to varied education phases, the government's <u>proposal</u> that pupils study for two hours per day would limit variation in learning hours, learning gaps and streamline provision.

Nordic and Baltic countries have developed the '<u>Teach Millions</u>' website that provides content to pupils of all ages on a central platform, to ensure that all pupils are able to move through their curricula at a managed rate - assuming device access and appropriate lesson signposting from their teachers. Moreover, the governments of these nations have provided frequent updates to guidance on best practice for distance learning, addressing concerns that varying expectations on engagement hours and teaching practice will lead to substantial learning gaps.

Links to referenced documents:

- https://portal.portaleducoas.org/sites/default/files/COVID19_Korean%20Response_KERIS.docx.pdf
- https://www.worldbank.org/en/topic/edutech/brief/how-countries-are-using-edtech-to-supportremote-learning-during-the-covid-19-pandemic
- https://blogs.worldbank.org/education/high-stakes-school-exams-during-covid-19-coronavirus-whatbest-approach
- https://blogs.worldbank.org/education/blending-space-and-time-during-covid-19

- https://www.worldbank.org/en/data/interactive/2020/03/24/world-bank-education-and-covid-19
- <u>https://teachmillions.com/</u>
- https://www.sunbird.org/explore/sunbird-usecases
- https://www.japantimes.co.jp/news/2020/04/06/national/japan-remote-education-coronavirus/
- https://www.pcgamer.com/the-polish-government-has-launched-a-minecraft-server-for-
- housebound-kids/
- https://www.rtve.es/educlan/
- https://www.technologyreview.com/2020/02/17/844747/chinas-students-will-now-study-onlinebecause-coronavirus-has-shut-schools/
- https://timesofindia.indiatimes.com/home/education/news/govt-may-limit-daily-e-classes-to-2-hrsweek-days/articleshow/76396087.cms

4. Supporting schools to adapt:

Key questions:

- How are we supporting schools to adapt to remote learning?
- How is the possibility of further periods of remote learning being addressed in the reopening plans?
- How are schools receiving information about what works and how will we ensure that all schools have access to high quality resources?

During this session, policy leaders and innovation experts shared their perspectives on the support that has been provided to schools during the closures, as well as possible ways to improve resilience and help schools build longer-term digital capability.

Key themes:

Centralised support and initiatives

Pupils and teachers have benefitted from resources produced centrally, commissioned by the government, like Oak National Academy and BBC Bitesize. This content is designed to supplement teachers' lessons and content plans. Pupils' and teachers' awareness of these resources has increased since the start of the school closures, with more lessons being completed on the Oak National Academy during the May-July half-term than the April-May half-term. This might also be due to more content being available on the platform in time for the May-July period.

For these resources to be impactful, teachers and parents need guidance on how to signpost the available content to pupils and incorporate it within their plans.

Several pilot initiatives are underway that consider ways to more centrally support pupils needing to operate remotely.

Nesta is trialling an <u>Open School</u>, a national online centre to help children catch up on lost learning and designed to address the needs of the many children who do not excel in the traditional school environment. This hybrid school is designed to support disadvantaged and excluded learners.

A second ongoing initiative is <u>Eduu.School</u>. The pilot brings together partners in edtech (<u>Gluu</u>), school leaders (<u>Shireland Collegiate Academy</u>), local authorities (Birmingham and Black Country) and wellbeing specialists (<u>Trauma Response Network</u>) to help disadvantaged learners working remotely. It attempts to combine academic rigour with student-wellbeing and uses technology and teacher training to achieve engagement and progression, both of which will be critical in the event of further school closures and beyond.

The findings from these and other innovative trials should be considered centrally to determine possible applications in the school system.

Teacher support

The transition to remote learning forced many teachers to reskill in order to deliver digital content to their pupils. Ensuring technological competence across staff teams at both the school and subject level was the first priority for many schools. However, the closures quickly revealed knowledge gaps, with some highly skilled, experienced teachers less able to guide their pupils' learning and maintain regular contact. Some schools advocated and developed expectations for their staff in terms of both digital learning capabilities and pupil engagement. The government should consider whether expectations should be set nationally, to prevent disparities between schools' ability to operate remotely. A thorough audit of teachers' capability to operate remotely and facilitate digital learning would help to establish knowledge gaps to be addressed with more targeted interventions. This should consider where teachers have utilised centralised resources and those produced at the regional, trust or local authority level.

While there is no real substitute for the valuable, personal relationships between pupils, teachers and school leaders, we should recognise that blended learning does facilitate more flexible teaching practices, particularly when considering teacher cover, pupil or teacher absence and helping pupils to catch-up on lost learning.

Home learning support

Devices and the internet enable pupils to regularly engage with their teachers, join group lessons, access online content and submit their work for feedback.

The major hurdle for many pupils, particularly the most disadvantaged, is regular and consistent access to devices and the internet that they can use for digital learning. The government has recognised this deficit and is working to roll out 200,000 devices and six-month internet passes. However, recent <u>figures</u> published by the Office for National Statistics suggest that 450,000 devices are needed to address the digital access divide, citing that 8.5 per cent of households consider their children struggling to learn at home due to a lack of devices. It is important to recognise that this is not only an issue for the most disadvantaged. Device sharing and use of mobile phones can also be considered sub-optimal.

What the criteria should be for government provision of a device and internet access is up for debate, however a thorough audit at school, local authority and national level would highlight access gaps that could be filled via technology lending schemes, as has been seen in South Korea (see page 9). This would ensure that pupils have more equal and predictable access to digital learning content, impactful both in the event of further closures and more generally when teachers and schools deliver digital content.

Prior to the school closures, some schools had already created and implemented digital strategies at the school and school group level. In some cases, this included providing devices to pupils on a one-to-one basis. The government should consider conducting research to assess how schools with one-to-one devices and implemented digital strategies adapted during the closures, relative to those without. The Edtech Demonstrator Schools could provide a useful, best practice benchmark for these assessments.

Parental support

Many parents will have become more engaged in their child's learning during school closures. In some cases, this will have been fairly light-touch due to the availability of learning management software and virtual learning environments. However, in cases where this technology is not available or utilised, parents may have taken a more formal home-schooling role. This will have been particularly critical in homes without consistent device and internet access when communications between school and the home take place via mailed hard copies of schoolwork or via telephone calls. As such, the government

should consider forming guidance for parents on how to best assist their child while learning remotely and these should be tailored to the technology infrastructure in the school and available in the home.

Data infrastructure support

High-speed internet connections and quality telephone coverage are unevenly distributed across the country, with urban areas more likely than rural areas to have consistent access. System-level upgrades are highly expensive and disruptive, but if schools and learners are expected to operate remotely, we should consider these upgrades a priority and in the meantime, produce best practice guidance specific to schools in areas with poor telephone and internet connectivity.

Wellbeing support

The disruption caused by the pandemic has been felt across the education sector with closures forcing schools to begin operating remotely at only two days' notice. Such significant changes to working patterns have created wellbeing challenges for teaching staff, parents and pupils.

In these circumstances, it is important to recognise the broader roles that schools play as community hubs. Schools are appreciated as critical public spaces for delivery of food, physical learning resources and childcare. However, they are primarily a space for social engagement with teachers, peers, and school leaders who care about each other and create a culture of learning and ambition.

Monitoring wellbeing remotely is difficult, given limited engagement time between pupils, their peers and their teachers. It is important that pupils and teachers feel able to share their experiences and challenges with peers and that they are aware of channels available if they require assistance or support.

Significant changes to assessment and exam plans, coupled with the challenge of communicating these changes to pupils and their parents, is likely to have increased stress levels among pupils anxious to progress to a further education phase, or enter the workforce.

In such complex circumstances, it is imperative that guidance is communicated effectively, so that pupils and parents are aware of the processes that have been used to determine grades, progression to further phases of education and allocation of opportunities usually determined by grade outcomes. It is also important that there is a comprehensive appeals process in place in the event that pupils, parents and teachers feel that the grades they receive are not a fair reflection of the progress they were making prior to the closures.

School leaders preparing to start the new school year should recognise the wellbeing challenges the closures may have caused their pupils, the stressful home situations they may have experienced during school closures and through the summer holidays, and the learning gaps that may have emerged between pupils.

Assessment support

Changes to remote learning have not only disrupted scheduled GCSE and A-level exams, but assessments planned internally by schools, subject departments and individual teachers.

Many schools both domestically and internationally have pivoted assessments to online formats, whether in the form of more informal quizzes using online platforms or project-based assessments in which pupils can submit their response to their teachers. In some cases, platforms will deliver real-time assessment data, such as those provided by <u>Renaissance Learning</u>. This will highlight clear learning gaps and ensure limited variation in pupils' progress through teachers' planned lessons. Therefore, when employed effectively, this lower-stakes approach can smooth the return to classrooms. However, this technology is not employed universally. Schools should be supported to access platforms capable of real-time

assessment or receiving modular project-based assessments, otherwise pupil engagement is more difficult to track and learning gaps are less easy to manage.

Links to referenced documents:

https://www.ons.gov.uk/peoplepopulationandcommunity/educationandchildcare/articles/coronavir usandhomeschoolingingreatbritain/apriltojune2020#main-points

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