



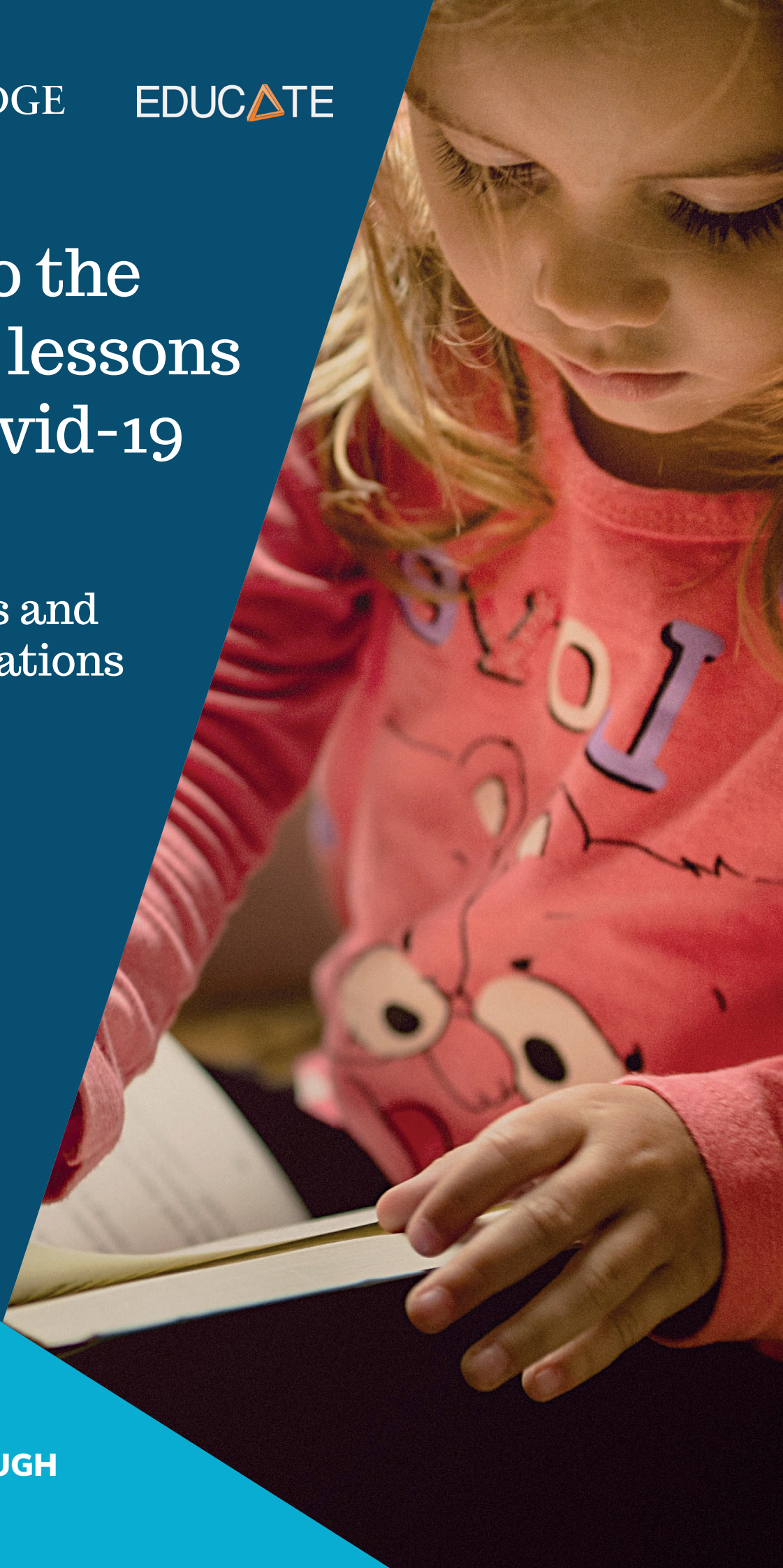
CAMBRIDGE

EDUCATE

Shock to the system: lessons from Covid-19

Volume 1:
Implications and recommendations

**TRANSFORMING
SOCIETIES THROUGH
EDUCATION**



Introduction

This report presents the ways in which educational technology can best be used to support teaching and learning for school-aged pupils, particularly when traditional education is disrupted. The work we report here is unique in its synthesis of the multiple voices that contribute to the education ecosystem. It is pragmatic and future facing, with an emphasis upon progress, not just 'getting through' and returning to the status quo.

There is much to learn from the educational disruption caused by Covid-19. To maximise learning, it is vital that the *entire education ecosystem* is examined, and not just one part of that ecosystem in isolation, such as schools or parents. The education ecosystem is made up of a diverse set of interacting individuals in communities and sub-communities, all contributing from different perspectives, using physical, economical, regulatory and pedagogical infrastructures, and mostly operating under a shared goal: to make our society better. Like all ecosystems, by definition, the education ecosystem relies on strong connections *between* and *within* its communities, but all too often, these communities and their members are unconnected, or not connected enough.

In this report, we present recommendations and practical guidance for educators, leaders, parents and policymakers to help build a better connected, more effective, self-supporting ecosystem. The recommendations and guidance draw on expertise, experience and a rich supply of new data and information about the impact of the Covid-19 pandemic on school education. The threads that we pull together are drawn from a rich data set collected across the months of disruption in 2020 from the key stakeholders in the education ecosystem: teachers, parents, educational leaders and EdTech companies. This new data is complemented by findings from existing academic literature, as well as research reports and analyses from others about what happened during 2020 when many schools across the world were closed, and technology became a learning lifeline for many young people.

We focus specifically on the situation in the United Kingdom and upon the English education system. However, the findings from our research will resonate with educational stakeholders across many different countries who face some of the same challenges when they are required to provide continuous, high-quality education, no matter what disruptions are thrown their way.

There is much of which education stakeholders should be proud. Education did take place for many, many students often in almost impossible situations, with conflicting constraints and a high number of unknown factors. Communities came together, often informally, to share their learning and support each other, and rapidly scaled up their expertise and capability.

Our report is published in two volumes. Volume 1, which follows on from this introduction, includes: an executive summary; a set of recommendations; commentaries from expert representatives; from the educational technology sector; and a narrative of the implications we have drawn from the data and research we have analysed. In the Appendix to this first volume you will find a range of invaluable practical guidance.

Volume 2 contains the data and evidence upon which this first volume is based, plus an explanation of the methodology we adopted.

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Executive summary

The data and evidence that we analysed, synthesised and that we present here illustrate the problems that occur when the education ecosystem is disconnected, and resulting in reduced functionality. The ecosystem we refer to is at a national level, and made up of *communities* and *sub-communities* of members.

Our findings are presented from the perspective of the role of educational technology (EdTech), which has provided a vital learning lifeline for many pupils. We demonstrate the areas of the education ecosystem that were compromised when face-to-face schooling broke down, and the ecosystem had to rapidly reconfigure. We report on the relationships and communication between key communities: teachers, leaders, parents, policymakers, researchers, technology developers and governments, and about the integrity of the inter-connections *within* each community and sub-community.

This is a story about disconnection and missed opportunities, of existing weaknesses leading to breakdowns. But it is also a story of resilience and of great opportunity for rapid improvement. Following this executive summary of findings, we present a series of recommendations that focus on how best to strengthen the education ecosystem for the future.

Key findings

- Too little attention was paid to the education ecosystem, in its entirety, when schools closed to the majority of pupils.
- Ineffective connections and communications between communities, such as between government and school leaders, compromised the integrity of the whole ecosystem and disabled it from being self-supporting.¹

Not all members of the education ecosystem experienced and dealt with the pandemic disruption in the same way. Studying the differences in the support systems they used, the educational opportunities they identified and the concerns they reported, enabled us to identify five distinct personas for whom different recommendations and support needs to be provided: Aeronauts, Earth Movers, Fire Tamers, Water Pilots and Space Seekers.²

Poor connections between communities

Research and education

- There was little connection between existing research evidence and educational practice. Decades of research into online learning that could have helped schools to implement a sound pedagogical infrastructure was largely absent from Remote Emergency Teaching (RET).³
- Inappropriate conclusions about the value of online learning are now being drawn on the basis of RET, without reference to the huge wealth of available relevant research.⁴

Research and EdTech

- EdTech companies sought to learn more about their customers as the restrictions on school operations continued. By autumn 2020, only 10% of companies reported that they were not collecting any data, down from 30% at the beginning of lockdown.⁵
- However, the data collected by companies was mainly in the form of interviews with users, which increased from 4% in April to more than 50% in autumn 2020. Interviews are important, but time-consuming; more efficient methods for use in a crisis would be log data, and yet the use of this method decreased 32% in autumn 2020, as did the number of companies reporting changes based on the evidence they had collected, which dropped from 57% in May, to 46% in autumn 2020.⁶

‘This is a story about disconnection and missed opportunities, of existing weaknesses leading to breakdowns. But it is also a story of resilience and of great opportunity for rapid improvement.’

Poorly understood concerns

- An ecosystem should, by its very definition, support itself, but this was greatly compromised as a result of the concerns, anxieties, confidence and optimism felt by one community not being accurately understood by the others.
- Falling behind and learning loss have understandably received much attention, but this was not the main concern for all people. The biggest challenge, according to our survey’s respondents, was work–life balance (38%), followed by concerns about students ‘falling behind’ (33%) and confusing messages and guidelines from the government (28%).⁷
- In April and June 2020, the most pressing concern for EdTech companies was paying rent on company premises (rated 5 out of 10). By autumn 2020, this changed to having recruited too many customers for companies to be able to serve them effectively (also rated 5 out of 10).⁸
- The main worry for the parents of older children was the return to school in September 2020. Parents of younger children were more concerned about childcare than learning loss.⁹
- Falling behind was a ‘big’ or ‘quite a big’ concern for 77% of single parents, but for only 54% of non-single parents. Fifty-nine per cent of single parents had financial concerns, but these were shared by just 16% of non-single parents.¹⁰
- Parents of children with Special Educational Needs (SEN, or SEND – including Disabilities) were particularly disadvantaged. Sixty-eight per cent found home learning very challenging. Only 28% agreed that their child’s educational placement had provided ‘very good’ support, and 40% felt they received no support from educational or other agencies.¹¹
- The number of EdTech companies feeling optimistic about the prospects for the EdTech sector dropped from 89% to 69% between May and September. However, their feelings of optimism about their own future increased from 26% to 49% over the same period.¹²
- General feelings of positivity declined from April to July across the English educational ecosystem. Similarly, optimism about how it would cope in the new school year declined as September approached.¹³

Good connections between communities, schools and parents

- Parents who felt that communication from school leadership was clear were *ten times more likely to feel confident* about their school's handling of the disruption than parents who did not feel this communication was clear.¹⁴

Schools and EdTech

- Communication between EdTech companies and schools improved and impacted positively on communication between other communities, such as educators, leaders and parents.
- EdTech companies started to be seen as organisations who were there to help: over 60% of companies reported offering free technologies. All educational leaders, a third of the teachers and almost half of the parents reported using or recommending free technologies to others.¹⁵
- EdTech companies made changes to products or services as a result of lockdown, such as moving their product online, adding functionality to support home learning or providing support specific to Covid-19 restrictions, such as social distancing.¹⁶
- Educational leaders (74%), teachers (81%) and parents (68%) reported using or recommending technologies they had not used before.¹⁷ All engaged in trying new technologies.
- The appetite for new technology from educators and parents coincides with companies changing and introducing new products and/or services. For example, Zoom made changes to its video conferencing products and practices to enable it to give more support to the educational ecosystem.

Building a self-supporting ecosystem

- Teachers adapted to the pandemic remarkably quickly and supported each other. As one reported:

'As soon as someone learned how to do something, we would then share it with everybody else. So... we had some very basic training, and then we shared it. It was just learning together and helping each other.'¹⁸
- More than 30% of headteachers, teachers and parents felt supported by colleagues and school leaders, while less than 2.5% felt supported by the government. More educational leaders and parents than teachers felt that nobody was supporting them.¹⁹
- EdTech companies said colleagues were the most common form of support (73%); 57% said they relied on family for support, and 59% on their managers.²⁰
- There is a correlation between *people enjoying remote education and being confident about sustaining it, and people feeling positive and supported by colleagues and family members*.²¹
- Collaboration is important for adults and students. There was a significant correlation between *educators feeling positive, and their reports of using technology to support collaboration amongst their students*.²²
- Fifty-four per cent of respondents believed there was an opportunity to improve the use of technology for learning.²³

Barriers and challenges within the education ecosystem

- Educators were aware that provision needed to be more interactive and efficient, but they were hindered by a disparity in technical infrastructure between different types of school. Seventy-one per cent of state school children received either no daily online lessons, or less than one. Thirty-one per cent of private schools provided four or more live online lessons daily, as compared with just 6% in state schools.²⁴
- In the first month of lockdown, students in private schools were twice as likely to access online lessons daily, compared to those in state schools.²⁵

- The overall level of deprivation of the school has more influence on learner engagement than the level of deprivation of individual students. Ninety-six per cent of students who attend advantaged schools in the UK reported having a computer for schoolwork at home. However, only 88% of students in disadvantaged schools reported that they also had a computer at home for schoolwork.²⁶
- Teachers from disadvantaged schools reported that more than a third of their class would not have adequate access to technology. Twenty-one per cent of teachers in state schools reported that their school is providing pupils with laptops or other devices to mitigate inequality gaps (secondary 31%, and primary 11%). However, affluent schools were still able to provide more laptops than disadvantaged schools (28%, compared to 15%).²⁷
- There were significant problems in communication between government and other communities. In the wake of the cancellation of exams, concerns about the school assessment regime increased, which gave rise to a new wave of resistance, such as the *Rethinking Assessment* movement.
- The lack of communication and effective direction from the Department for Education left headteachers confused, forcing them to make decisions based on what they felt was insufficient advice and incomplete guidelines. One leader remarked:
*'I know there are points at which I get more guidance, and I physically look at it, I can't even bring myself to open it right now. Because you just get saturated with it.'*²⁸
- The dysfunction within education in the wake of the Covid-19 pandemic is driving more parents to opt out of school altogether. A third of the schools visited by Ofsted during October reported an increase in the number of pupils not attending school or leaving to be home educated.²⁹
- Trust between technology companies and the education ecosystem was weakened when companies rushed to get schools online without considering safeguarding issues, which is of paramount importance for the majority of educators we interviewed.³⁰

Ten policy recommendations: Connect and diversify support to reduce inequalities

Connect

1. The evidence summarised in this review suggests that providing continuous, high-quality school education in times of disruption requires that we **shift the focus of attention to the entire education ecosystem**, as opposed to its constituent parts.
2. The urgent need for **better communication and connection between and within the different communities that make up the English education ecosystem** must be addressed, to avoid a decrease in the system's ability to provide appropriate education for all schools.
3. **Apply four simple steps to speedily and easily improve government communications with the educational community**: highlight the changes to all documents that are re-released; clarify explicitly between what is guidance and what is regulation; steer clear of conflicting information unless unavoidable, in which case state that change is essential and explain why; avoid issuing communications outside of the normal working day unless absolutely vital.
4. Pool the combined wisdom of the UK's globally leading science, innovation and education expertise to create a public/private partnership and **develop a national digital data infrastructure built on shared open interoperability standards and governed impartially**. This would enable personalised support and the highest levels of privacy and security, and secure the long-term future of the education system.
5. **Prioritise, encourage and resource the creation of online communities for teachers** to be able to share their insights, concerns and experience (for practical guidance, see the Appendix to this volume).

Diversify support

1. **Focus on ensuring reliable, high-quality technical training and support infrastructure to capitalise on the enthusiasm around technology**. This includes fit-for-purpose personal devices for every learner, reliable broadband, as well as training and wellbeing support for teachers and learners. This is essential for building a foundation that will minimise the growing inequalities.
2. **Provide practical short-term support and a long-term vision**. Leverage freely available tools³¹ to help teachers integrate educational technology into their practices, focusing on components that are central to online learning, such as content and media type, engagement, assessment, analytics and collaborative learning. The five personas presented in this report – Aeronauts, Earth Movers, Fire Tamers, Water Pilots and Space Seekers – offer a simple initial framework for the rapid deployment of **essential contextualised training and support** to build skills and expertise amongst educators, parents, students and leaders to enable them to leverage technology for learning.
3. **Recognise and value the diversity of the education ecosystem**. Evidence suggests failure to do this will increase the misalignment between people's needs and the available provision, and could cause the education ecosystem to collapse.
4. **Use the significant advances in digital technology suitable for children who have Special Educational Needs and/or Disabilities (SENDs)** to vastly improve their particularly poor experiences during the Covid-19 lockdown disruption.
5. Reduce the reliance on **attendance as a proxy for education and learning, and move towards recognising the benefits of viewing engagement in learning** as the real signifier of educational progress. An effective online learning infrastructure that enables seamless learning, regardless of the student's physical location, will provide the foundation for this.

Implications and commentaries: What the data tells us

As the Covid-19 pandemic restrictions came into force in March 2020, teachers' confidence in their ability to teach remotely ranged from 42% to 64%, with the most confident teachers working in the independent sector, where students come from higher socio-economic backgrounds. By August 2020, technology was being used in schools to support remote education. The education sector was changing, and teachers, leaders and parents were all keen to know how to educate the nation when the vast majority of pupils were not attending school.

The education ecosystem is greater than the sum of its parts

For far too many years, there has been a disconnect between the individual facets of the education system that support the effective use of technology. The people who use the technology – teachers, learners and parents – are not connected with the technology developers well enough to enable an understanding of the real challenges faced. Neither the educators, learners or parents, nor the technology companies themselves, are sufficiently acquainted with the educational community in a way that will help them understand the workings of this technology. It is this lack of understanding that underpins many of the problems that arose during lockdown, and it is only through focusing on the educational ecosystem, through building and supporting its inter-connections, that we can nurture its resilience. The government has a responsibility to provide a supportive environment in which the communities, sub-communities, and the members thereof, can thrive.

The EDUCATE programme was set up in London in 2017 to support the EdTech ecosystem (a sub-part of the education ecosystem). Its aim was to bring together three key communities: the people who *use* the technology, the people who *build* the technology, and the people who *understand how the technology can be used*, all need to work together. The concept of the Golden Triangle³² was introduced as a grounding metaphor for the effective collaboration and coordinated action of the community towards EdTech products that are rigorously developed based on evidence and a deep understanding of the real-world context of learning (see Figure 1).

The Golden Triangle – Supporting the EdTech Ecosystem

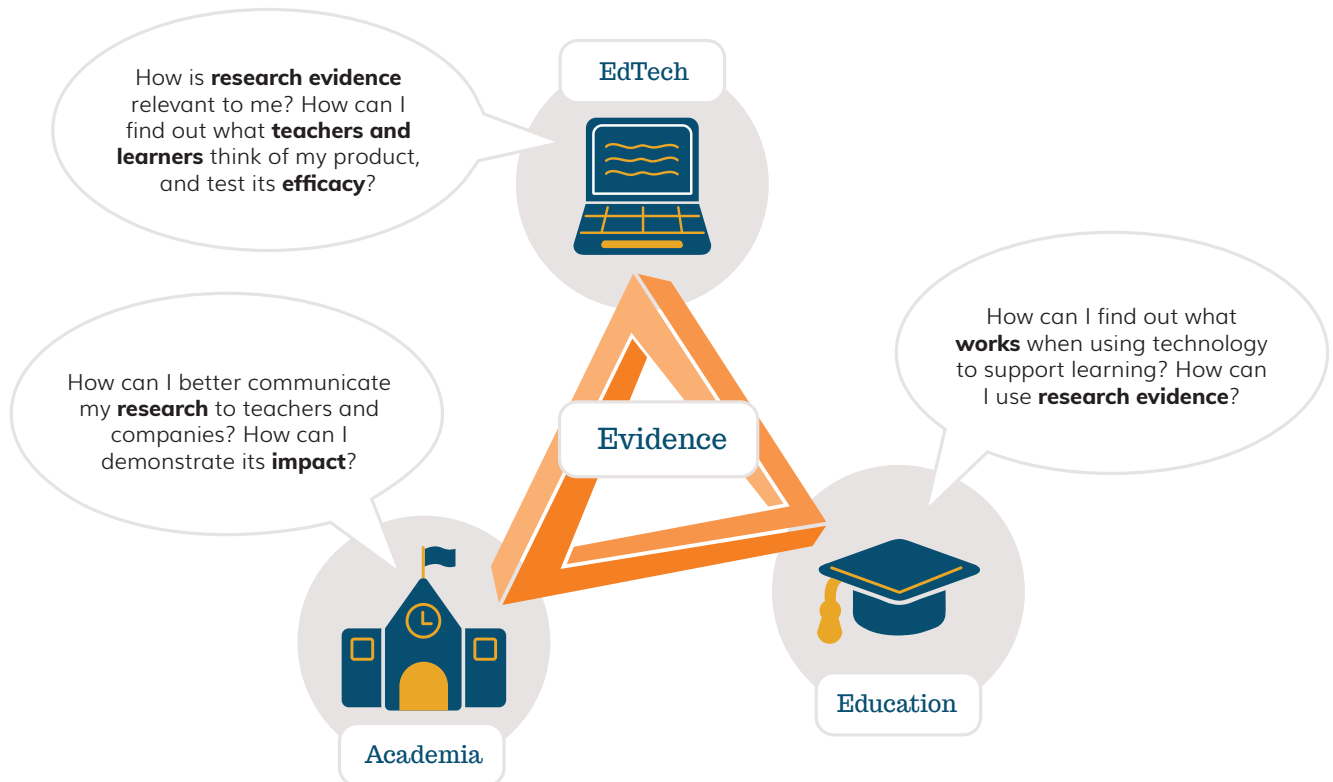


Figure 1: The EDUCATE Golden Triangle

The education ecosystem is rich and diverse

The diversity of any ecosystem is vital to both its survival and prosperity. Likewise, the situation with the education ecosystem is enriched by the diversity of the communities and individuals that make up its membership. It is essential that the diversity of membership is recognised in any attempt to provide support, guidance and regulation. However, the evidence we present in this report suggests that often, diverse communities are treated as if they were uniform. The key question here is to find a way to differentiate the way communications, guidance, help and assistance is provided to the different parts of the education ecosystem.

Research into school leadership – a vital factor for the implementation of information and communication technology (ICT) in schools – offers a useful way forward. Each school principal's leadership style can be characterised through a 'leadership style' framework.³³ For example, a principal might be characterised as having an 'affiliative' style and a 'people come first' approach. Alternatively, a principal may emphasise high standards for performance through a 'pacesetting leadership style'. The responsibility and pressure of the pandemic on school leaders is evident in the data presented

in this report, and preparation and training for school leaders is critical in order to assist them in their handling of such emergencies. However, all communities and education ecosystem members are required to support student learning to a lesser or greater extent, and all need appropriate provision.

We analysed the data we collected from educational leaders, teachers, parents and governors through our surveys and identified five personas,³⁴ as illustrated in Figures 2 to 6.

The survey responses suggest that the key differentiators between communities were those that concerned:

1. the *support systems* respondents reported using;
2. the main educational *opportunities* respondents identified as arising from the pandemic; and
3. the main *concerns* stakeholders reported facing in the context of school education.

These personas are therefore a useful basis upon which the different training and support needs can be identified for each persona sub-community. They are classified as follows.

Aeronauts

Members of this community are ready to become more strategic with respect to online learning, and applying EdTech in general. They would benefit from guidance about how to build and implement their EdTech strategy building on evidence-based pedagogies. Educational leaders and teachers in this community would be good at taking part in school demonstrators, and good at working with EdTech companies and educational researchers. They could be paired to less well-developed schools in a 'buddy' system.



Aeronauts comprise slightly more of **independent school** than **state school** members.



There are slightly more **secondary school** than **primary school** members.

Figure 2: Aeronauts



Aeronauts are ready to fly and relish trying new things and learning. They feel well-supported, optimistic and recognise the value of technology to help learners reach for the sky.

Earth Movers

Members of this community would benefit from some mentoring from more able colleagues, for example Aeronauts, who can show them the value that technology can bring to education. Some basic training and very pragmatic, focused EdTech support would be invaluable. The focus should be on the technology applications with which members of this community are already familiar, in order to build confidence – such as designing good activities for students to download, basic communication tools, recording lessons and providing student feedback digitally. In particular, students' emotional wellbeing needs should be emphasised within this training and support. Establishing an online community for headteachers, teachers and parents would also be valuable to share experiences and develop peer support networks.



There are more **independent school** than **state school** stakeholders in this group.



There are more **primary school** than **secondary school** Earth Movers.

Figure 3: Earth Movers



Earth Movers are focused on the pedagogical grounding. They are keen to develop the infrastructure that supports schools, and are keen to promote well-being and communications.

Fire Tamers

This is a community of members who are ready for a substantial intervention to help them build an initial technology and skills infrastructure. We would advise guiding them to a beginner-style 101 technology strategy that starts with an audit of their skills and ICT readiness. For example, this audit could provide an initial diagnostic process that would enable a context-sensitive profile for each school to be specified along with a short-term, simple and pragmatic strategy for online learning to include continued professional development (CPD). A focus on a small set of tools across each school community (such as a learning management system, or LMS), accompanied by support for teachers to experiment with subject- and pedagogy-specific technology, would be wise. Leaders, teachers and any IT support staff should be encouraged to join in and participate in online, knowledge-sharing communities (see the EDUCATE for Schools section, below).



Fire Tamers are the largest group. They put their energy into tackling the challenges that get in the way of learning. Give them the right tools, support and resources and they will shine brightly!



This group has more **state school** than **independent school** members.



There are more **secondary school** members than **primary school** ones.

Figure 4: Fire Tamers

Water Pilots

Water Pilots recognise the value of technology and are not worried about infrastructure inadequacies. They are keen to develop their professional expertise, but lack confidence and did not enjoy remote education. The Water Pilots reported the highest use of live and recorded lessons and therefore it would be great for them to widen their repertoire and develop an innovation-led pedagogy experimentation environment. The types of support we advise for this community are:

1. Training to expose them to EdTechs who can support asynchronous teaching. This would lessen some of the live teaching workloads and to better support teaching across different time zones.
2. Training on collaborative and social learning. The evidence of this impact would be valuable for this community who can showcase collaborative learning technologies and set up a knowledge-sharing community of practice for other leaders, teachers and parents.



Water Pilots smoothly sail through turbulent waters to steer around obstacles. When they land they are ready to dry off and get tech-savvy.



Water Pilots are mostly from **independent schools**.



More or less evenly spreadly between **primary** and **secondary schools**.

Figure 5: Water Pilots

Space Seekers

Communication with parents and support for student wellbeing needs are a focus for this community's attention. Members of the Space Seekers community are worried about students falling behind, work-life balance, and confusing messages from the government. They lack confidence and do not feel supported. They would therefore need a very gentle and supportive approach. We recommend the provision of a substantial assistance scheme for headteachers, including resources and support to build their confidence in their leadership to enable them to develop a simple short-term strategy around a small, very basic set of EdTech. For example, for primary schools this might include educational technology that support SATS or phonics tests revisions.



Space Seekers are constantly looking for the right learning space for each child. They do their jobs well and once they've mastered the basics, will use technology to deliver effective learning for students.

Slightly more **independent school** stakeholders than **state school**.

Space Seekers are mostly from **primary schools**.

EDUCATE for Schools³⁵

Schools need to:

1. Understand their own needs:
 - Look at the priorities in the school/ departmental development plan.
 - Involve teachers, other staff, parents, learners.
 - Identify the gaps or issues in your school development plan or curriculum that could be addressed by technology.
2. Conduct an inventory:
 - What software is already deployed and used?
 - How much does it cost you?
 - What hardware do you have?
 - What skills and skills gaps can you spot in your staff?
3. Ask for evidence:
 - What evidence does the supplier have that their product actually helps you achieve your required educational outcome?
 - In which context was this evidence collected? Is this context similar to your school's context?
 - How long do you have to use the EdTech for in order to see the advertised outcomes?
4. Try before you buy:
 - You may also want to pilot EdTechs you already have that aren't being implemented by enough staff.
 - Make sure you ask exactly what data will be collected by the EdTech, where this data is stored, who can access it and for what purpose.
5. Learn from the data:
 - What does the EdTech provider do with the data collected from your deployment? What do they do with the findings?
 - Will you purchase the product?
 - How can pilot data inform implementation across the school?

Figure 6: Space Seekers

There are damaging disconnects within the ecosystem

Remote Emergency Teaching is not the same as online learning

When schools adopted Remote Emergency Teaching (RET) upon being faced with school closures and restrictions, there was little connection between what happened in practice to the findings from the years of research that has been conducted into what works well when teaching and learning are taking place online.

Without the appropriate pedagogical and physical infrastructure in place, RET included mirroring classroom practices in online teaching and requiring students to interact with an LMS to which paper-based assignments were uploaded. We know from years of research that these are not found amongst the more effective methods of online teaching and learning.

The implications of RET for the long term are worrying. Many educational stakeholders are still drawing conclusions about the potential effectiveness of online learning from their experience of RET, and drawing unfounded conclusions, such as those illustrated on Twitter.³⁶

In particular, there was a lack of feedback from teachers to students.³⁷ Research by Parent Ping shows that 51% of primary school students received no feedback at all, and more than 40% of secondary school students did not receive personalised written feedback from their teachers during lockdown RET.

As lockdown extended, more pre-recorded lessons and some live lessons were provided. Live lessons were far more prevalent in the independent sector than its state counterpart. State schools faced significant challenges: some of their students lacked access to technology or an internet connection, while many schools lacked the requisite resources and infrastructure.

Teachers were providing face-to-face lessons for the children of key workers, those on Free School Meals or with SEND requirements, as well as remotely educating all students who were at home. The extent of online lessons provision in state schools was minimal: 71% of state school children received no or less than one daily online lesson. 31% of private schools provided four or more live online lessons daily, as compared with just 6% in state schools.³⁸

In the first month of lockdown, students in private schools were twice as likely to access online lessons daily as compared to those in state schools.³⁹

This disparity in provision was supported in the interviews we conducted with teachers and school leaders, who were aware from having spoken to the local community of the disparity in teaching and technology between the state and the private sector.

Educators were aware that provision needed to be more interactive and more efficient. Teacher skills and confidence in their use of technology had improved, and most teachers reported being more aware of what technology could do for their students. And yet, a TeacherTapp survey conducted on 20 July 2020 indicated a clear preference for teaching in school, with 69% of teachers selecting this option.

‘Learning cannot be remote. But it can take place online. Like the best classroom teaching, it is the result of a skilfully designed combination of co-constructed content, context, creativity, collaboration, and communication in a community supported by caring, capable, confident and compassionate teachers.’

The gap between Remote Emergency Teaching and effective online learning

Bob Harrison

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As I judge the entries for the Learning Reimagined Awards – celebrating the most innovative and inspirational uses of technology for learning around the world – I couldn't help but reflect how incredibly quaint and outdated the entries make DfE efforts look. I look at the latter, and want to reach for the remote control. The Oxford English Dictionary's definitions of 'remote' all lead to the realisation that the Department for Education, with its *Example Lessons for Remote Teaching*,⁴⁰ doesn't have the remotest clue about technology for learning.

Its first definition of remote reads: '(of a place) situated far from the main centres of population; distant'. In the context of a second pandemic wave disproportionately affecting the North, it's a perfect description of where the DfE has left itself with that attitude. They are worlds away from school leaders' and teachers' concerns about how children learn, and how to ensure fair and responsive assessment systems amid the disruption.

A further definition reads: 'having very little connection with or relationship to'. It is spot-on for the notions of so-called remote learning espoused by the department. Many trailblazing schools and colleges made technology integral to their learning and teaching years ago. Thoroughly inclusive, they ensured all learners had access to technology and online learning.

*Example lessons for Remote Emergency Teaching*⁴¹ is at least honest enough to admit the DfE are not in the business of online learning. Broadcasting talking-heads, it seems, is engagement enough.

It is not.

Recent research from the Education Endowment Foundation (EEF) offers a more constructive view about effective digital learning. The main finding of their meta-analysis is that the crucial factor – whether face-to-face, online or in a blended model – is the quality of teaching. But online teaching demands a different skill set in order to translate into online learning.

It's unclear who is setting out what this skillset is. And in the meantime, we are left with a raft of confused terms – remote education, remote schooling, remote teaching, remote learning – all used synonymously. So let me attempt to offer some clarity.

For '**remote education**', read: a system that is not related to the needs or contexts of learners.

For '**remote schooling**', read: individual learners singing (or not) *Land of Hope and Glory* to their laptops, led by an archbishop.

For '**remote teaching**', read: Oak National Academy or, talking heads broadcasting lessons to passive screensavers.

For '**remote learning**', read: a convenient myth.

Learning cannot be remote. But it can take place online. Like the best classroom teaching, it is the result of a skilfully designed combination of co-constructed content, context, creativity, collaboration, and communication in a community supported by caring, capable, confident and compassionate teachers.

And there's nothing at all about that!

Assessment needs rethinking

When exams were cancelled due to the pandemic, and a great deal of confusion and concern followed the use of an algorithm to decide on exam grades,⁴² public trust in the way the government was handling education declined⁴³ and concerns about the school assessment regime gave rise to new calls for change, such as the rethinking assessment movement.⁴⁴

Debates and commentary about the future of assessment are not new and are extremely complex. Issues of accountability, fairness, and the technical quality of assessment remain entangled, and must be understood clearly in any rethinking of assessment. The pandemic has precipitated a new energy for and desire

to explore this complexity and find new ways forward that can take advantage of what EdTech has to offer.

High quality online tools offer new possibilities for learning and assessment that is interactive as well as socially and cognitively engaging. These technologies are also capable of tracking performance over time aiding formative assessment as well as supporting summative assessment processes. However, the possibilities afforded by these technologies do not displace the need for excellence, rigour and accountability. The data that can be collected, collated and processed through the gateway of technology needs to increase the validity and accountability of assessment, not reduce it.

The need to rethink assessment

Dr Sue Swaffield

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The impact of Covid-19 on young people's learning and prospects brings the long-standing need to rethink assessment into sharp focus. This year's cancellation of national examinations, and the necessarily rapid implementation of alternative systems for awarding qualifications, exposed the realities, weaknesses and challenges of examination systems. Issues of equity and fairness rightly loomed large. A subsequent major change to England's high-stakes assessment system already announced is government's welcome intention that actual, rather than predicted grades be used to offer university places.

Lessons are to be learned from assessment approaches used by the four UK constituent nations, as well as around the world. Systems incorporating assessed course work and other methods alongside traditional timed written examinations are more resilient to disruption, and arguably fairer. Teachers can use their knowledge of individual students and evidence elicited over time, set alongside criteria for reporting levels or grades, to make summative assessment judgements. This approach requires moderation (which ideally

involves teachers in valuable professional learning within and across institutions) and standardisation at a system level. Teachers' judgements can be supplemented by formative assessment data generated and stored electronically: many programmes already exist and more are being developed that harness the power of artificial intelligence.

Designing and implementing high-quality assessment requires clarity about the principles, purposes, use and possible consequences of assessment, as well as understanding about validity, reliability, ethics, and other key concepts. The major task of changing high stakes summative assessment will take years. It must not eclipse the development of assessment that supports learning directly now. Assessment for learning, integral to everyday learning and teaching, assists pupils' subject learning as well as helping them become better learners.

Perhaps the most pressing needs are support and professional learning for assessment specialists, teachers, education leaders, and policy makers. A role for technology?

Teacher skill development is critical

Technology and infrastructure alone are not enough for good-quality remote or hybrid education. Teachers need to develop online teaching skills and

be able to critically evaluate evidence about the available EdTech tools and their applicability and appropriateness for their particular students.⁴⁵

Despite the difficulties teachers were faced with when suddenly required to use technology to do their jobs, they were able to adapt remarkably quickly, and build capacity. Teachers were resourceful and their appetite for learning can be seen in the numbers who signed up for a FutureLearn course designed to explore online teaching in response to the Covid-19 pandemic: 82,000 enrolments.⁴⁶ Teachers who felt additional training would be helpful agreed that using technology, organising learner collaboration digitally, delivering remote lessons, and digital assessment and feedback would be valuable to support their work.⁴⁷

‘The impact of Covid-19 brings the long-standing need to rethink assessment into sharp focus[...] It exposed the realities, weaknesses and challenges of examination systems. Issues of equity and fairness rightly loomed large.’

The role of school leaders and headteachers during COVID

Brian Lightman

Brian Lightman's broad experience in education spans 41 years and has included two headships and the position of General Secretary of the Association of School and College Leaders. Now a self-employed education consultant, he has a wide-ranging portfolio which includes working with schools and leading on careers education for the PiXL network of some 3000 schools. He is a non-executive director of the Careers and Enterprise Company and of an Academy Trust.

School leaders and headteachers have made heroic efforts to adapt to the challenges surrounding COVID and have invariably worked long hours with little respite at weekends and during holidays. They have done this willingly and with professionalism, but have been immensely frustrated by the uncertainty around changing and unclear guidance.

The short-term implications are:

- Headteachers and school leaders are going to need support to continue coping with the vast range of increased demands they are facing. Many are exhausted.
- The assessment system at 16 and 18+ needs to be adapted immediately in recognition of the disruption to learning for many young people. [...]

In terms of long-term implications, there is an unprecedented opportunity to look at many aspects of schools' operations differently in the light of experience. These include:

- The curriculum and educational vision including the role of students and independent and resilient learners and the necessary skills and attributes.
- The use of technology as a virtual learning tool so that blended and flipped learning becomes an integral aspect of the curriculum. Research into effective practice and professional learning for staff will need to be prioritised.

- Assessment and testing – moving from a reliance on external assessment to a position where formative and diagnostic assessment are embedded in teaching and teachers are re-skilled in this.
- Accountability (including inspection and performance tables). The pandemic has brought the shortcomings and unintended consequences of existing systems into sharp focus. There is an opportunity for schools to demand and rise up to a higher trust system in which they hold themselves to account.
- Schools have made a vast contribution as Community Hubs during the pandemic. The opportunity is to build on this.
- Building on the role of parents as partners in the educational process. Many parents have learnt a great deal about their children's education during lockdown and participated in increased communication between home and school.
- Building on the fundamental change in working conditions including the role of remote working for teachers, the way meetings and staff training etc are organised and what opportunities for flexible working have been discovered.

I have explored some the questions school leaders might consider.⁴⁸

Parental engagement is vital

Parents were understandably worried about their children's education, and parents who felt that communication from school leadership was clear were ten times more likely to feel confident about their school's handling of the disruption than those parents who did not feel communication from school leaderships was clear.⁴⁹

Much has been written about learning loss and falling behind.⁵⁰ When asked specifically about whether *falling behind* was a concern for them, 55% of the parents who responded to a Parent Ping survey stated that *falling behind* was a 'big' or 'quite a big' concern, compared to 36% reporting that it was 'not a big concern', or that it was 'not a concern at all'.⁵¹ However, this was not necessarily the main worry for all. The main worry for parents of children at the end of primary school and in secondary schools was the return to school in September 2020. These parents were less concerned about learning loss than they were about a member of their family contracting Covid-19. Childcare was a larger worry for parents of younger children,⁵² for whom learning loss was a lesser concern.⁵³

Disruption is disproportionate

The consequences of educational disruption are not felt evenly across all students and families.⁵⁴ The most recently published OECD data indicates that students from disadvantaged communities have less access to personal technology and high-quality online learning resources.⁵⁵

There is evidence that primary school children from the least advantaged communities would lose 31% of a standard deviation from lockdown by the time schools re-opened in September, whereas children from the most advantaged community would have lost 24% of a standard deviation. The difference between these two communities is bigger in secondary education than primary. This attainment gap is also reported by teachers⁵⁶ who felt that the majority of their pupils would require additional support.

The bare essentials for effective home learning – personal technology, access to suitable internet connected technology, and a quiet, dedicated space to study – were not available to all children. Eighty-eight per cent of secondary school children report that their school has at least one online home learning resource, which means that those children without appropriate access at home are at risk of being left behind. Indeed, access to IT has been identified by the Nuffield Trust as *the most significant form of educational disadvantage*. However, the overall level of deprivation of the

school was found to have more influence on student engagement than the level of deprivation of individual students.⁵⁷

The school is the key driver for engagement for disadvantaged students. Teacher confidence in their use of technology is another factor and even before the lockdown teachers in private schools reported being more confident in using education technology than their state school peers.⁵⁸

The disparity in educational provision is also reflected in parental concerns. For example, data collected by Parent Ping and TeacherTapp, shows how socioeconomic factors impact the kinds of worries felt by different families. Worries about *falling behind* were evaluated by Parent Ping on 28 July 2020. As reported, 20% of parents who responded to being asked if *falling behind* was a concern for them stated that *falling behind* was a big or quite a big concern. When a comparison was made between respondents who were eligible for Free School Meals (FSM) and those who were not, 58% of parents eligible for FSM said that *falling behind* was either a big concern or quite a big concern for them. Seventeen per cent of parents eligible for FSM responded that they did not know if *falling behind* was a concern, compared to 5% of respondents not eligible for FSM. Thirty-six per cent of parents not eligible for FSM responded that falling behind was *not* a big concern for them, compared to 21% of respondents who were eligible for FSM.⁵⁹

When the same data from Parent Ping's survey on 28 July is analysed to explore the views of single parents compared to non-single parents, the differences are even more noticeable. Seventy-seven per cent of single parent respondents stated that *falling behind* was either a big or quite a big concern for them, as compared to 54% of non-single parent respondents. Respondents who stated that falling behind was *not* a concern were divided as follows: 18% of single parents elected for this response, compared to 36% of non-single parents.⁶⁰

A further question from Parent Ping used in a survey on 30 July 2020 sought to find out what did concern single parents as compared to non-single parents. This survey revealed some clear differences, 59% of single parent respondents reported being concerned about 'missed learning due to lockdown' whereas only 28% of non-single parents selected this response. The greatest difference was seen in concerns about financial worries with 59% of single parent respondents selecting this response compared to 16% of non-single parents.⁶¹

Parents reported spending money on learning, since lockdown, for extra books, resources, subscription to apps or websites or on electronic devices. Twenty-four per cent of parents have spent less than £50, and 14% had spent more than £100 pounds in the week after schools closed. Moreover, many families supported their children's learning with additional tuition if they could afford it.⁶²

Families with SEND children faced substantial challenges

Sixty-eight per cent of parents of children with special needs reported that they found home learning really challenging and this was exacerbated by the fact that many of these children are extremely vulnerable and required to be shielded. Only 28% of parents agreed that their child's educational placement had provided very good support.⁶³

Independent or non-maintained special schools (INMSS) had more satisfied parents (29%), compared to parents in mainstream schools (16%) and in state special schools (18%). In addition, the amount of work set was felt adequate by 50% of parents in INMSS compared to 16% in mainstream schools and 26% in state-run special schools.

Special needs children's access to therapies, one-to-one teaching assistants and support was also badly affected by restrictions brought about by Covid-19 crisis, and this will cause many children who require intensive support to regain skills lost or not progressed during this period. Only a small percentage of one-to-one teaching assistant support could be provided online, and once again those in INMSS tended to fare better (22%) than those in state special schools (8%) or mainstream schools (9%). The figure was 17% in post-16 settings. Forty per cent of parent carers of children with SEND felt they received no support from educational or other agencies during the lockdown.⁶⁴

There is a key role for technology to play in tackling the challenges highlighted by the data. A useful series of recent reports about Specific Learning Difficulties (SpLDs) and technology is available.⁶⁵

The need to rethink attendance

The Square Peg team⁶⁶

Square Peg, a Community Interest Company, was set up to effect change for all those students who face barriers to attendance and their families. The one-size-fits-all education system is having a negative impact on an increasing number of children and young people who then 'act out' and become excluded, or shut down and become persistent absentees. The consequences can be catastrophic.

Several factors have contributed to the anxiety currently experienced by children and young people, not least of which relate to education. These include an overly academic curriculum, increased testing, a reduction in support staff and difficulties accessing external support for SEND or mental health issues. Schools have become larger, with school leadership teams held accountable for attendance and attainment. They are also the focal point for much more than education: an integral part of safeguarding policy, childcare for parents to return to work, and the 'coalface' for children and young people's mental health issues. This has put huge importance on a child's physical presence in school, irrespective of the cost to their mental health and emotional wellbeing.

The response to attendance difficulties often exacerbates the problem, and punitive sanctions for parents serve to heighten their own anxiety (which impacts on their child's anxiety). There is also no evidence that these sanctions are effective. The result is that an increasing number of children have become

persistent absentees – over 771,000 in the 2018/19 academic year and for 42.8% of their absences there is no formally recorded reason. More than 60,000 students are absent for 50% or more of the academic year.

For the cohort of children who face barriers to school attendance, lockdown provided welcome relief from the daily pressure of attendance, and the threat of parental fines and prosecution. It also demonstrated that online education is possible (now statutory for Covid-related absences). We need to build online provision as a permanent complement to mainstream education and one which could be synchronous, engaging, therapeutic and effective. Technology now allows us to identify how individual students learn and offer up bespoke content and pedagogy that taps into their skills, talents and passions, and better prepares them for our future (predominantly digital) world.

For an up-to-date review on technology-led interventions for specific learning difficulties, please see Luckin et al (2020).⁶⁷

The infrastructure is inconsistent

Ninety-six per cent of students who attend advantaged schools in the UK reported having a computer for schoolwork at home. However, only 88% of students in disadvantaged schools reported that they also had a computer at home for schoolwork.⁶⁸ Teachers from disadvantaged schools reported that more than a third of their class wouldn't have adequate access, compared to concerns about access in most affluent state schools (3%) and private schools (4%).⁶⁹

Twenty-one per cent of state school teachers reported that their school is providing pupils with laptops or other devices to mitigate inequality gaps (secondary 31%, and primary 11%).

However, affluent schools were still able to provide more laptops than disadvantaged schools (28%, compared to 15%).⁷⁰

The increase in numbers of pupils refusing to attend school is an increasing matter of concern

with mainstream media. In November 2020, the Guardian newspaper published a report entitled "It was damaging him": the spiralling number of children refusing to go to school⁷¹ which reported that government data from 2018–2019 indicated that 770,000 pupils were persistently absent in England, with an increase in the numbers of pupils who miss more than half their schooling from 39,000 in 2015–2016 to 60,000. The Covid-19 pandemic is likely to be making this situation worse, with Ofsted reporting that of the 121 school visits conducted in October 2020 a third of schools reported an increase in the number of pupils not attending school or leaving to be home educated. Campaign group Not Fine in School (NFIS) reported that almost 1000 new members had joined their closed Facebook group since the start of the school term in September, 2020, an increase in membership of 8%.⁷²

Trust in government is low

The uncertain and dynamic reality of the Covid-19 impact led to the daily reliance of schools on government advice, support and guidelines, which were often highly reactive and, as Figure 7 illustrates, contained multiple conflicts in the information they provided. As one headteacher noted:

*'I think one of the things that would have helped enormously is if when they updated something – if they told you which part of that document had been updated, rather than just sending it out, and then you having to trawl through it to find the bit that was new or different. And to know what was statutory and what was guidance.'*⁷³

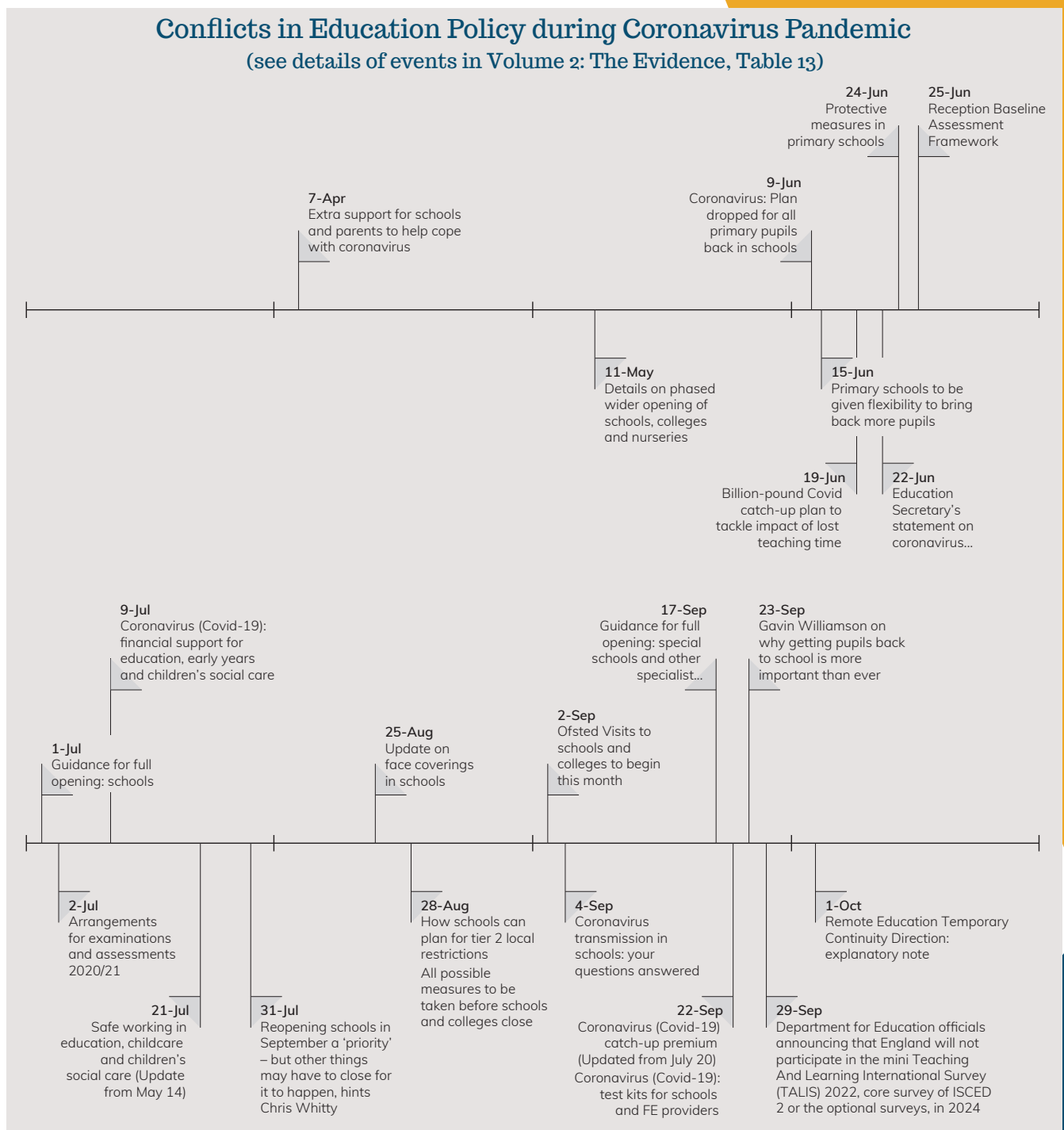


Figure 7: The Timeline of Guidance for Educational Leaders

Trust in the government

Jim Knight

Jim Knight, Rt Hon Lord Knight of Weymouth, mostly works with education companies helping them to provide great services for teachers and learners. He also works in the House of Lords as a legislator. Right now he is building a global teacher community for climate change education and helping to develop a network of free coding schools.

The last nine months have been a time of unprecedented challenge for everyone working in education. Covid-19 will impact a whole generation of children and young people for many years. Many children have fallen behind and have increased levels of anxiety; parents have juggled work and teaching, with a new appreciation of the importance of school; teachers have had to learn new skills and work excessive hours to adapt to continue to do their job.

All of this has had to be led, and that is where we have seen the biggest gaps.

Thanks to some great school leadership I have seen some wonderful things. New ways of communicating and teaching have been developed overnight. Young people have been allowed to blossom as self-directed learners. Schools have been at the heart of caring communities as they converted into food distributors for those that most need it.

School leaders have shown real love and care for their people whilst juggling compressed budgets, grieving families, and a constant flow of guidance.

This is where the failings have been most apparent. System leadership in a crisis is hard. You have to act quickly, focus on the right

things, take risks and act decisively. Then you have to communicate, communicate, communicate. In a crisis everything is uncertain and good leaders create certainty. Even where there are unknowns, you can still explain what the scenarios are and what will happen in each scenario.

Schools have been given no certainty. Would they close? Would they re-open? Who should come to school? What personal protection is needed? What about exams? Inspections? How do we remote teach? What about children without technology at home? What about free school meals?

The questions were many and predictable. But we have had exams crisis before. We have had schemes to end the digital divide before. And yet no attempt to learn from history and instead just mountains of guidance to add to headteacher workload. For most, teaching and learning came way down the priority list because compliance had to come first.

2020 could be remembered as a time when schools and teachers showed their flexibility, commitment and professionalism. I fear it may be remembered more for a model in poor leadership from the top, as ministers continuously failed to get ahead of the curve.

Trust in the online world is also lacking

During the lockdown, interview data reveals that a wide range of apps and online software were used, and as the main school platform, Microsoft Teams and Google Suite. Most of these were provided free to schools during the lockdown, but most schools already had accounts set up for pupils. However, many companies did not consider safeguarding issues due to the urgency of the need to go online, yet most of our interview participants mentioned that safeguarding was at the forefront of their provision for remote teaching, particularly for primary schools, for whom safeguarding and privacy issues are fundamental. This stopped some schools from

engaging with certain software. Research by Avast⁷⁴ shows that more than one in five (21%) children admit to having had bad online experiences during the Covid-19 lockdown. Of those who cited negative online experience, 72% had received unkind messages, 72% had received unsolicited and inappropriate content, 71% had received unwanted contact from a stranger, 67% had received a malicious video call and 58% had accidentally downloaded a virus onto their device.

Privacy in learning during COVID

Tom Moule

Tom Moule is Executive Lead at the Institute for Ethical AI in Education. Tom leads the Institute's research programme, and is the primary author of the Institute's reports.

A key part of my role is to listen to stakeholders, from secretaries of state to students themselves, in order to understand their optimism and concerns around the use of AI in education.

I have heard concerns around educational technologies being used as instruments of surveillance, but have also learned of an appetite for data being gathered on an ongoing basis as part of continuous assessments.

Learners in particular are uneasy about the possibility of inaccurate AI systems making mistakes and hence having an adverse effect on their learning. Accordingly, there is broad recognition that large amounts of data pertaining to the learning process is needed to make these systems function with high degrees of accuracy; that said, there are still demands/expectations that data be collected (and stored) safely, parsimoniously and only for the purpose of supporting learning and other key educational goals. And what constitutes parsimoniousness in these contexts?

That depends. For instance, the collection of highly personal data (relating to a learner's emotional states, perhaps) could be justified if the benefits outweighed the risks. But how do we decide if that is the case?

With balances to be struck, and contexts to be taken into account, ensuring learners' privacy is respected requires trusted processes in addition to codified principles. Learners and educators need to be involved in making decisions around when/what data is and isn't collected, and when/if the benefits of data-consuming technologies outweigh the risks. Transparency is needed around how technologies operate, and around what goes on behind the scenes. And, in the event that learners' privacies are compromised, someone (not something) needs to be accountable.

So, to address the exam-style question: *"Should students share video during live lessons?"* – maybe: if trusted processes are in place to ensure learners' privacies are respected.

The feelings of the education ecosystem are important and diverse

The restrictions to school operations imposed in March 2020 tasked school leaders with finding ways to support teachers, students and families safely to adjust and maintain student learning. Disruption impacted classes, exams and learning over many months, leading to an inevitable deterioration in how people felt. Feelings of positivity declined from April to July across all stakeholders. Levels of enjoyment of remote teaching and learning were highest amongst parents, with infant school stakeholders feeling the most challenged. State school stakeholders reported lower levels of enjoyment and higher levels of challenge than in independent school peers. None of our SEND stakeholders reported that they were enjoying the remote mode of teaching and learning. However, this was a small group and the rich data from interviews provided positive evidence when children were offered a

different type of opportunity, a nonverbal autistic child performing extremely well when able to submit a recording they had done at home rather than attending a face-to-face audition.⁷⁵

Stakeholder optimism about how the English educational system would cope in the new school year during July and August declined over time as the school year approached. The decline was steepest amongst educational leaders relative to other roles, and most stable amongst teachers. Parents were the least optimistic communities. There were also differences between state and independent schools, where feelings of optimism were well matched in July, but declined more steeply amongst state school respondents.

Primary school stakeholders were the least optimistic of the school sector stakeholders, and parents were the least optimistic community.

Likewise, confidence about their ability to maintain remote learning over the longer term, declined. Average confidence levels decreased most amongst educational leaders and least amongst parents; most in state schools as compared to independent schools and more in junior schools than primary or secondary schools.⁷⁶

Remote teaching and learning are not exclusive to lockdown, but there is a clear relationship between these two settings which is useful, when exploring how people felt when school education was disrupted due to the pandemic. We found evidence of a correlation between enjoyment and confidence with respect to remote teaching and learning. In general, those who were enjoying remote education were more confident in their ability to sustain it. This is not a causal relationship; it is, however, interesting to evidence a relationship between enjoyment of learning and teaching, and then, confidence.⁷⁷

Twitter data collected in September 2020 indicated a transition in the prevalence of mentions of *parents* and *students* to mentions of *teachers* and the *school* between the time prior to schools re-opening and the time directly after schools re-opened.⁷⁸

In spite of declines in positivity, there was positivity about the opportunities resulting from the pandemic restrictions in education. Fifty-four per cent of respondents believed there was an opportunity to improve the use of technology for learning. The opportunities perceived varied across stakeholder communities.

For example, primary school respondents were more appreciative about the opportunities for improved communications between parents and schools than secondary school respondents.⁷⁹ The most concerning factor for respondents was work–life balance (38%), followed by concerns about students ‘falling behind’ (33%), and confusing messages and guidelines from the government (28%). The teaching community was most concerned about work–life balance (40%) and about what happens once lockdown is over, and this may signal a need for increased teacher training. The leadership community was the most concerned about confusing messages from the government, and parents’ concerns were focused on emotional wellbeing and communication with the school.

The differences between sectors is evident again, with concerns about ‘falling behind’ – together with the lack of technical knowhow and poor infrastructure – much more apparent in state schools. The ‘falling behind’ concern was also greater in secondary school stakeholders than their primary contemporaries. Boredom and

loneliness amongst students was much more of a concern in secondary and state schools. Interestingly, independent schools reported greater use of collaborative technologies and much greater use of synchronised learning than state schools. Lack of motivation, and the difficulty of studying alone, were of most worry to pupils.⁸⁰

The risk of learning loss was greatest among the children who did not have access to a personal computing device; whose caregivers were not able to step into teachers’ shoes; whose household did not have a reliable internet connection; and for whom learning was not validated as a priority within their social circle. The risk of damage to children’s wellbeing was widespread and crossed the nation, affecting all socio-demographic communities.⁸¹

The EdTech sector worked hard to step up to the challenge

During school closures, educational technology became invaluable to many teachers, parents and learners. EdTech companies often provided free support to help alleviate the effects of the pandemic on learning. Going back to school also saw an increase in the use of EdTech.

The sort of technology used and the way it changed over time

We wanted to probe the manner in which teachers, parents, EdTech companies and school leaders reported on their schools’ technology use over the eight-month period from April. The four most popular activities for schools were:

- live (synchronous) lessons
- digitally marked assignments
- shared lesson recordings
- the provision of downloadable activities.

There was also a substantial number of respondents who reported their use of subject-specific software and technology to support collaborative learning.⁸²

When looking at the breakdown of technology used, it is clear that primary schools put more emphasis on asynchronous, as opposed to synchronous, learning. Independent schools used more collaborative learning than state schools.⁸³

We also asked our respondents to what extent they were using, offering or recommending free or reduced-price technologies. All of our educational leaders, a third of the teachers and almost half of the parents who responded, reported using or recommending free technologies.⁸¹ Almost

two-thirds of the EdTech company respondents reported offering free technologies during the lockdown.⁸⁴

When asked if they were using, offering or recommending technologies they used before Covid-19 or using new alternatives, more than two-thirds of educational leaders (74%), teachers (81%) and parents (68%) reported using or recommending technologies that included technologies they had never used before. In comparison, 26% of educational leaders, 16% of teachers and 17% of parents said that they were only recommending or using technologies they had used before. Across the period from 22 April to 4 September 2020, it can be seen that as one might expect, there was an increase in technology use in the spring and during lockdown, including technologies previously not used. Educational leaders reported less technology use, and their pattern of usage was not evenly spread over the months. Teachers' and parents' use of technology was more evenly spread. June and July saw an increased reporting of the use of technology that had not been used previously.⁸⁵

EdTech learning from lockdown

Lockdown 2020 has provided a unique opportunity for EdTech companies to introduce new technology to the educational sector. Companies who offer EdTech – and even some technology companies who were not previously particularly active in the education space – have increased *and/or* changed some of their products *and/or* services. For example, Amazon introduced Amazon Kids+ to offer books, videos, music and educational content. Zoom has also made changes to their products and practices to address educational requirements. We wanted to know if the companies we surveyed were using this opportunity to collect some data and learn about how their products *and/or* services were being used.

Data from EdTech companies sampled in April, June and then again during September/October evidences that the number of companies who had not collected any data at all has reduced from 30% at the beginning of lockdown to 10% when the school year resumed in autumn 2020. The highest increase in data collection method was using interviews (from 4.35% in April to more than 50% in September/October).⁸⁶

Data collected via interviews provides useful but limited data, and therefore we wanted to know what other data sources our EdTech respondents were using to collect evidence about their products or services. The simplest data collection method to scale is the use of logs or clickstream data to gather and collate evidence about the

‘The “falling behind” concern was also greater in secondary school stakeholders than their primary contemporaries.’

way a product or service is being used, and yet the adoption of this data collection method increased the least, moving from 26% in September to 32% in October.⁸⁷

We also investigated the plans that EdTech companies were making to change their products in the light of lockdown. Initial enthusiasm among respondents suggested they would use their ‘lockdown learning’ to change their product or service, with 39% reporting that they had thought about changes and were starting to plan how they would make these changes, and 57% reporting that they had already made changes in May 2020. In the autumn of 2020, the number of respondents thinking and planning was 36% – a slight dip from May 2020 – and the number of respondents who said they had already made changes was 46%.⁸⁸

Data regarding the nature of changes made to products or services by EdTech companies as a result of ‘lockdown learning’ illustrates that the most common changes companies made were to put their product online, add functionality to support home learning, expand functionality, while scaling or building support specific to Covid-19 restrictions, such as social distancing.⁸⁹

EdTech company anxiety and support

In 2020 we asked in April, June and then again in September and October, what the main concerns were. For the EdTech companies who responded earlier on in April, the most pressing concern reported was paying rent on company premises that were not being used, rating 4.9 on a scale of 1–10. This remained the main concern in June, with a rating of 5.08. By autumn 2020, the main reported concern was that companies were onboarding too many customers for them to be able to meet their needs effectively – this was rated 5.07. Initially in April, the third most highly rated concern was inadequate or inaccessible government support – rated 4.47 – but this reduced to the least-rated concern by autumn 2020, with a rating of just 3. June 2020 saw the main concern remaining paying rent, but concerns about staff being ill was now the second highest rated concern at 4.25 and concerns about supporting staff who were working remotely had increased to 4, which made it the fourth-highest rated concern. The rating for concerns about staff becoming ill dropped to 3.95 in autumn 2020. Worrying about when lockdown or Covid-19 restrictions would end, and what that might mean for business, was not initially rated highly as a concern – but it did increase over time, rising from an initial rating of 3.18 in April, to 3.42 in June and 3.55 in the autumn of 2020.⁹⁰

Concerns about paying property rent did not change significantly, and stayed high on the list of EdTech company concerns. In terms of how our respondents dealt with working in the office or at home, however, with 45% of the companies who responded to our question reported that their staff were all working remotely, with 27.5% of respondents in rented premises and 17.5% in a shared workspace.⁹¹

In the same way that we were interested in how other educational stakeholders were being supported during the disruption caused by Covid-19, we also asked about this with our EdTech sample. Colleagues were the most common form of support, with 73% reporting this, and family was also important, at 57%, and management at 59%.⁹²

The future outlook for EdTech

The increased use of EdTech due to the Covid-19 disruption to education could precipitate a rosy future for the EdTech companies in Britain. Researchers expect that more blended learning approaches may be implemented in schools, mixing classroom and online learning to continue

the fight to reduce the detrimental impact of Covid-19 in the schools and the ecosystem.⁹³ A recent report by London & Partners⁹⁴ and Dealroom⁹⁵ highlights London as the major European EdTech hub and states that it has notable potential for growth. London's EdTech ecosystem is the largest in Europe, with an estimated value of \$3.4bn, and it is the only city in Europe in the global EdTech top ten by investment.⁹⁶

When we asked our EdTech respondents what they thought of the prospects for the EdTech ecosystem in May – and then again in autumn 2020 – the response was less positive. In May, 50% of respondents reported that they believed that the EdTech ecosystem had the potential to be stronger, due to the Covid-19 restrictions, but that it needed more government support. Thirty-nine per cent of respondents agreed that prospects were good, but that there were barriers to be overcome – aside from government support. At that point, there was also concern about the negative impact on the sector of free resources being made available by non-commercial organisations. By the autumn of 2020, the number of companies responding stated that the EdTech ecosystem had the potential to be stronger owing to Covid-19 restrictions, but that it needed more government support, which had dropped by 9% to 41%. Respondents who felt that the EdTech ecosystem had the potential to be stronger due to the restrictions, but that there were other barriers, had dropped to 28%. Anxieties about free resources had all but disappeared by autumn 2020, but 10% of respondents stated that they now felt that the EdTech ecosystem was *weaker* due to the Covid-19 restrictions, yet no respondents had expressed this view in May. Those who stated that they believed that the EdTech ecosystem was *stronger* due to Covid-19 restrictions had also dropped slightly from 22% in May to 21% in autumn 2020.⁹⁷

The reduced reporting of positivity about the EdTech ecosystem was not reflected in reports about EdTech company respondents' feeling of optimism. Overall, when asked if they generally considered themselves to be more or less optimistic about the future than they were before Covid, the EdTech respondents moved from 26% of respondents reporting that they are more optimistic about the future than they were before the pandemic in May, to 49% in the autumn.⁹⁸

The World Economic Forum⁹⁹ examination of the effects of the lockdown on education concludes that it is necessary to combine the power of

technology with the power of communities. It states that:

'The factory-inspired, 19th-century model of education made sense when there were severe limitations on teaching resources. Today there are innumerable digital learning platforms powered by AI that are struggling to find customers.'

Researchers agree that while online education works for some people, it is not effective for everyone and not in every area.¹⁰⁰ This indicates that there is 'a fundamental need to belong, learn and share'. We need meaningful communities – because they are force multipliers. They make learning fun and create a peer-to-peer accountability mechanism that shapes a culture of learning.¹⁰¹

BESA Director General Caroline Wright noted commented:

'A significant proportion of the UK's EdTech providers work with schools across the globe and were well placed to provide support and advice to British schools when Covid-19 cases first reached critical levels in the UK in Spring 2020, given their experiences working with schools across the ASEAN region during the first quarter of 2020.

'I am incredibly proud to represent BESA, an association whose members collectively provided more than £36m of free resources during the period from the March to June 2020 alone. The final figure will be significantly higher.

'Many schools experienced a pace of change in technology practices that accelerated the uptake of technology over and beyond what had been seen before. This presented additional CPD and support challenges for UK EdTech providers who worked tirelessly to support both existing school customers and schools in need of additional support and guidance. Schools and the wider EdTech sector pulled out all the stops to help support learners at breakneck speed during the initial school closure period. Schools and the EdTech industry now face the significant challenge of embedding these new practices over the longer-term. This will be testing given the additional Covid-burdens and budgetary pressures currently facing schools.'

Everyone needs support

The closure of schools in the spring of 2020 required that education became a home-based, technology-enabled activity, with limited face-to-face opportunities. School leaders found themselves in the unenviable position of balancing the provision of support to students and staff, whilst attempting to reduce the impact of school closures on millions of children and wading through numerous pages of government guidelines and regulations. School leaders had to work in a context where there was little to no predictability and no certainty or end in sight.

What can the evidence tell us about the impact of the Covid-19 lockdown and related ongoing restrictions on school leaders and teachers?

Support systems

Teachers' workload is an ongoing issue, even before the pandemic, as evidenced in the National Foundation for Educational Research (NFER) survey carried out in October last year,¹⁰² which found that over a quarter of the teachers who were polled were considering leaving their jobs within the next 12 months due to workload pressures, stress and anxiety.

Support systems are a central mechanism for helping to reduce stress and anxiety in all stakeholder communities.¹⁰³ More than 80% of parents and staff who felt involved with shaping their school's response to Covid-19 also felt they were part of the school community, and communication, clarity of decisions and support were the highest factor that correlated with both parent and staff confidence in a school's response to the pandemic. Staff who felt that communication from school leadership was clear were four to five times more likely to feel confident about their school's handling of the disruption than the staff who did not feel that communication was clear.¹⁰¹

The support systems as reported by our survey respondents, that is, all stakeholders except EdTech companies, illustrated that more than 30% felt supported by colleagues and school leaders, and under 2.5% felt supported by the government.¹⁰⁴ All stakeholders including EdTech felt most supported by colleagues. Family and friends were also important sources of support, particularly for EdTech companies. More educational leaders and parents responded that nobody was supporting them (15% and 21%

respectively) than educators and EdTech, where less than 10% of respondents reported this. The feeling of lack of support by governmental agencies is clear across the board.¹⁰⁵

The importance of support networks

We have already illustrated that when asked to score their personal feelings during the six months from April to July 2020, our respondent stakeholders reported a decline in their feelings of positivity. We explored the relationship between respondents' feelings of positivity and their responses to questions about the support available to them. In particular, we wanted to know if the respondents who felt supported by their colleagues were also the respondents that expressed feeling more positive.

Our analysis showed a relationship between reports of positive feeling and respondents who report being supported by colleagues. This relationship is statistically significant. A similar investigation into the relationships between feelings of positivity and being supported by family members was also conducted to determine if stakeholders who reported being supported by family, also reported higher feelings of positivity. This comparison illustrated a positive relationship between being supported by family members and reporting feelings of positivity.¹⁰⁶

But what about the stakeholders who reported either that nobody supported them, or that they did not need support?

Those who reported that they were not being supported, but that they needed support, reported higher levels of confidence in the sustainability of remote education (mean rank = 64.22) in comparison to those who said they did not need support (mean rank = 52.25). A further significant relationship was found between respondents reporting higher levels of enjoyment of remote education and those feeling supported by their school leadership. A similar relationship was found between educational stakeholders reporting feeling positive and those feeling supported by school leadership.¹⁰⁷

The importance of working together and feeling supported is not just something of value to adults – the use of collaborative technologies for students is also known to be of great value for

learning. We therefore wondered if there was a relationship between educational stakeholders who reported higher values for feeling positive, and the use of technology to support student collaboration. Our findings indicate a significant relationship between respondents who reported using collaborative learning with students and higher feelings of positivity.¹⁰⁸

Within the interview data, we also found reports of teachers appreciating the pedagogical use of collaborative technologies:

'We'll definitely make more and better use of [collaborative technologies] and forums with children kind of debating things, if that's something which could move into a home learning situation in normal times, they could debate and discuss...'

Concluding remarks

Developments since spring 2020 were substantial and important. From March to July, the educational ecosystem endured a huge shock. Schools quickly transformed under circumstances of great uncertainty, often without having the appropriate infrastructure or support. The technology and practices that were 'to hand' were adapted and sometimes forced to cope with short-term pressing needs. Through August to December 2020, the impact of the lockdown restrictions became apparent and the need for schools to re-open in a sustainable way became paramount. There was no going back, and the magnitude of the consequences of Covid-19, was an accelerator for change. The early months of 2021 will need to see a gathering of communities, and discussion about building a longer-term vision for a resilient education ecosystem that supports the diverse set of stakeholder needs. Holistic critical thinking will be essential.

'There is a fundamental need to belong, learn and share.'

'Over a quarter of the teachers who were polled were considering leaving their jobs within the next 12 months due to workload pressures, stress and anxiety.'

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Shock to the system: lessons from Covid-19

Volume 2:
The evidence



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Abstract

In March 2020, Covid-19 shook education systems across the globe. The repercussions on education were both disruptive and transformational – or at least potentially transformational. In the UK and across the world, the Covid-19 pandemic revealed structural challenges and inequalities. It precipitated a rate of technology use in education that would normally have taken many months or even years. Whether this transpires to be a one-off, or the start of a chain of events stretching into the future, it has presented a rare opportunity to observe, collect evidence, and to learn.

This report is an analysis of multiple data sources collected over several months of engagement with educators, parents, and other educational stakeholders. It maps the main challenges, opportunities, support systems, and uses of educational technologies in the English education system since Spring 2020. This evidence volume, and the associated implications volume, reflect our findings and offer a list of recommendations which are relevant to the UK, and may also inform educational systems internationally.

Specifically, we identify six interconnected challenges, from which we will extract in the Implications volume six evidence-informed sets of implications. The six themes are **Remote emergency teaching; Teacher skills development; Parental engagement; Disproportionate disruption; Inconsistent infrastructure; and Trust**. Many of the challenges behind these six themes are a direct result of the disconnection in the existing Educational Technology (EdTech) ecosystem, which has left teachers without access to reliable evidence about the efficacy of options available to them, and the range and impact of the different pedagogical delivery models they could adopt. This is the same siloed ecosystem that has also left the EdTech industry without access to a clear understanding of the needs, opportunities, and challenges that are faced by learners, parents, teachers, and headteachers.

In addition, this report also identifies five main educational stakeholders' personas which we describe and name as the earth movers, the space seekers, the fire tamers, the water pilots, and the aeronauts.

In the associated Implications volume, we offer practical suggestions for improvement, tailored to these personas. Our listed recommendations address both the short- and the long-term challenges we face. Primarily, our analysis suggests that education systems must create a connected EdTech ecosystem of multi-stakeholder communities. Educators, educational leaders, researchers, parents, and EdTech developers must be better connected to bridge the gulf that is often created by their current rather isolated existence. Specifically, secure and evidence-based channels of communication and collaboration must be provided between the community of teachers, learners, and parents who use technology for education, the community of researchers who investigate technology's design and use in education, and the sector that creates technology for use in education. These communities must be incentivised and enabled to connect.

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Chapter 1: Introduction

On 18 March 2020, the UK government announced the closure of all schools until further notice. Two weeks earlier, on 3 March 2020, when teachers were asked on Teacher Tapp¹ about their ability to use technology to teach remotely if schools were to be closed suddenly, only

42% to 64% confirmed they would be able to do so successfully. Teachers working in private schools were more confident in their ability to transform teaching practices (82%) compared to only 55% of their counterparts from state schools (see Figure 1 below).

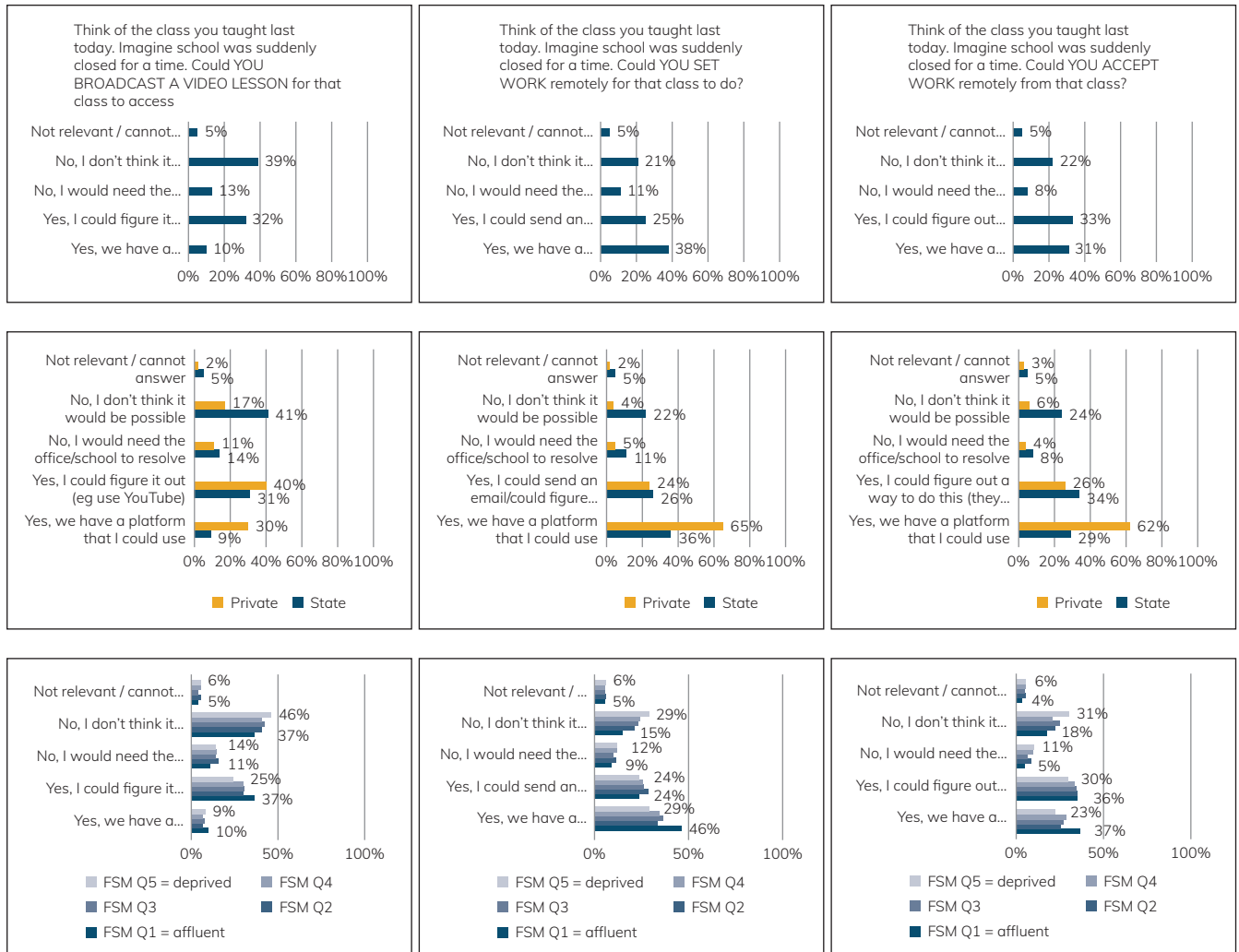


Figure 1: Teachers' sensing of their ability to teach remotely (Source: Teacher Tapp 3.3.2020, n=6,375)

¹ <https://teachertapp.co.uk/>

Five months later, in August 2020, the increased use of technology in schools had become a reality. When asked if they would change the way they

use technology, many teachers stated they would, especially around managing homework (60%) (see Figure 2 below).

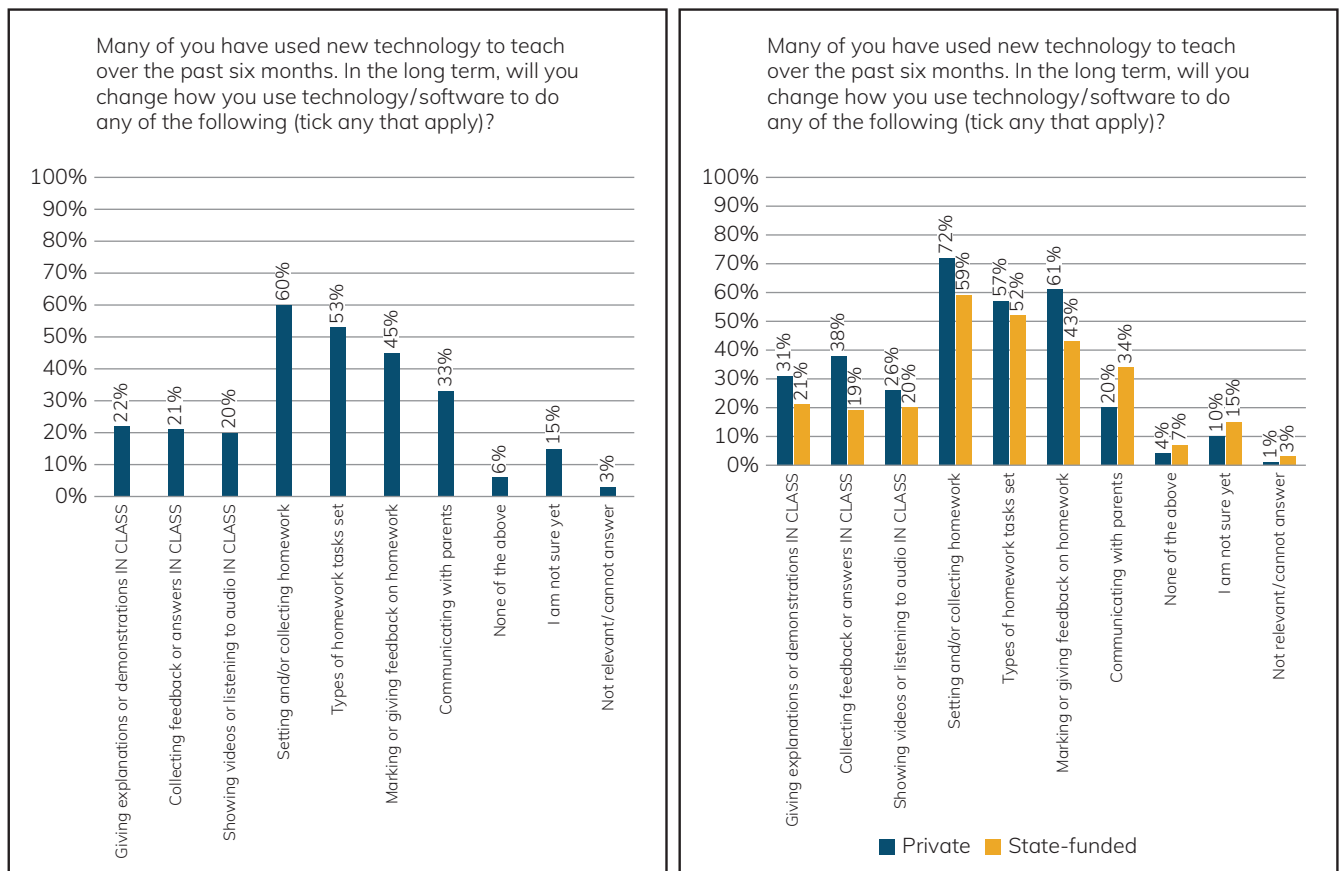


Figure 2: Teachers' feedback on changes they would make in the way they use technology (Source: Teacher Tapp, 8.2020, n=6,909)

A similar finding emerged in our own interviews. The school lockdown had enabled some teachers to observe first-hand how much easier it was to manage, mark, and provide immediate feedback to students when a suitable technology is used.

The Covid-19 crisis has affected many aspects of our society. Specifically, it has illuminated many existing structural barriers and gaps in the existing English education ecosystem. For one, the importance of schools and childcare to the infrastructure of society was brought to the fore as parents juggled work and schooling their children. As education moved out of schools and into students' homes, families needed to take on

multiple roles, which revealed many structural gaps in the existing education ecosystem (Cullinane & Montacute, 2020). Schools, meanwhile, had to implement a range of measures to be able to continue educating students and to protect them from the impact of the pandemic. Children's well-being was at risk as they were required to stay away from friends, some of their family members, and the support of teachers and schools. Children living in homes without a suitable internet connection also risked being excluded from lessons, from interacting with their friends, and from many educational opportunities (McNeil et al., 2020).

In this report, we review the impact of the pandemic-related restrictions on school education in England and link it to the role of technology and digital access in providing children with a sustainable education during a crisis.

In the chapters that follow, we present the evidence and findings from our research, conducted over the past eight months. Chapter 2 on Emotions, Opportunities and Concerns, maps our main findings, contextualised within a literature review. It considers stakeholders' sentiments, the main opportunities and the main concerns associated with the change to the educational system caused by Covid-19 amongst the studied population. Chapter 3 presents the six main themes arising from the data, and Chapter 4 offers evidence about the EdTech being used and the EdTech companies themselves. In Chapter 5, we discuss our analysis of schools' leadership and teacher behaviour. We present five educational personas, for which we make recommendations in the Implications volume about the support system we would advise for each: the earth movers, the space seekers, the fire tamers, the water pilots, and the aeronauts. Finally, Chapter 6 provides details about our methodology including the surveys, interviews, and Twitter data harvesting.

The second part of this report is the associated implications volume, comprising a summary of the main findings, experts' commentaries on chosen topics, and evidence-based recommendations and best-practices associated with the topics raised in this volume.

Chapter 2: Emotions, opportunities, and concerns

The Covid-19 crisis hugely disrupted the learning, assessment, and examination of children and young people in the UK, and globally. The move to remote learning across many schools required considerable changes to how schools normally operate. School leaders needed to find ways to support their teachers, students and families to adjust to the new environment and make sense of constantly changing government guidance. Within a few months of the first lockdowns in Europe, a substantial body of literature seeking to understand the educational implications of school closures and disruption was starting to build. Studies investigated how and what children learnt during and after the schools' closure, how schools coped with teaching during times of lockdown, and which children were most or least advantaged. We include

the evidence from many of these studies in this report, which sets the context within which this report should be read.

How did people feel?

We asked adult educational stakeholders (EdTech developers, educational leaders, educators, and parents) to score their personal feelings during school closure. The feeling score was presented on a scale of 0 to 100, where the left side of the scale read 'Poor – I don't feel I am teaching/leading/parenting as well as usual', the middle read 'neither better nor worse than usual' and the right side read 'Great – I am teaching/leading/parenting better than usual'. The respondents demonstrated a general decline in their feeling score as seen in Figure 3, with EdTech developers showing the steepest decline and educational leaders showing the most stable decline.

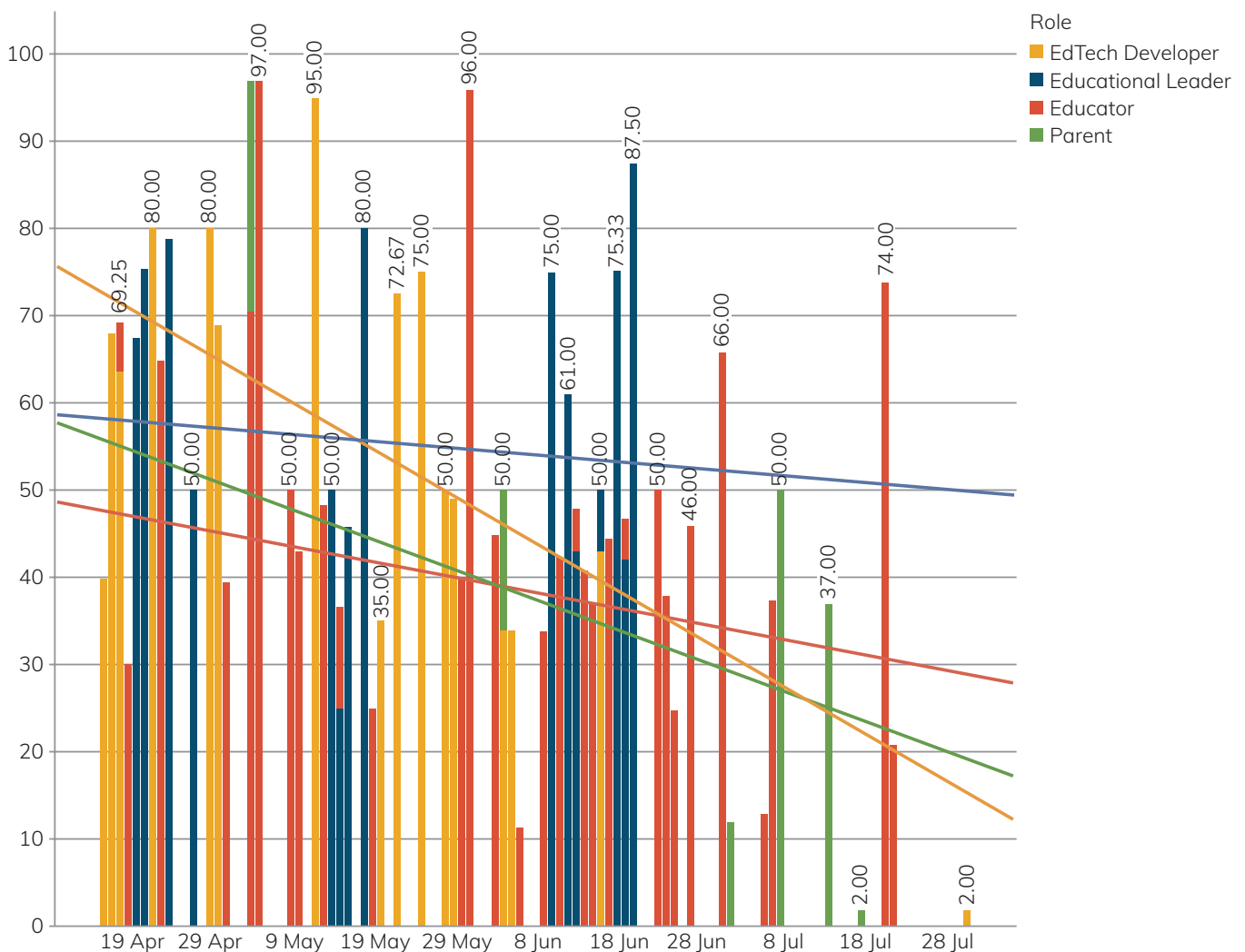


Figure 3: The average score of feeling across the months of April to July on a scale of 0 to 100, for each role

Figure 4 illustrates our respondents' self-reported enjoyment level from remote teaching and learning. The data indicates that parents were the happiest stakeholder group and that infant schools' stakeholders felt the most challenged by the situation. Across the board, interestingly, state schools' stakeholders reported lower levels of enjoyment compared to their independent school peers. None of our SEND stakeholders (which was a small group) reported enjoying the remote mode of teaching and learning.

To complement the data about feeling and enjoyment, we collected data about educational stakeholders' feelings of optimism during July and August. Figure 5 illustrates the average scores from respondents about their feelings of optimism that the school system will cope when the new

school year begins in September 2020. The options available to respondents were: 1= I am pessimistic and fear at least some parts of the English educational sector will struggle without more support and better resources; 2= I am very concerned that the educational system will struggle to cope with some challenges, and I am not sure that the right support system is in place; 3= I am somewhat worried that the educational system will struggle to cope with some challenges. However, I am reasonably confident that the right support system is in place for next year; 4= I am optimistic and think the educational system will cope with making up any academic deficits in learners.

Similar to their feelings about how the English education system will cope in the new school year, adult educational stakeholders' optimism also

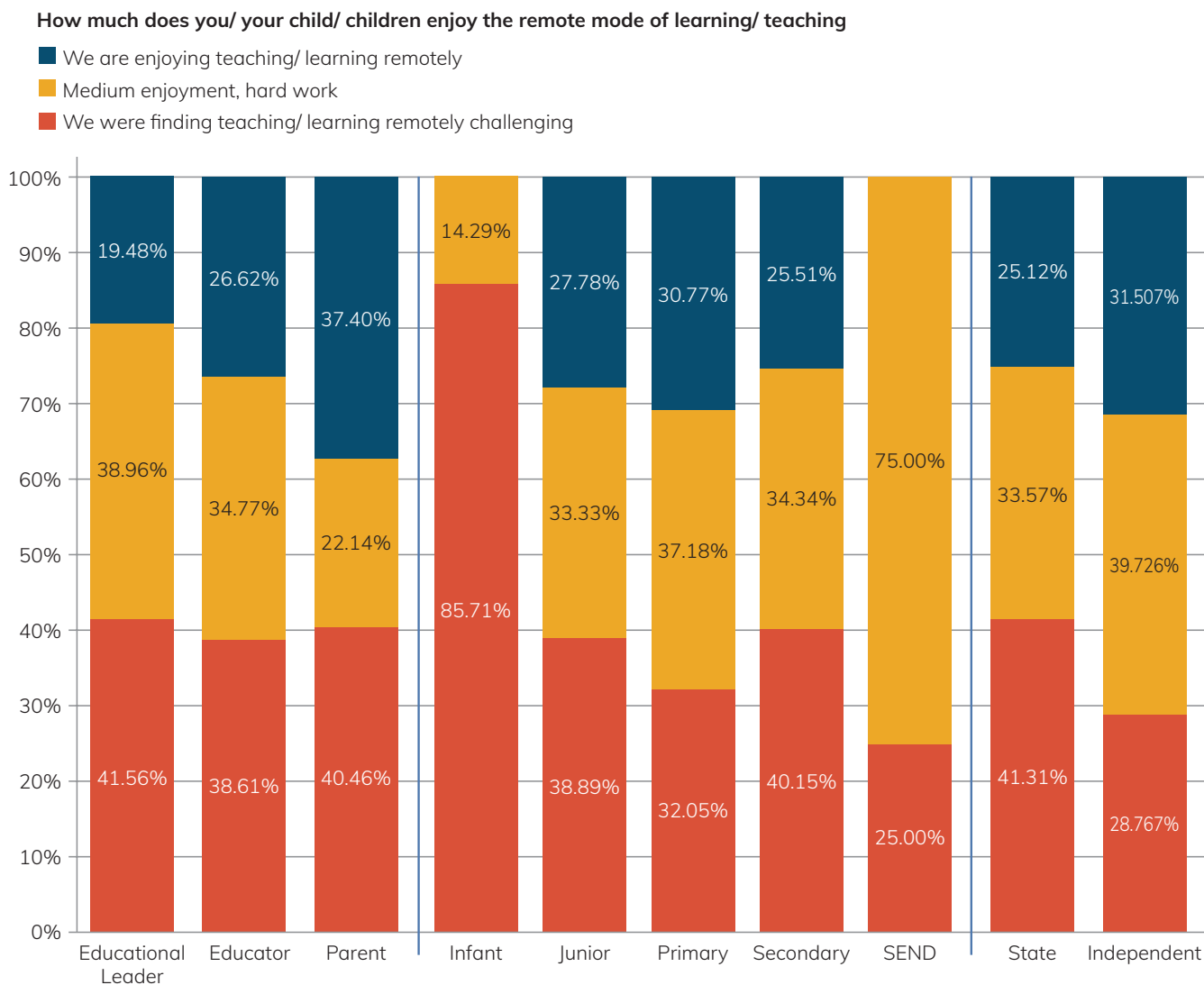


Figure 4: Breakdown of how much different respondents enjoyed remote teaching and learning. By role on the left, by school level in the middle, and by school type on the right.

showed a general downward trend as September approached. As seen in Figure 5, the decline was steeper for educational leaders relative to other roles and was most stable amongst educators. Parents were the least optimistic group. There were also

differences between state and independent schools, where feelings of optimism were well matched in July, but declined more steeply amongst state school respondents and in secondary school stakeholders as compared to primary school stakeholders.

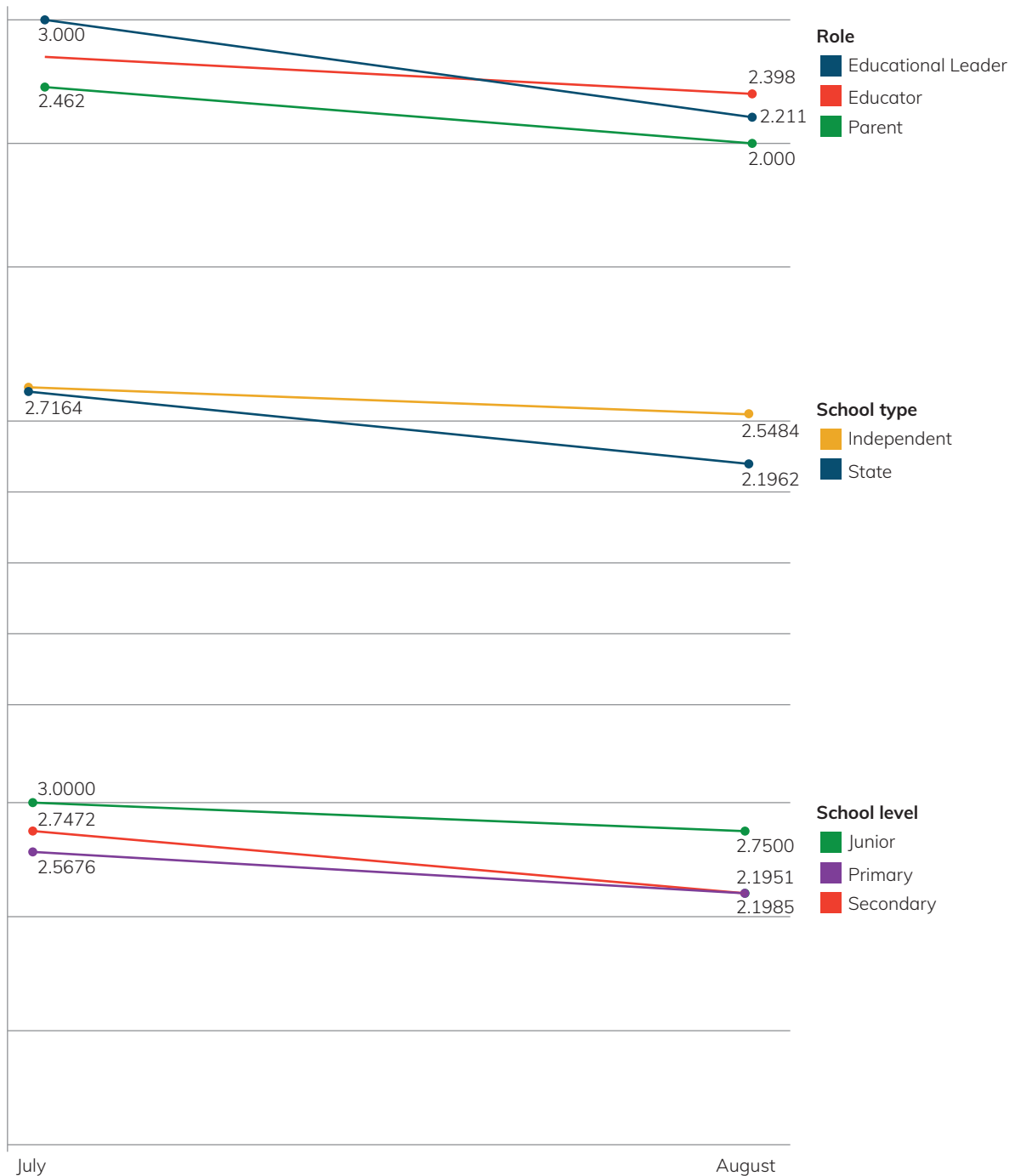


Figure 5: Average of optimism score about the school system from July to August 2020

There were also differences between the various school sectors. Junior school stakeholders were the most optimistic in July and remained more optimistic than all other stakeholder groups. Primary school stakeholders were the least optimistic of the school sector stakeholder groups.

When asked during July and August 2020 how confident they were about their ability to maintain remote learning over the longer term, our respondents' self-reported levels of

confidence (on a scale of 1 to 3, where 1 means that stakeholders are not confident about sustaining remote learning in the longer term and 3 indicates that stakeholders are confident) once again declined over time across all categories. As illustrated in Figure 6, average confidence levels mostly decreased amongst educational leaders and least amongst parents; more in state schools as compared to independent schools, and more in junior schools than primary or secondary schools.

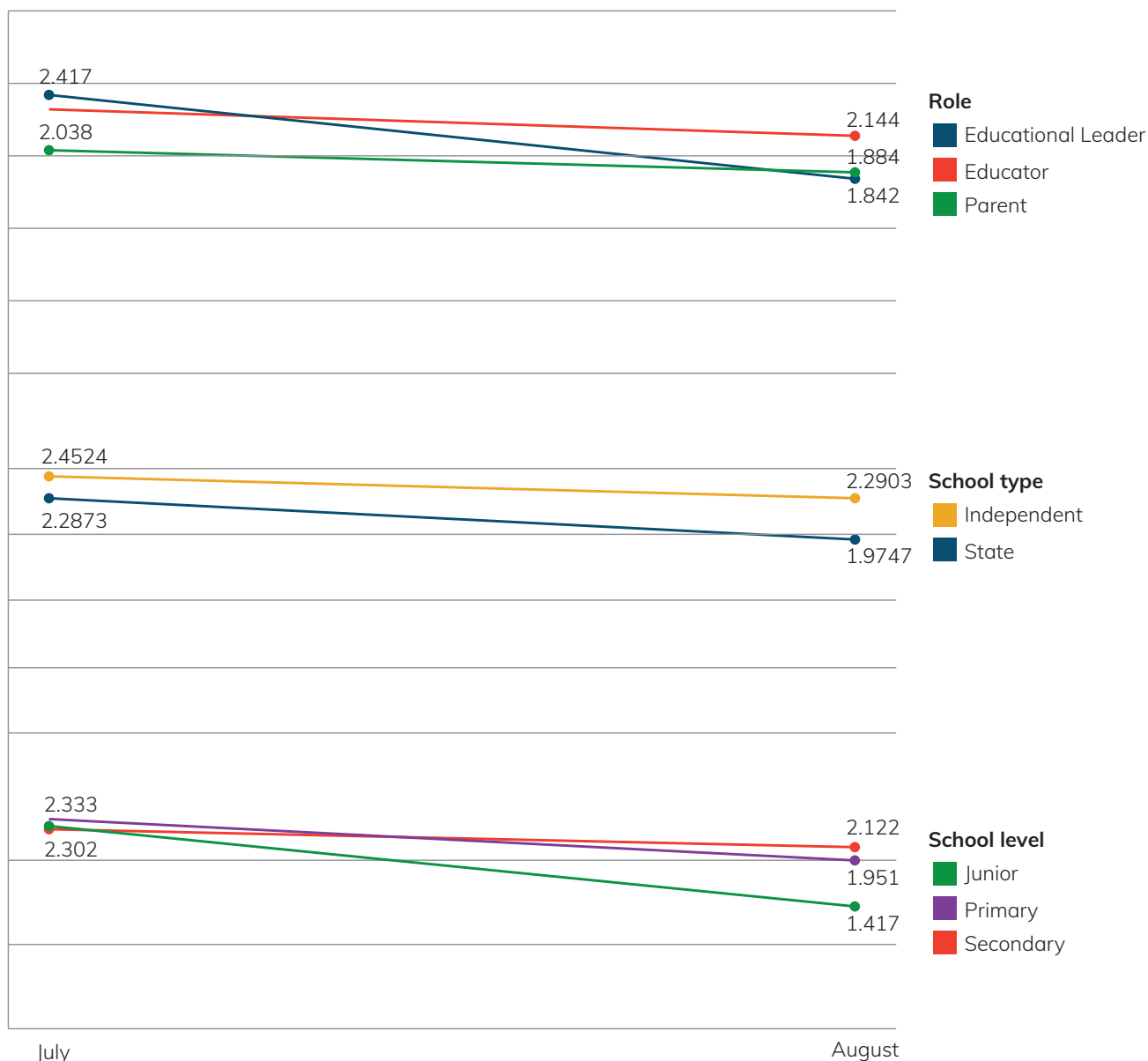


Figure 6: Average confidence score in sustaining remote learning over the longer term from July to August 2020, broken down to role (on the upper side of the figure), to school type (in the middle) and on school level (on the bottom).

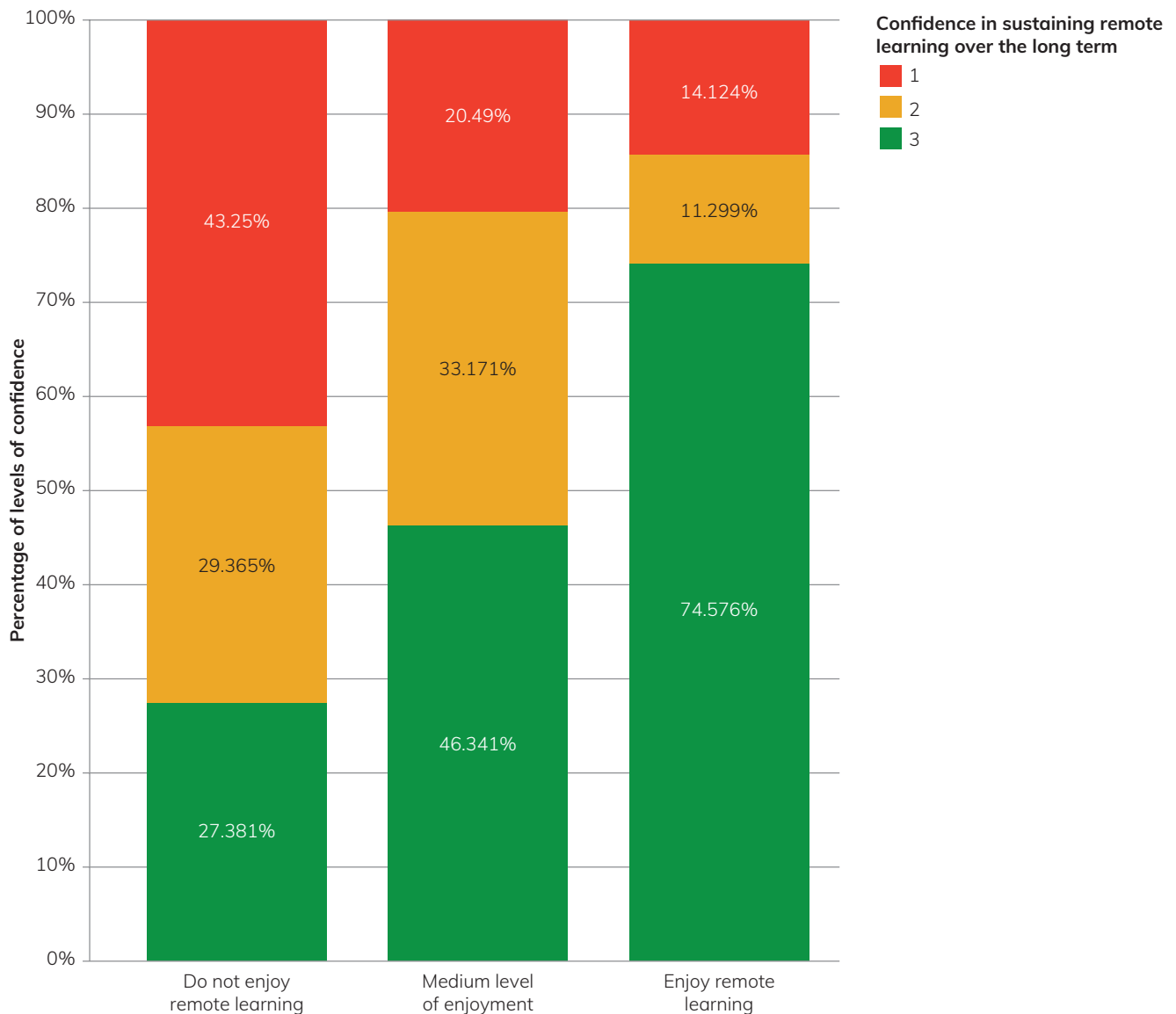


Figure 7: Breakdown of level of confidence on a scale of 1 to 3 (1 is low confidence and 3 is high confidence) (in sustainability of remote learning over time) based on level of enjoyment (of remote teaching and learning)

From Figure 7 it is evident that there is some correlation between the levels of enjoyment and confidence about remote teaching and learning. In general, those who were enjoying remote education were more confident in their ability to sustain it. Although this is clearly not a causal relationship, it is interesting to validate how central the construct of enjoyment of learning and teaching is.

In contrast between the evidenced decline in participants' optimism, enjoyment, and confidence with respect to remote learning, some learners reported feeling better and struggling less as a result of the lockdown.² Researchers from the University of Bristol (Widnall et al., 2020) found that teenagers' anxiety levels improved when

schools closed during the Covid-19 lockdown. The researchers surveyed more than a thousand year nine students from seventeen secondary schools in South-West England and found 'a variety of mental health experiences' but general 'reductions in anxiety and rises in well-being' (p.15). They said that 'this may be due to the removal of stressors within the school environment, such as the pressure of academic work and challenging peer relationships including bullying' (p.15).

There was also positive evidence about the educational offerings and their implications on some learners' ability to strive, as reported by one of our interviewed headteachers:

² <https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-of-children-and-young-people-in-england/2020-wave-1-follow-up>

'[...] so children sent audition tapes [...] and our teacher compiled them all on YouTube [...] and our judges watched them and had finalists. One of the finalists came second in the end, as we had an online vote to select the winners. But the little chap who came second is a [...] nonverbal autistic child who goes on quite a tight timetable, because he's home-schooled in part of the time because he's got quite specific needs. But he would never have done that in a million years in school, he would never have come to an audition in my office and done this thing, but because he could do it by himself in his bedroom [...]' [Rachel Tomlinson, Headteacher, State Primary]

Opportunities

The variety of the educational offerings was not the only opportunity educational stakeholders were identifying. Indeed, the overwhelming majority of our survey respondents indicated that they saw opportunities in the mode of learning carried through schools' closure. Figure 8 shows the main opportunities that our respondents reported on as resulting from the pandemic. Figure 8 also illustrates that 53.82% of respondents believed there was an opportunity for improved use of technology for learning. Other opportunities identified included improved technical skills among teachers (34.20%) and informal learning opportunities (29.37%) and informal learning opportunities (29.37%) and informal learning opportunities (29.37%).

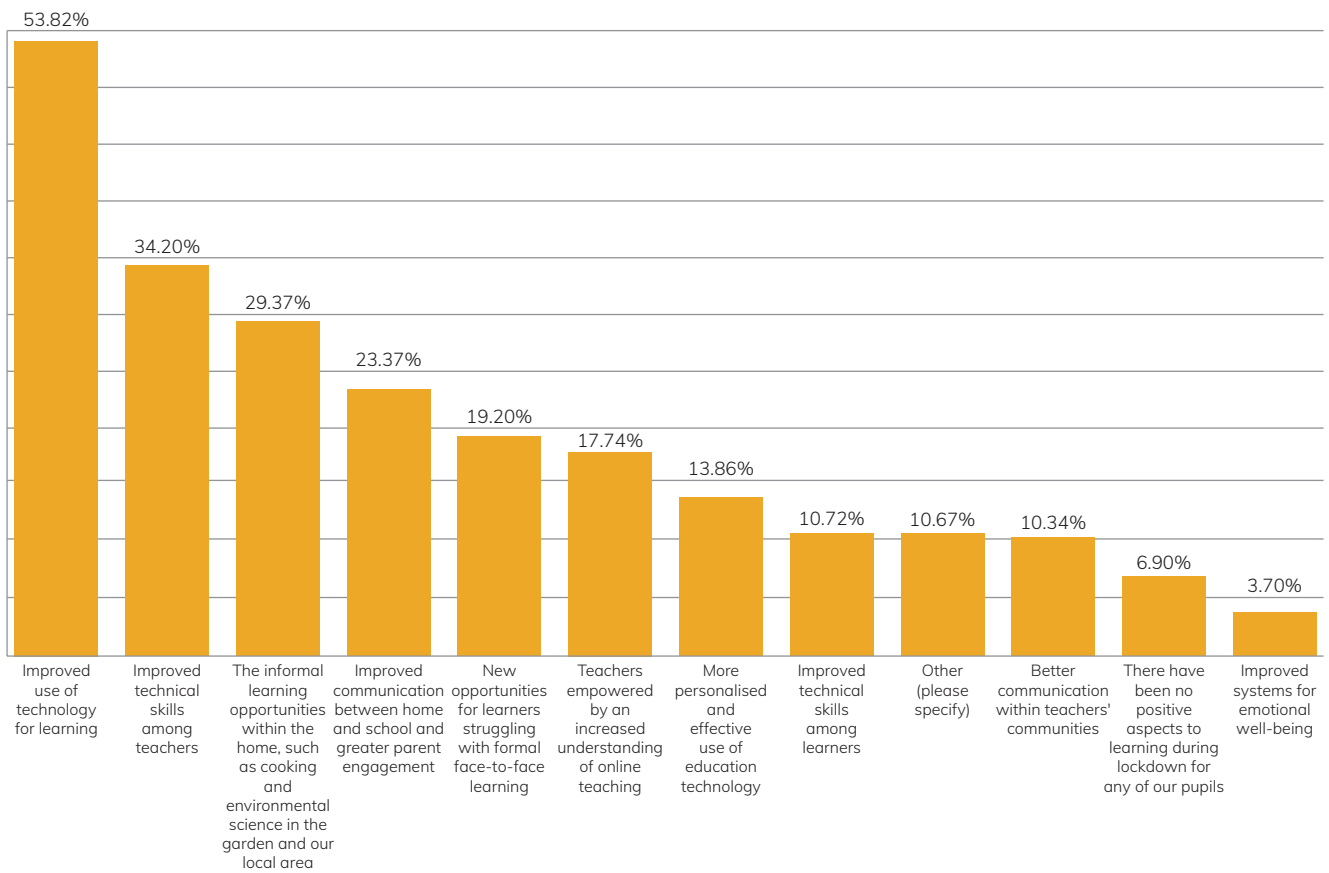


Figure 8: Opportunities as indicated by respondents (each respondent was asked to choose up to two main opportunities)

As shown in Figures 9A and 9B, state school stakeholders were more appreciative of new opportunities for learners who were struggling with face-to-face learning and opportunities for technical upskilling of both learners and

teachers. Also, primary school stakeholders were more appreciative than secondary school stakeholders about the opportunities for improved communications between parents and schools.





















	Independent	State
Improved use of technology for learning	 32.59%	 31.25%
Improved technical skills among teachers	 17.78%	 19.36%
Improved communication between home and school and greater parent engagement	 11.11%	 11.03%
New opportunities for learners struggling with formal face-to-face learning	 6.67%	 9.07%
Teachers empowered by an increased understanding of online teaching	 9.63%	 9.80%
More personalised and effective use of education technology	 5.93%	 7.72%
Improved technical skills among learners	 3.70%	 6.13%
Other (please specify)	 3.70%	 2.08%
Better communication within teachers' communities	 4.44%	 2.21%
Improved systems for emotional well-being	 4.44%	 1.35%

Figure 9A: Percentage of educational stakeholders indicating opportunities by school type and level





















	Primary	Secondary
Improved use of technology for learning	 24.83%	 33.42%
Improved technical skills among teachers	 16.78%	 19.68%
Improved communication between home and school and greater parent engagement	 15.44%	 10.04%
New opportunities for learners struggling with formal face-to-face learning	 9.40%	 8.85%
Teachers empowered by an increased understanding of online teaching	 8.05%	 10.30%
More personalised and effective use of education technology	 8.72%	 6.61%
Improved technical skills among learners	 7.38%	 5.15%
Other (please specify)	 2.68%	 2.25%
Better communication within teachers' communities	 3.36%	 2.11%
Improved systems for emotional well-being	 3.36%	 1.59%

Figure 9B: Percentage of educational stakeholders indicating opportunities by school type and level

Main concerns

When asked about their main concerns, the overall most concerning factor for respondents was work-life balance (37.86%), followed by concerns about students 'falling behind' (33.48%) (see more in the

section on 'Disproportionate Disruption' below), and confusing messages and guidelines from the government (28.10%) (see more in the section on 'Trust' below). Interestingly, on average, loss of income was the least of our respondents' concerns.

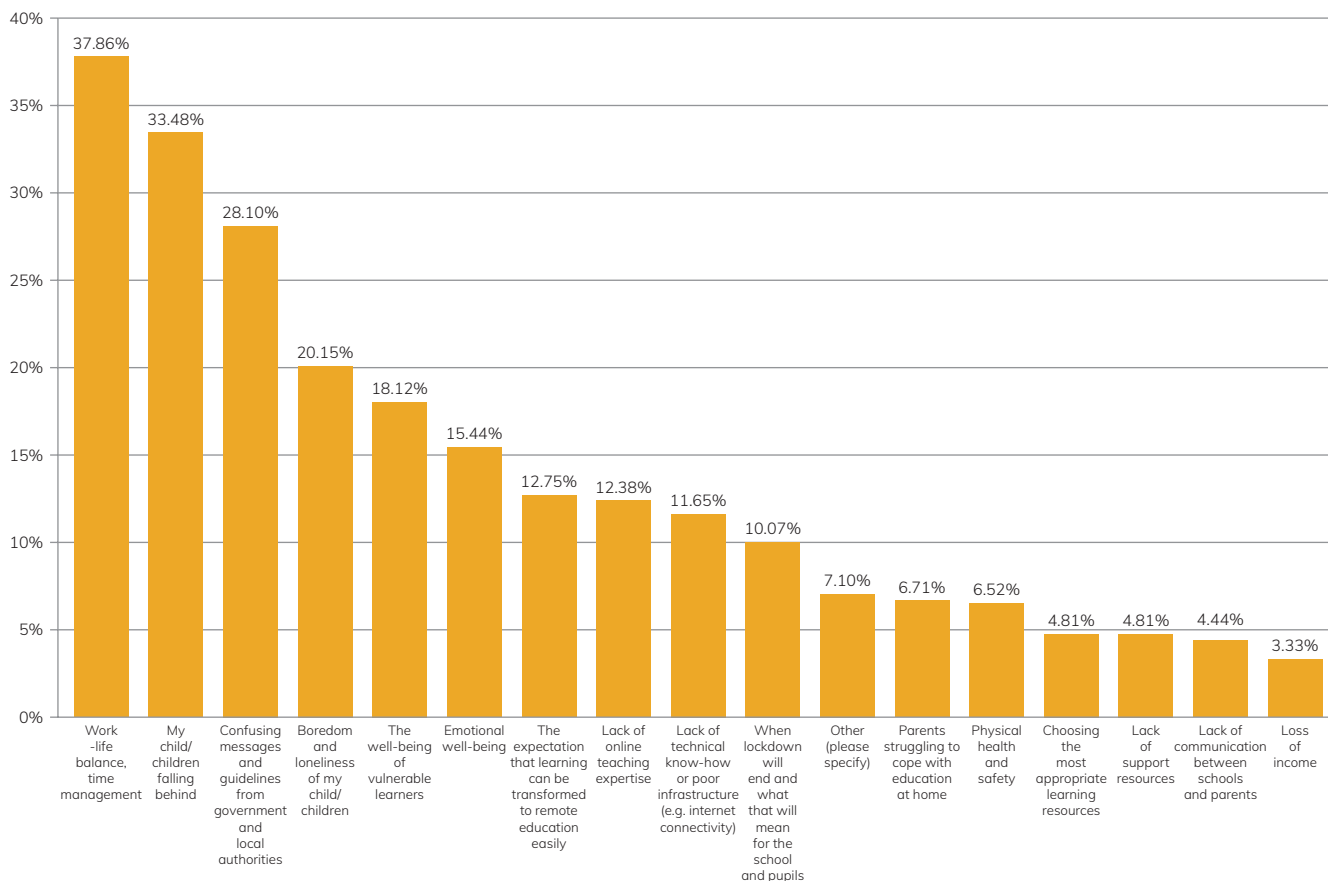


Figure 10: Concerns as indicated by all educational stakeholders

	Educational Leader	Educator	Parent
Work-life balance, time management	37.25%	40.32%	33.33%
Confusing messages and guidelines from government and local authorities	37.71%	28.68%	24.21%
My child/children falling behind	27.38%	37.61%	26.67%
Boredom and loneliness of my child/children	21.43%	21.32%	16.84%
The well-being of vulnerable learners	21.43%	26.39%	2.50%
Loss of income	20.00%		
The expectation that learning can be transformed to remote education easily	17.86%	9.72%	10.00%
Lack of technical know-how or poor infrastructure (e.g. internet connectivity)	16.07%	11.05%	12.63%
Lack of online teaching expertise	12.50%	12.37%	13.68%
Parents struggling to cope with education at home	10.71%	5.56%	2.50%
Emotional well-being	7.14%	6.94%	37.50%
Lack of support resources	7.14%	3.95%	7.37%
Physical health and safety	7.14%	5.09%	11.85%
Choosing the most appropriate learning resources	3.57%	4.74%	6.32%
When lockdown will end and what that will mean for the school and pupils	3.57%	13.89%	10.00%
Other (please specify)	2.38%	7.52%	9.63%
Lack of communication between schools and parents	1.79%	3.68%	9.47%

Figure 11: Concerns ranking by role

Looking more deeply at the concerns of specific stakeholders, Figure 11 shows that teachers were the group most concerned about work-life balance (40.32%) and about what will happen when the lockdown is over. This might reflect on the need for some teacher training on how better to manage remote learning.

Understandably, educational leaders are the group most concerned about confusing messages from the government, which suggests a need for better collaboration between policymakers and educational leaders. Parents' concerns about emotional well-being and communication between schools and parents were much deeper than the other stakeholders, which suggests that better communication and support communities are needed between school staff and parents.

Figures 12A and 12B map the concerns of respondents from different school types and levels. It is evident that the concerns about students 'falling behind', and the lack of technical know-how and poor infrastructure are stronger in state schools. The 'falling behind' concern was also greater in secondary school stakeholders than in primary schools. Boredom and loneliness amongst students were more of a concern across the state

sector, particularly in secondary schools.

In related research by Brink et al. (2020), when students were asked about their biggest challenges, they frequently mentioned lack of motivation, and the difficulty of studying alone, both of which were selected twice as often as any other factor, which suggests the need for a deeper look into collaborative learning practices.

	Independent	State
Work-life balance, time management	44.12%	47.29%
Confusing messages and guidelines from government and local authorities	35.29%	29.06%
My child/children falling behind	29.41%	42.36%
Boredom and loneliness of my child/children	17.65%	20.94%
Lack of online teaching expertise	16.18%	12.07%
Other (please specify)	14.71%	8.62%
Lack of technical know-how or poor infrastructure (e.g. internet connectivity)	10.29%	12.07%
Physical health and safety	8.82%	6.16%
Lack of support resources	5.88%	5.17%
Choosing the most appropriate learning resources	5.88%	5.17%
Lack of communication between schools and parents	4.41%	3.69%

Figure 12A: Concerns ranking by school type

	Primary	Secondary
Work-life balance, time management	43.59%	47.47%
Confusing messages and guidelines from government and local authorities	32.05%	29.55%
My child/children falling behind	25.64%	43.43%
Boredom and loneliness of my child/children	14.10%	21.72%
Lack of technical know-how or poor infrastructure (e.g. internet connectivity)	17.95%	10.61%
Lack of online teaching expertise	11.54%	12.88%
Lack of support resources	11.54%	4.04%
Physical health and safety	10.26%	5.81%
Choosing the most appropriate learning resources	6.41%	5.05%
Other (please specify)	8.97%	9.60%
Lack of communication between schools and parents	8.97%	2.78%

Figure 12B: Concerns ranking by school's level

To better understand what the general public (beyond just educational stakeholders) are concerned about in the context of this report, we went to Twitter to harvest the words used before and after the start of the school year in September when schools reopened. The education and EdTech related tags we have chosen to guide us appear in Figure 58. Figure 13 and 14 are focused on the 40 most frequent terms collected from Tweets before the school year began, on 18 August 2020 (left), and after the school year began, on 2 October 2020 (right). It shows how the focus has changed from 'learn', 'time', 'need', 'share', and 'student' to 'free', 'support', 'school', 'teacher', and 'new'.

Twitter data, whilst lacking the design and structure of survey data, has the advantage of picking up sentiment and narrative in an unguided way. If one can draw any conclusions from this data, it suggests that there is a need for support from new (and free) online tools. The prevalence of tweets that mention parents and students reduces and mentions of teachers and the school increase over time, which suggests that the discussion became more focused on school learning, and on the need for support.

In the next chapter, we try to point at some of the most concerning themes arising from our study.

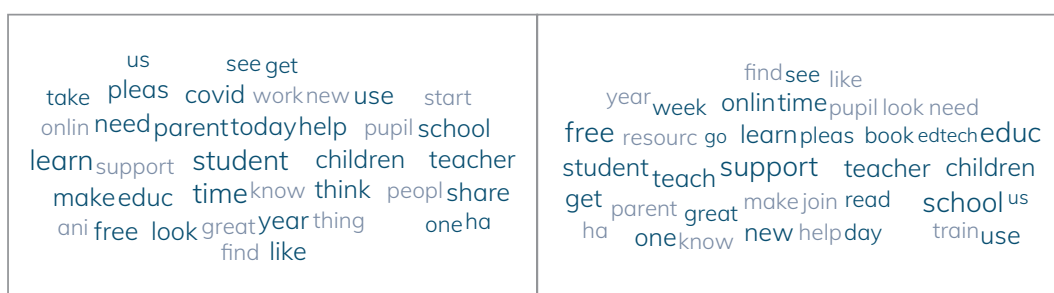


Figure 13: Most frequently appeared stems on tweets collected before the school year (left) and after school year opening (right)

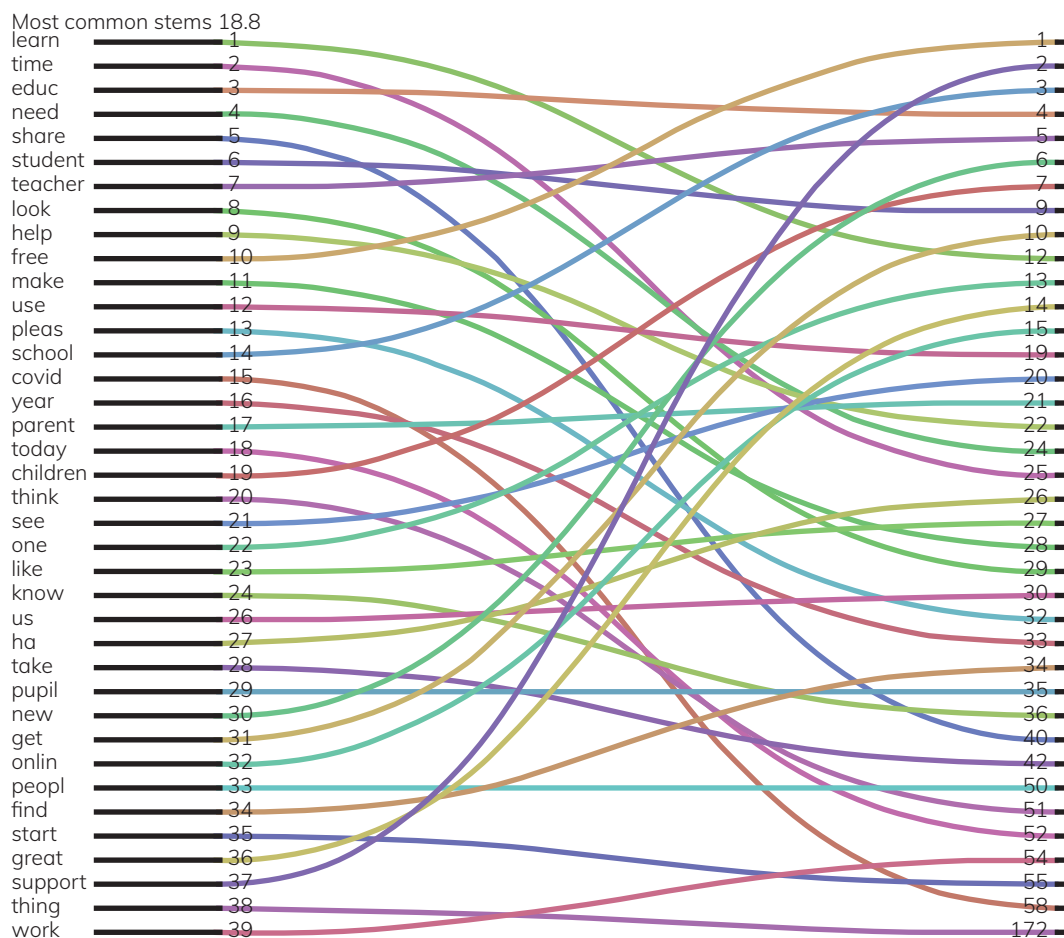


Figure 14: Difference in frequency occurrences ranking of the most common stems on 18 August (left) in relation to their appearance on 2 October (right)

Chapter 3: Six main themes

Theme 1: Remote Emergency Teaching (RET)

A report compiled by Cambridge University Press (2020) reveals that schools across the world were generally not prepared to implement distance learning at scale when schools were closed during periods of the lockdown. Many adopted interim measures 'with limited evidence that [these] would reach every learner or would provide an effective way to ensure continuity of learning' (Cambridge University Press, 2020). Indeed, one of the main outcomes of English schools needing to revert abruptly to remote teaching without an appropriate pedagogical and physical infrastructure in place, is that most schools unsurprisingly adopted Remote Emergency Teaching (RET) practices. These practices included transferring classroom practices online without the pedagogical scaffoldings in place (such as well-constructed feedback, interaction and class engagement), or merely expecting students to be able to continue with their studies, for example – while interacting just with paper-based assignments that have been uploaded to a Learning Management System (LMS). The field of online learning is not new (Joksimović et al., 2015). Online courses and degrees began to appear around 1994, and online learning enrolment, even before Covid-19, was growing much faster globally than enrolment to face-to-face settings. However, this was far from being the case in the English schooling system, pre-Covid. Even though the field of effective online learning is very well researched and practised in many places (such as the English Open University), the siloed structure of the English educational system has prevented it from diffusing into most schools. This has brought us in September 2020, after a rapid 'experimental period' of six months of remote learning, to a place where most schools still use RET.

The interview data we collected describes the way schools started with providing downloadable packs of resources, links to resources on the school website or learning platform and increased the use of already available apps and online resources. As lockdown extended, they moved to pre-recorded lessons by teachers and some live (synchronous) lessons. Out of 46 interview participants from schools, only one state school (out of 37) and two independent school participants (out of nine) mentioned a seamless transition to remote teaching. All the independent schools' participants said that their schools provided live lessons (in one case 8.40am to 4pm every day), while most state school participants said that their schools did not use live lessons due to lack of access to technology and internet connection by some students, lack of resources in the school, concerns over online safety and privacy, lack of school infrastructure and having teachers needing to teach in the school and remotely at the same time (emergency workers and children on free school meals were invited to attend school in England throughout the lockdown in spring 2020). Some schools used live sessions for well-being meetings to check if students and families were all coping, and almost all schools used live remote meetings for staff meetings (mainly Microsoft Teams and sometimes Zoom).

Online and face-to-face learning are very different and are based on a different set of assumptions. For example, online learning requires a much higher degree of self-regulated learning skills, which many students (in particular younger pupils) are not equipped with, often leading to lower retention rates. However, studies do show that online learning can be delivered to a high quality (e.g., Bernard et al., 2004; Duffy et al., 2002; Fojtik, 2015).

Most interview participants commented that the approach they adopted to teaching during the spring lockdown needs to be reviewed, and teaching needs to be made interactive and more efficient in the event of future lockdowns that require remote teaching. In addition, most participants agreed that the use of technology during lockdown increased teachers' skills and confidence, and now most teachers can use technology. Teachers reported being more aware of what technology could do for their students.

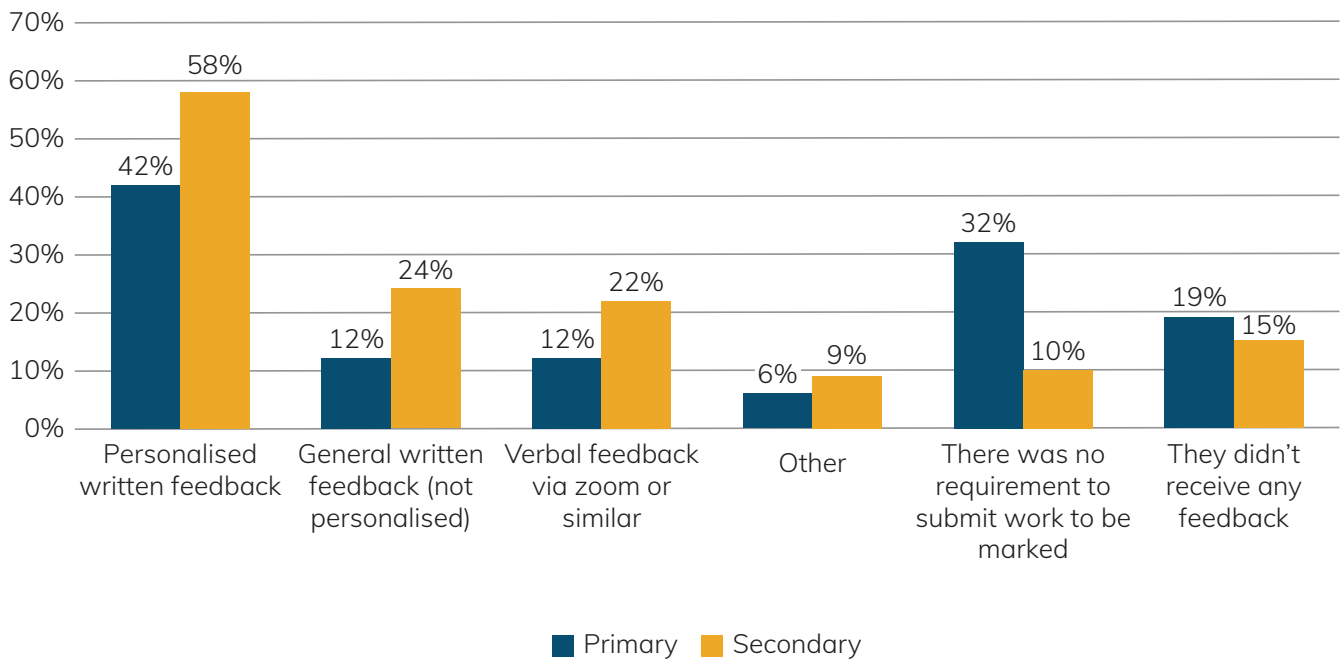


Figure 15: Primary vs secondary students' parents on the feedback their children receive on their schoolwork during the period of schools being shut (Source: Parent Ping 28.7.2020, n=771)

Some of the key requirements for effective teaching and learning were absent in much of the teaching elements, as reported by our survey respondents. For example, Figure 15 shows that approximately 60% of primary school students and more than 40% of secondary school students did not receive personalised feedback from their teachers during the lockdown.

The implications of RET for the long term are even more worrying. Many educational stakeholders are still drawing conclusions about the potential effectiveness of online learning from their experience of RET. Unsubstantiated opinions can be shared and seen by thousands through social media platforms: a thread likening the university experience during the pandemic to online lectures in a plague village has been seen and liked by over 35,000 Twitter users (search: 9k plague village).

A Teacher Tapp survey conducted on 20 July 2020 asked respondents '[g]iven a free choice, and assuming all options are equally safe, which would you prefer next half-term?' The options available were: teach from home; teach in school (with social distancing); teach partly in school and partly from home. The teachers who responded indicated a clear preference for teaching in school, with 69% of respondents selecting this option. The hybrid approach of teaching partly in school and partly from home was preferred to purely distance teaching, as illustrated in Figure 16.

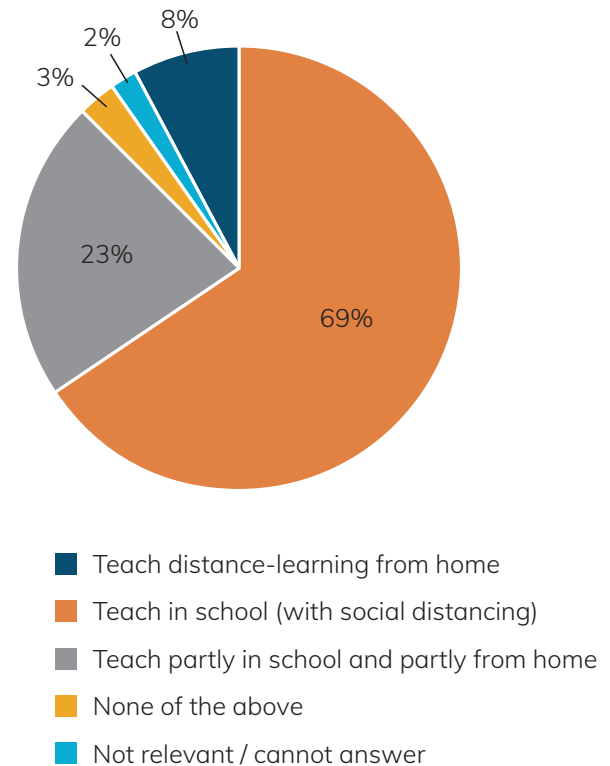


Figure 16: Given a free choice, and assuming all options are equally safe, which would teachers prefer next half-term (Source: Teacher Tapp 20.7.2020, n=7,187)

RET and further Covid-19 restrictions also had repercussions on assessment, with GCSEs and A-level exams being cancelled for summer 2020. When exams were cancelled due to the pandemic, there was a great deal of confusion and concern about the algorithm and methodology used to grade as an alternative.³ This debate continues with decisions still to be made about 2021 examinations at the time of writing this report, as well as the longer-term impact of the problems seen this summer. As a result, public trust in the government, as indicated in the YouGov data represented in Figure 17, has declined.

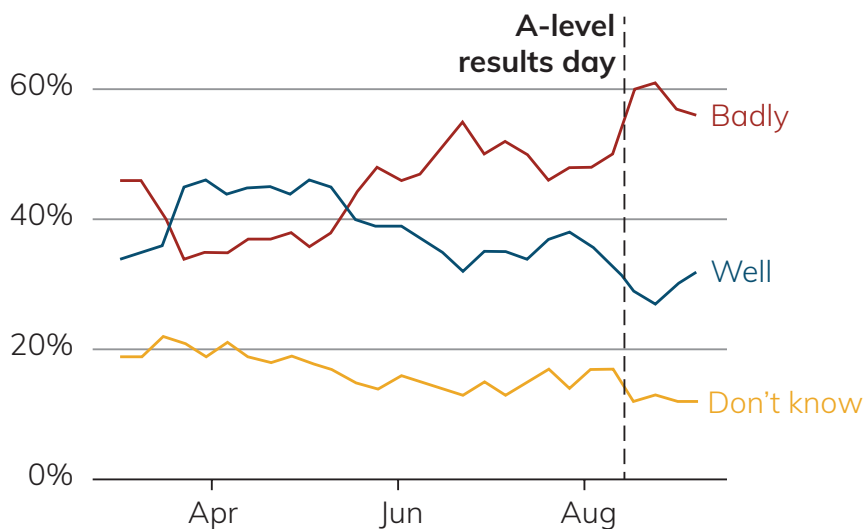
These concerns about the school assessment regime are giving rise to a new wave of resistance, such as the campaigning groups *Rethinking Assessment*⁴ and *School Differently*⁵. In addition, the current assessment regime, which is geared towards high stakes testing, does not take advantage of the possibilities offered by effective online learning, which is interactive, socially and cognitively engaging, and capable of tracking a much broader set of skills over time (Luckin, 2017).

Theme 2: Teacher skill development

One of the main factors leading to the gap between RET and best-practised online learning is related to teachers' proficiency in online learning pedagogies.

Although many online resources were shared to support the delivery of learning by reputable organisations like UNESCO, OECD, Harvard Graduate School of Education, the World Bank, the Hundred Organisation, BBC, and private EdTech companies, studies show that there are still teachers without the necessary technical and pedagogical skills to integrate digital devices in instruction (OECD, 2020). The possession of many resources, adequate devices, a reliable internet connection, and existing exposure to technologies is not a sufficient enabler on its own to lead to effective student learning. Teachers need to develop online teaching skills and to be able to critically evaluate the evidence about the available EdTech tools and the applicability and appropriateness of different pedagogical methods (OECD, 2020). It is also worth mentioning that the use of technology in education is not limited to teaching and learning materials. A review of Education in Emergencies research literature found that some of 'the most powerful uses of digital technology centre around education management, coordination and communication' (Cambridge University Press, 2020).

In practice, and despite the difficulties teachers were faced with when suddenly required to use technology to teach remotely, they were able to adapt remarkably quickly, and build capacity (Schleicher and Reimers, 2020, p.9–10). Our interview data describes how many institutions and communities shared free resources to



Source: YouGov

BBC

Figure 17: How is the government handling the issue of education in the UK? (Source: YouGov, BBC: <https://www.bbc.co.uk/news/education-54103612>)

³ <https://www.theguardian.com/education/2020/aug/17/uk-exams-debacle-how-did-results-end-up-chaos>

⁴ <https://rethinkingassessment.com/>

⁵ <https://www.schoolsdifferently.net>

assist with home learning, and a list of these resources was made available to teachers and parents to use as they saw fit. One of our teacher interviewees reported that:

'[...] as soon as someone learned how to do something, we would then share it with everybody else. So, I mean we had some very basic training and then, and then we shared. So it was just learning together, helping each other.' [Teacher, State Primary]

Teachers were also able to find many resources for professional learning in the form of webinars, Zoom courses and live-streamed educational events. FutureLearn⁶ designed and offered a practical course to explore online teaching in response to the Covid-19 pandemic and more than 87,000 learners enrolled on the course. Richard Holme, writing in TES on 30 April 2020, presents some of these resources available to teachers and argues that 'there is a surprising amount of professional learning taking place, although in a more informal or unconscious manner. Teachers are reaching out to provide support to colleagues across Scotland and around the world, in ways that we have never seen before.'⁷

In the Edurio survey (Brink et al., 2020), when asked about their training needs, two-thirds of participating teachers felt they did not have all the training they needed. Among those, using technology, organising pupil collaboration digitally, delivering remote lessons, and digital assessment and feedback were the most frequently selected options, as seen in Figure 18.

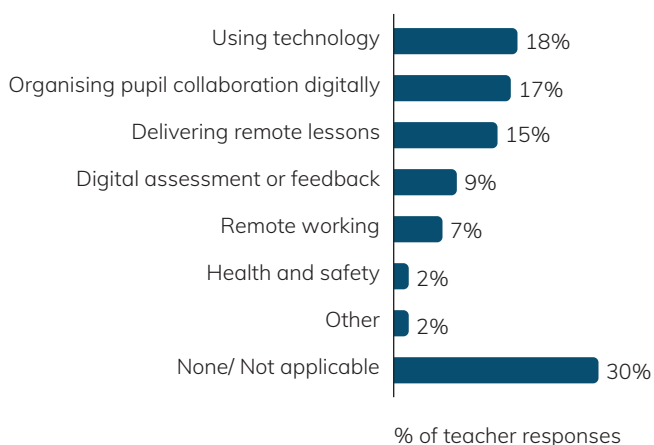


Figure 18: Teachers' training needs (Brink et al., 2020) – 'What additional training would you find valuable, to support your work?'

⁶ <https://www.futurelearn.com/>

⁷ <https://www.tes.com/news/evidence-clear-teachers-are-doing-all-they-can>

Theme 3: Parental engagement

A survey conducted by Parent Ping on 30 July 2020 showed⁸ that parents of older children

in secondary schools and those who were transitioning from primary to secondary schools were most worried about the return to school in September 2020.

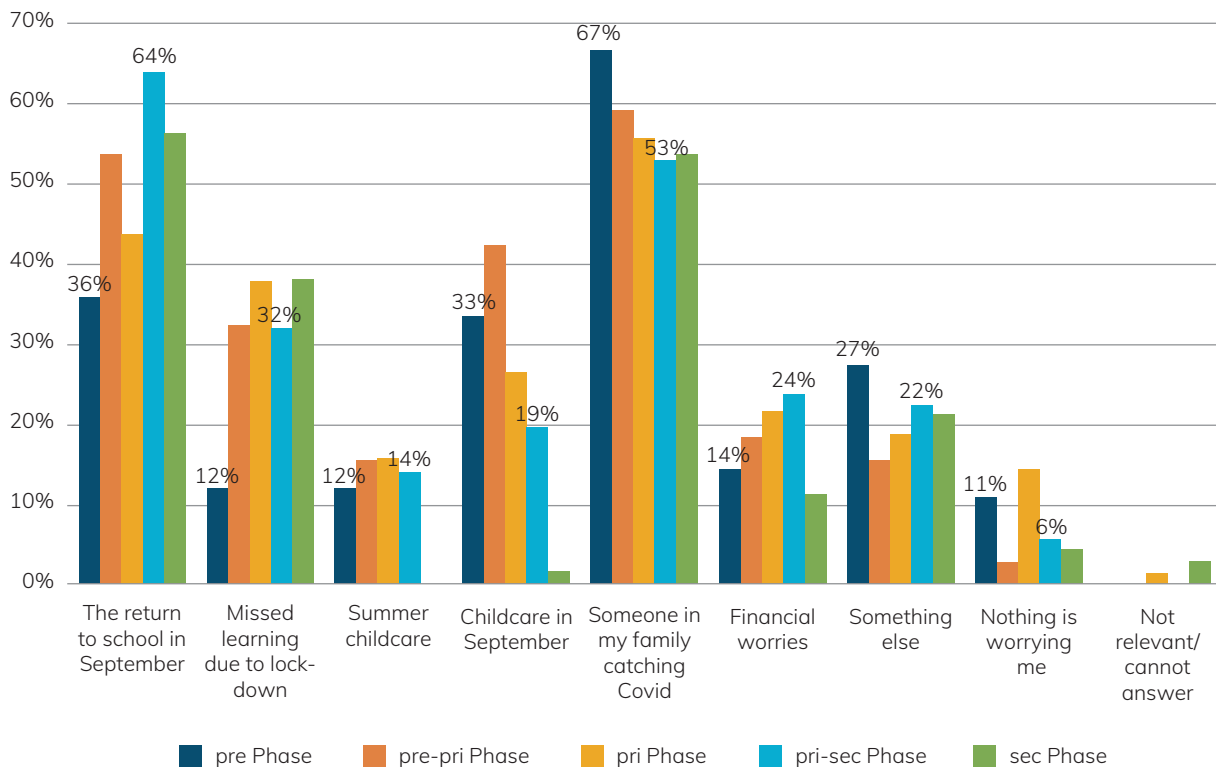


Figure 19: What do parents worry about? (Source: Parent Ping, n=444)

In our interviews, some parents noted that the conflicting need to support their children and to attend to their own professional responsibilities created fears that they were neither working nor parenting effectively. One parent told us:

'So, if I'm doing a piece of drafting, and I get interrupted, it then takes me a minute and a half to get back into that drafting. So, everything took longer [...] I thought I was doing a bad job at my job and a bad job of being a mother [...]' [Kirstin Roberts, Parent]

It is not surprising that parents have been worried over the months of disruption due to Covid-19. However, the disruption also provided some great opportunities for increased parental engagement in their children's education. Parentkind⁹, a charity that helps parents to get fully involved in their children's education and school life, conducted three surveys in March, May, and July 2020. In these surveys, they asked parents to share their opinions and concerns related to the pandemic,

what they were going through and how they were dealing with school closures. The data from these surveys indicates that 88% of parents felt engaged in their child's learning and more than half (53%) felt they engaged during and after the lockdown, in comparison to 10% reporting this engagement prior to the lockdown.

On the topic of communication between home and school, data from Brink et al., (2020) illustrates that parents who felt that communication from school leadership was clear were ten times more likely to feel confident about their school's handling of the disruption than those parents who did not feel communication from school leadership was clear.

For most parents we interviewed the communication was adequate:

'Right at the start before lockdown actually began – when it was on the horizon – we were all given some expectations about what would happen.' [Fiona Aubrey-Smith, Parent]

⁸ <https://parentping.co.uk/>

⁹ <https://www.parentkind.org.uk/>

However, this was not the case for other parents, who felt completely on their own with the lack of communication from the school. 9.47% of the parents in our surveys mentioned that the communication with school was a concern (see Figure 11).

As already noted in the 'Main concerns' section above, the concern of *falling behind* is a very pronounced one. In a separate survey by Parent Ping, more than half (56%) of the parents who responded also indicated that *falling behind* was quite a big concern (see Figure 20).

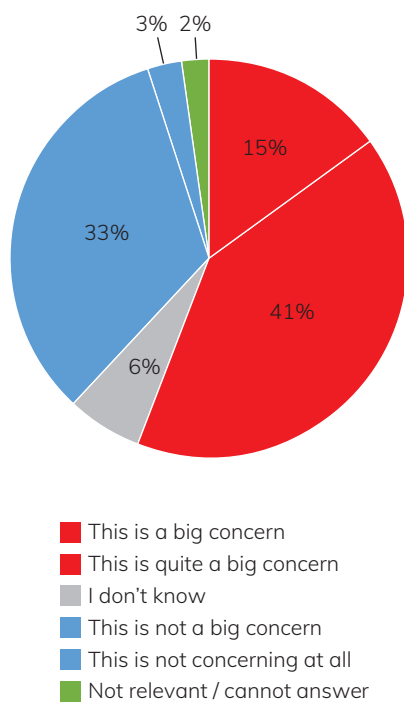


Figure 20: *Is falling behind a concern?* (Source: Parent Ping 28.7.2020, n=430)

In our interviews with parents, one-third of the respondents noted that they were concerned about their child falling behind. Three respondents indicated that their concerns were founded on their belief that home learning was not effective, or that the subjects that interest their child cannot be taught remotely. For example, one parent we interviewed shared how her child's learning was affected during the lockdown:

'[...] He was doing a very long commute to attend a basketball Academy where he is doing a sports diploma and business A Level. Lockdown had a real impact on what he was able to do because of course, he was unable to do any physical sports. He was

trying to do what he could using a laptop from home.' [Michelle Jayman, Parent]

The *falling behind* and 'learning loss' narrative is tackled by other researchers and is likely connected to some of the other themes we report here, such as assessment, anxiety, confidence, and RET. For example, Brink et al. (2020) reported that students were almost six times more likely to report low levels of stress if they did not feel overworked.

Theme 4: Disproportionate disruption

Concerns about learning loss and students *falling behind* was not felt evenly across all research participants, as is highlighted by various reports, such as Maldonado and De Witte (2020), and the EEF report (EEF, 2020). It is not surprising that the transition from face-to-face to online/home-schooling was likely to generate educational disruption and impact negatively on learning. It is well known and once again confirmed in the most recently published OECD data (OECD, 2018) that students from disadvantaged communities have less access to personal technology and high-quality online learning resources.

SchoolDash¹⁰ and RSAssessment¹¹ have shown in their joint report that younger year groups generally show bigger reductions in attainment than older year groups, and that schools with higher levels of deprivation show greater decline.¹² Pensiero et al. (2020) analysed the data from the Understanding Society study¹³ and found that primary school children from the least advantaged group would lose 31% of a standard deviation on average across subjects by the time schools reopened in September 2020. However, children from the most advantaged group would have lost 24% of a standard deviation. The difference between these two groups is bigger in secondary education than primary: 28% of secondary students from disadvantaged backgrounds compared to 14% of primary-aged children from most advantaged backgrounds (Pensiero et al., 2020).

In one of the more recent multi-stakeholder studies, Brink et al., (2020) found that around eight in ten teachers mentioned that the attainment gap between pupils was increasing. In schools with a higher proportion of free school meals, most teachers felt that the majority of their pupils would

¹⁰ <https://www.schooldash.com/>

¹¹ <https://www.risingstars-uk.com/rs-assessment>

¹² <https://www.risingstars-uk.com/rs-assessment/whitepapers>

¹³ April wave: see <https://www.understandingsociety.ac.uk/topic/Covid-19>

require additional support. Green (2020) analysed data from a survey designed by researchers at the Institute for Fiscal studies and the UCL Institute of Education. Their findings show that the extent of online provision in state schools was minimal: '71% of state school children received no or less than one daily online lessons' (Green, 2020 Executive Summary, p.2). In independent schools, however, the image was different, and it made an impact. An assistant Headteacher we interviewed told us:

'[...] we found an awful lot of parents felt that children would learn better from face-to-face teaching (synchronous). Having spoken in the area we're in, we've got a number of private schools close by and I think people are aware that private schools are using things like Zoom and Teams.'
[Louis Chaplin, Assistant Headteacher, State Secondary]

The amount of support provided to families for the home-schooling of children varies from school to school, although it is known that independent schools have provided more online and offline lessons: 31% of independent schools provided four or more live (synchronous) online lessons daily, compared with just 6% in state schools (Green, 2020). The Covid-19 impact brief by The Sutton Trust reflected that, in the first month of the lockdown, students in independent schools were twice as likely to access online lessons daily compared to those in state schools (Cullinane & Montacute, 2020).

Pensiero et al. (2020) conclude that:

'The transition to distance schooling is likely to exacerbate inequalities by socio-economic groups due to both the socio-economic gap in the volume of schoolwork completed and to the relative ability or inability of some parents to support children's learning. Families with a service class background have the twofold advantage of being better able to assist their children with home-schooling and of having more time to do it as they are more likely to be working from home [...] Finally, our analysis does not take into account the impact on educational attainment of the mental well-being of children and/or their parents during the lockdown, which is also likely to be associated with socio-economic status and further exacerbate socio-economic inequalities in learning losses.'

This disparity in provision was revealed in the interviews we conducted with teachers and school leaders. Most state schools did not offer live lessons due to lack of teacher preparation, lack of resources, concerns over students' access, and online privacy and safeguarding. Independent schools, on the other hand, had personnel to deal with online privacy and security issues, IT personnel to support teachers, and digital learning experts to advise best ways to implement online learning.

Another factor was the type of learning environment families are able to provide at home. Effective home learning is made much easier by access to suitable technology to attend online classes or download assignments and a quiet, dedicated space to study. Not all children had access to a quiet space for learning (Andrew et al., 2020). The Nuffield Foundation and National Foundation for Educational Research (NFER) are also undertaking research on the impact of Covid-19 on mainstream schools in England (See Lucas et al., 2020 and Sharp et al., 2020). Their first survey focused on the impact of the closure and early plans for re-opening, and many of the findings echoed those of other studies: access to IT was identified as the most significant form of educational disadvantage, with 81% of teachers saying it was leading to disadvantaged students being less engaged in schoolwork, a bigger factor than, for example, students being eligible for Pupil Premium funding, which was identified by 52% of teachers as the biggest cause of disengagement. However, the overall level of deprivation of the school was found to have more influence on student engagement than the level of deprivation of individual students, with students from disadvantaged backgrounds in more affluent schools being more likely to be more engaged in their learning.

In Scotland, a survey carried out by MRC Pathways,¹⁴ a mentoring charity for disadvantaged children, found that almost 70% of the most disadvantaged students in Scotland have not used any learning materials provided by their school since the start of lockdown in spring 2020. The survey received responses from a thousand young people and around half reported that they found the materials hard to understand, and a similar proportion of respondents were too stressed and anxious to engage with the work. In addition, around one in four reported having caring duties, which affected their ability to learn at home. Nearly 15% of the survey respondents did not have the adequate IT and internet access, and around 20% did not have the space to work at home.

¹⁴ <https://mrcpathways.org/wp-content/uploads/2020/07/MCR-Lockdown-Survey-Report-29th-July.pdf>

Even before the lockdown, research found that teachers in independent schools reported being more confident in using education technology.¹⁵ A survey conducted by Teacher Tapp on 27 June 2020 asked the question: Do teachers in state vs independent schools feel confident in using

educational technology as a learning resource? The data illustrated in Figure 21 shows that the vast majority of teachers from across both the state and the independent sector agreed, with only 10% of state school respondents and 5% of independent school respondents, 3% disagreeing.

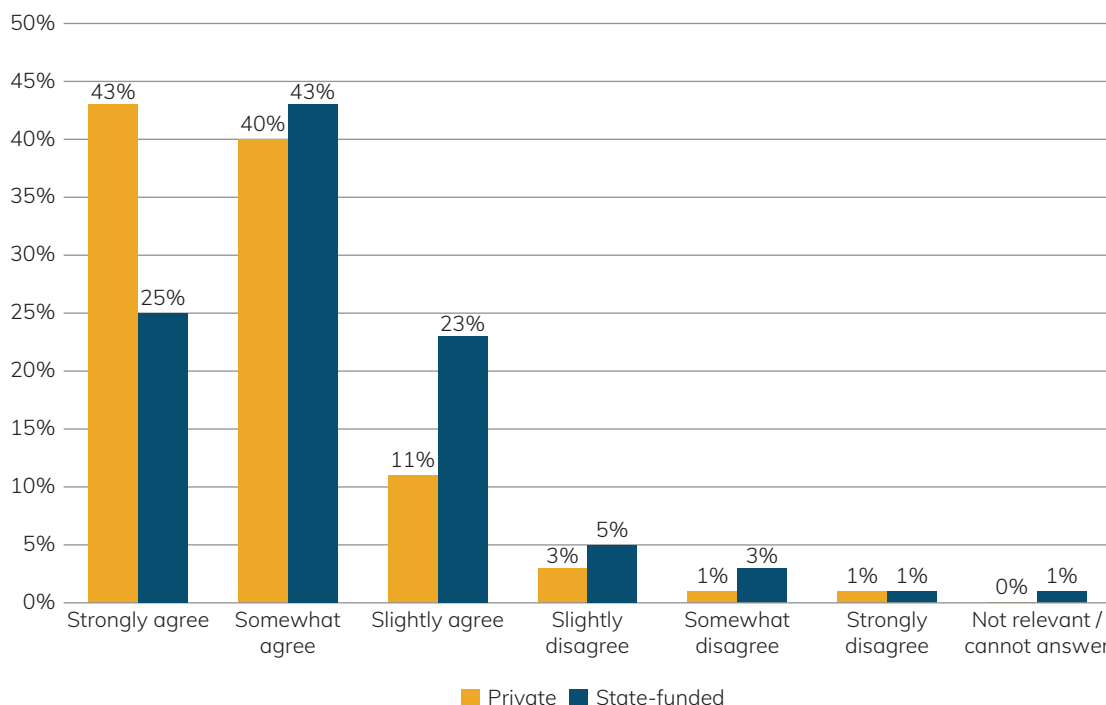


Figure 21: Do teachers in state vs private schools feel confident in using educational technology as a learning resource? (Source: Teacher Tapp n=7,303)

In addition, secondary school children, both in the least well-off families (14%) and highest-income families (10%) either have no device or have to use a phone to access schoolwork. If we consider that 88% of secondary school children report that their school has at least one online home learning resource, those children without appropriate access may be left behind (Andrew et al., 2020). The same study also explored non-educational activities of children, i.e. leisure time on screen and found that, older children in particular, spend quite a bit of time using technology for fun: 'At the top end, 9% of younger children and 23% of older children engaged in screen time for fun during eight or more hours of the day.' These findings make it clear that children's home learning experiences are very different from each other. 'Children in better-off families attend schools that are giving them significantly more work to do, often through more interactive platforms such as online video-conferencing. These students are more likely to

have access to resources such as study space and technology at home, and their parents report feeling (somewhat) more confident in supporting their learning.' (Andrew 2020, p.17).

The disparity in educational provisions is also reflected in parental concerns. For example, data collected by Parent Ping and Teacher Tapp, shows how socioeconomic factors impact the kinds of worries felt by different families. Worries about *falling behind* were evaluated by Parent Ping on 28 July 2020. As reported in Figure 19, 55% of parents who responded to being asked if *falling behind* was a concern for them stated that *falling behind* was a big or quite a big concern. When a comparison was made between respondents who were eligible for Free School Meals (FSM) and those who were not, 58% of parents eligible for FSM said that *falling behind* was either a big concern or quite a big concern for them. Seventeen per cent of parents eligible for FSM responded

¹⁵ <https://teachertapp.co.uk/what-does-distance-learning-look-like-in-england-and-where-will-teachers-kids-be-today/>

that they did not know if *falling behind* was a concern, compared to 5% of respondents not eligible for FSM. Thirty-six per cent of parents not

eligible for FSM responded that *falling behind* was **not** a big concern for them, compared to 21% of respondents who were eligible for FSM (Figure 23).

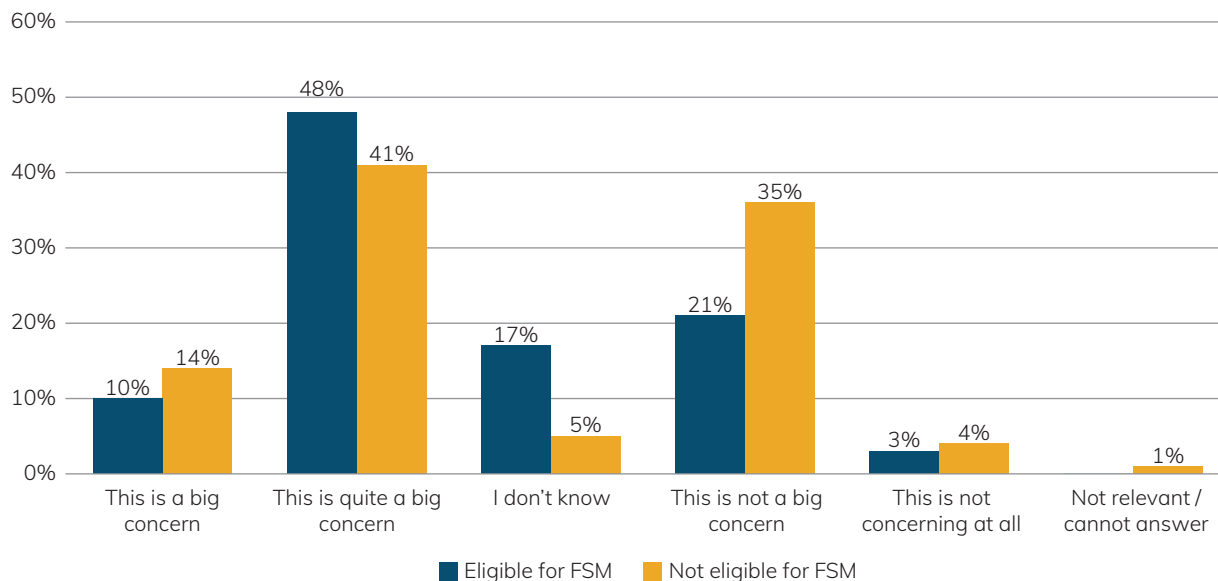


Figure 22: Is falling behind a concern for parents eligible for FSM vs parents not eligible for FSM? (Source: Parent Ping 28.7.2020, n=430)

When the same data from Parent Ping's survey on 28 July 2020 is analysed to explore the views of single parents compared to non-single parents, the differences are even more noticeable. Seventy-seven per cent of single parents stated that *falling behind* was either a big or quite a big concern for

them, as compared to 54% of non-single parents. Respondents who stated that *falling behind* was **not** a concern were divided as follows: 18% of single parents elected for this response, compared to 36% of non-single parents (see Figure 23).

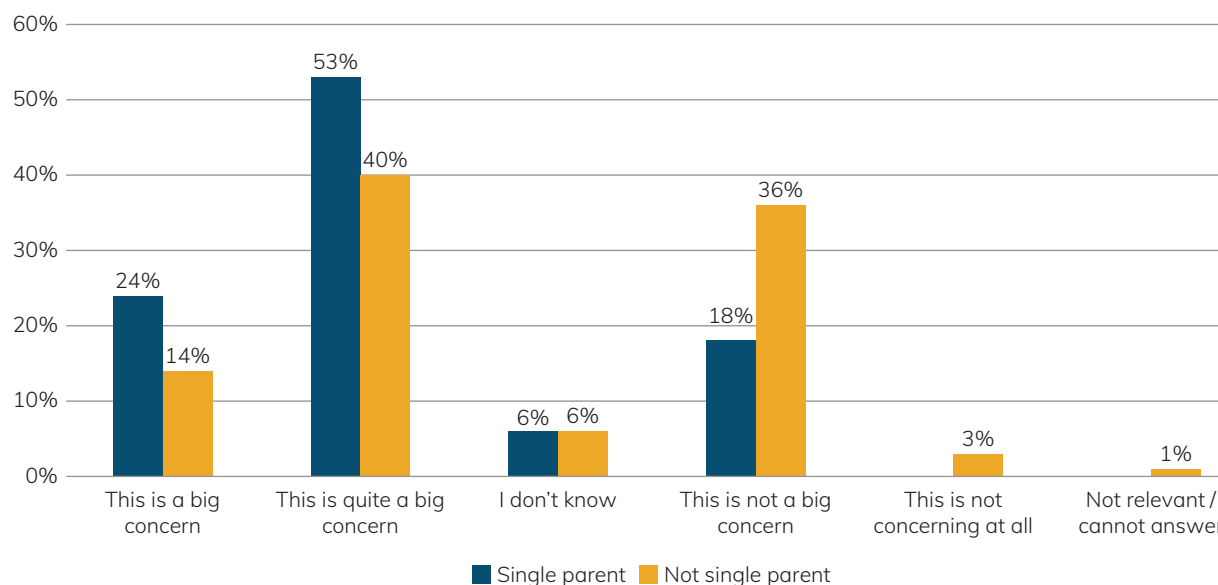


Figure 23: Is falling behind a concern for single parents vs non-single parents? (Source: Parent Ping 28.7.2020, n=430)

A further question from Parent Ping used in a survey on 30 July 2020 sought to find out what particular concerns single parents had compared to non-single parents (respondents were able to

tick any that applied). This survey revealed some clear differences. Fifty-nine per cent of single parent respondents reported being concerned about 'missed learning due to lockdown' whereas

only 28% of non-single parents selected this response. The greatest difference was seen in concerns about financial worries, with 59% of

single parent respondents selecting this response compared to 16% of non-single parents (see Figure 24).

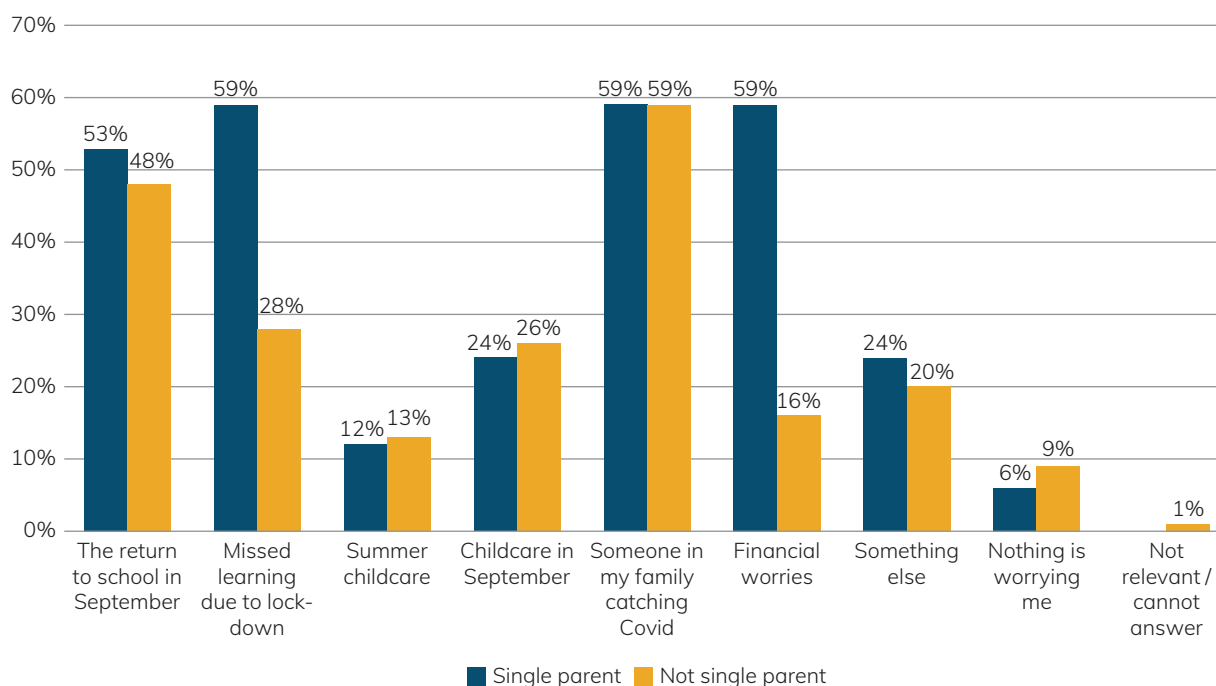


Figure 24: What do single parents worry about vs non-single parents? (Source: Parent Ping 30.7.2020 N=444)

The effect of lockdown was felt differently in different parts of the country. School leaders and teachers in educationally isolated schools in remote and coastal areas experienced additional infrastructural issues (such as access to resources), and researchers agree that these issues need to be recognised and resolved in order for children in these schools to perform in a similar way to children in more affluent and urban areas (Ovenden-Hope, 2020).

SEND

A website called Special Needs Jungle, that provides easy to understand resources, articles, and information for parents and carers of children with special needs, put out a survey to its readers to ask them about the support they and their children had received during the lockdown.¹⁶ The information gathered from parents and carers, in this survey as well as in other studies,¹⁷ revealed that support had all but disappeared. Parents of children with special needs found home learning really challenging (68%). Family circumstances such as access to internet-enabled devices, lack of access to one-to-one teaching assistants, special equipment, activities, and support workers have made their experiences even more difficult.

Moreover, many children with Education and Health Care Plans (EHCPs) were classed as 'extremely vulnerable' and needed to be shielded. The implementation, process, and application of risk assessments for children with EHCPs were all areas that raised significant concerns. A majority of respondents reported that their child had not had a risk assessment (or they did not know) and, of the parents whose children had undergone a risk assessment, only 9% said that they had been fully involved. Only 28% of parents surveyed agreed that their child's educational placement had provided very good support. Many parents said that there had been no differentiation of schoolwork for their child's needs, which meant their child could not complete the work that was set.

The type of the attended educational setting played a significant role in how positive families found remote learning and the support they received. Independent or non-maintained special schools (INMSS) had more satisfied parents (29%) compared to parents in mainstream schools (16%) and in state special schools (18%). In addition, the amount of work set was felt adequate by 50% of parents in INMSS compared to 16% in mainstream schools and 26% in state-run special schools. This significant overall disparity between the lockdown

¹⁶ <https://www.specialneedsjungle.com/coronavirus-send-education-survey/#DLreport>

¹⁷ <https://www.tes.com/news/warning-over-1-4-special-school-pupils-sat-home>

provision in independent schools and state schools certainly requires further exploration.

Special needs children’s access to therapies, one-to-one teaching assistants, and support is also badly affected by restrictions brought about by Covid-19 crisis, and this will cause many children who require intensive support to regain skills lost or not progressed during this period. Only a small percentage of one-to-one teaching assistant support could be provided online, and once again those in INMSS tended to fare better (22%) than those in state special schools (8%) or mainstream schools (9%). The figure was 17% in post-16 settings.

Although some studies reported that the pandemic had increased the anxiety levels in children generally, the Special Needs Jungle Survey cited that, for some children with special needs, being away from school had produced a beneficial effect on their anxiety levels. Respondents to this survey illustrate how different a child’s experience can be with 37% of parents reporting an increase in their children’s anxiety levels and a similar proportion (38%) reporting a decrease. Reasons for the increase in anxiety levels were cited as: concerns about Covid-19, disruption to routine, too much set work. The reasons for the decrease included: the less formal learning environment, more inclusive ways of learning, less pressure, a better understanding of a child’s needs, and reduced sensory issues.

In another study, researchers from University of Sussex School of Education and Social Work¹⁸ surveyed more than 500 parents to explore the experiences of parent carers of children with SEND during the time of the Covid-19 limited school provision (23 March – 1 July 2020) and

informed schools about parental perspectives and the transition back to school and ongoing SEND provision. Their results show that four in ten parent carers of children with SEND felt they received no support from educational or other agencies during the lockdown. The recommendations included schools planning a gradual return of children to school and ‘being prepared to incorporate technology, phased returns, one-to-one support, small-group work, social stories, checklists and visual supports to support children to transition back to full-time education, as well as incorporating home learning preferences established over lockdown to allow them to be continued in the classroom.’¹⁹ Parents in the study also suggested using technology to further engage families into the school day by virtual tours for pupils in addition to a checklist or social stories.

A survey conducted by Parent Ping on 30 July 2020 asked about parental concerns and categorised responses from parents with a child or children who had SEN and an EHCP, parents whose child/children had SEN but did not have an EHCP, and parents whose child/children did **not** have SEN. Figure 25 shows the results from this survey and illustrates that the greatest concern for parents whose child/children had an EHCP was returning to school in September (64%), whereas the greatest concern for parents with children without an EHCP or without SEN was someone in the family catching Covid-19. Financial worries were also a greater concern for parents whose child/children had an EHCP, 43% selected this response, compared to 18% of parents with a child or children with SEN, but no EHCP, and 16% of parents who do not have a child with SEN.

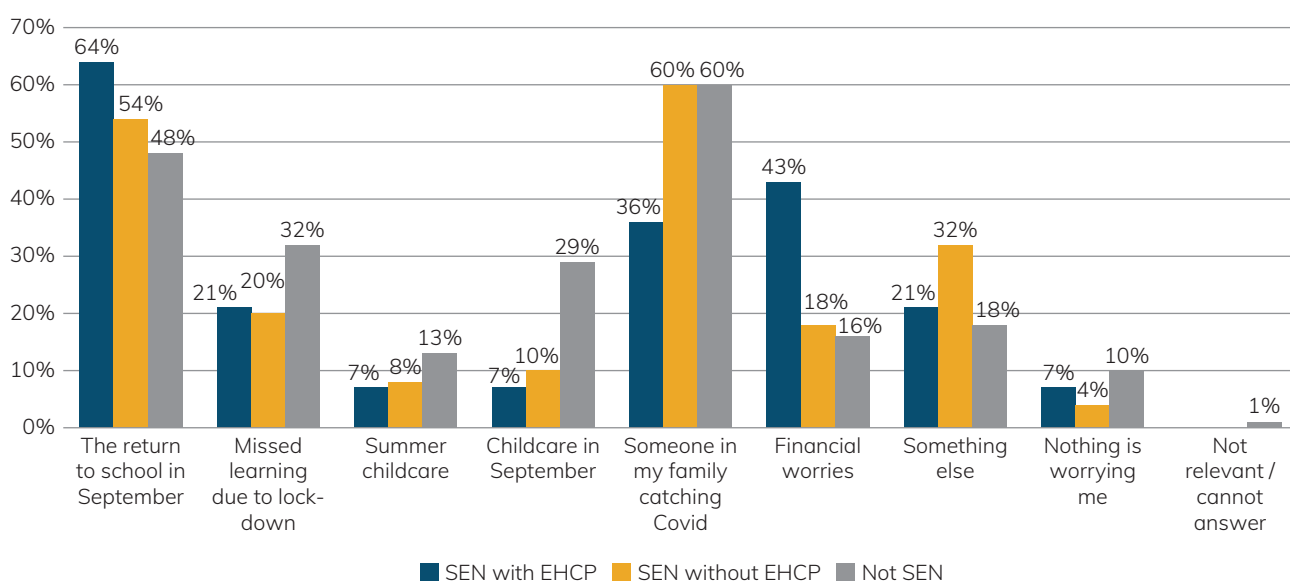


Figure 25: What SEN vs non-SEN parents are worried about (Source: Parent Ping 30.7.2020, n=444)

¹⁸ <http://www.sussex.ac.uk/broadcast/read/52612>

¹⁹ <http://www.sussex.ac.uk/broadcast/read/52612>

In our interviews, participants mentioned that SEND children were not always in school and, when that was the case, they were provided with resources tailored to their needs. However, this was not always possible and finding suitable activities was left to the parents. Schools also lent devices to families and asked for government laptop support to provide necessary devices to children. It was not always easy, but sometimes clever solutions were employed, as seen in the following statements by our interviewees:

'[...] we gave them a sandpit, and we gave them a water tray for their back garden. We gave them lots of the sinking and floating equipment or the sand or the shells.' [Martin Lumb, Headteacher, State Primary]

'We tailored our learning for SEND children. We mostly used SLSO (SMART Learning Suite Online), within Google Classroom. You can set different children different learning and they only see what they're actually set. In SLSO we set different learning for some individuals or groups of children. For some of the children, the learning may for example be to create videos of themselves doing learning, complete varied activities, do a drawing or read and answer questions to demonstrate what they now know. Read a book with your parent and using SLSO to put up a recording of that. Different activities to keep what they'd already learnt within school moving forward and ensure that learning was not dropping off. What we did also was we'd put teachers reading stories, every week in their Google Classrooms and the SLT would also read to the children, which was fantastic! Children's comments which they put in the stream in respect of this were really sweet! It was very important that the children could see that their teachers, teaching assistants and members of the SLT were reading and engaging with them.' [Stella McCarthy, Computing Coordinator, State Primary]

For an up-to-date review on technology-led interventions for specific learning difficulties, please see Luckin et al., 2020.

Theme 5: Inconsistent infrastructure

The PISA data from 2018,²⁰ which was released in October 2020, demonstrates some features of the infrastructure that were in place before lockdown and that affected education in unequal ways. The UK does well in terms of both students having access to a personal computing device and the provision of broadband connectivity in comparison to many other OECD countries; 96% of students who attend advantaged schools in the UK reported having a computer for schoolwork at home. However, only 88% of students in disadvantaged schools responding to the same question reported that they also had a computer at home for schoolwork. Broadband internet access is comparable to more affluent OECD countries, but it is not evenly distributed.

The lockdown and further restrictions resulted in learning becoming far more dependent on personal computer and internet access within students' homes. In settings where a computer was available in the home, its use may be contested by siblings also requiring access for learning and by remote working parents. Teachers from disadvantaged schools (12%) reported that more than a third of their class wouldn't have adequate access, compared to concerns about access in most affluent state schools (3%) and private schools (4%) (Cullinane and Montacute, 2020). One of our teacher interviewees noted:

'actually, the children who didn't have access to technology [...] there were some who either they had sort of five children on one computer, or they didn't have a printer or something else that make[s] it difficult for them to access things that were sent. If they let the school know that they were given paper copies of things, but they had [...] to sort of be able to get to school to let us know.' [Teacher, State Primary]

Research by Cullinane and Montacute (2020) reported that, when parents were asked about the number of internet-enabled devices in their home, the median figure was four, but 20% of homes reported seven or more devices. One parent we interviewed also highlighted how schools were stepping in to provide devices for students without access to any:

'So they, for those that didn't have laptops, they ['They' is referring to the school providing chromebooks for the children that didn't have them] provided Chromebooks so that everyone could access resources.' [Matthew Harker, Parent]

²⁰ https://www.oecd.org/pisa/Combined_Executive_Summaries_PISA_2018.pdf

Schools in more deprived areas were not only struggling financially,²¹ but they also had to help their students with devices. About one in five teachers in state schools (21%) reported that their school was providing pupils with laptops or other devices to mitigate inequality gaps (secondary 31%, and primary 11%). However, affluent schools were still able to provide more laptops than disadvantaged schools (28%, compared to 15%) (Cullinane and Montacute, 2020).

During lockdown, parents reported spending money on learning, on extra books, resources, subscription to apps or websites, or on electronic devices. Twenty-four per cent of parents spent less than £50 and 14% more than a hundred pounds in the week after schools closed. Moreover, many families supported their children's learning with additional tuition if they could afford it (Cullinane and Montacute, 2020).

Improving digital access is one of the three priorities identified by McNeil et al. (2020) and echoed by almost every study reviewed in this report. As seen in the following statement by an headteacher interviewee, it will be critical to get the government to think about broadening digital access, especially for children in disadvantaged groups so that the existing inequalities and disengagement will not increase.

'[...] and we were able to use the three laptops that we got from the government scheme for vulnerable children. Three. Three. Yes. [...] about the fact that you can't get the broadband for the vulnerable families unless you're a secondary school because that's a different issue I have with the scheme today.' [Interim Deputy Headteacher, State Primary]

Although this may look like a technical issue, it is also necessary to help children to gain the necessary skills and disposition to be able to use technology effectively for learning. One of the biggest areas of concern for teachers is the children who are least engaged during remote learning.

²¹ <https://www.nfer.ac.uk/the-implications-of-Covid-19-on-the-school-funding-landscape/>

School attendance

There are various ways in which we can interpret the meaning of educational infrastructure, and the levels of education possible to learners who can,

and cannot, access that infrastructure. Figure 26 shows a map of children refusing to go to school and thus cutting their access to the education provided by physical attendance.²²

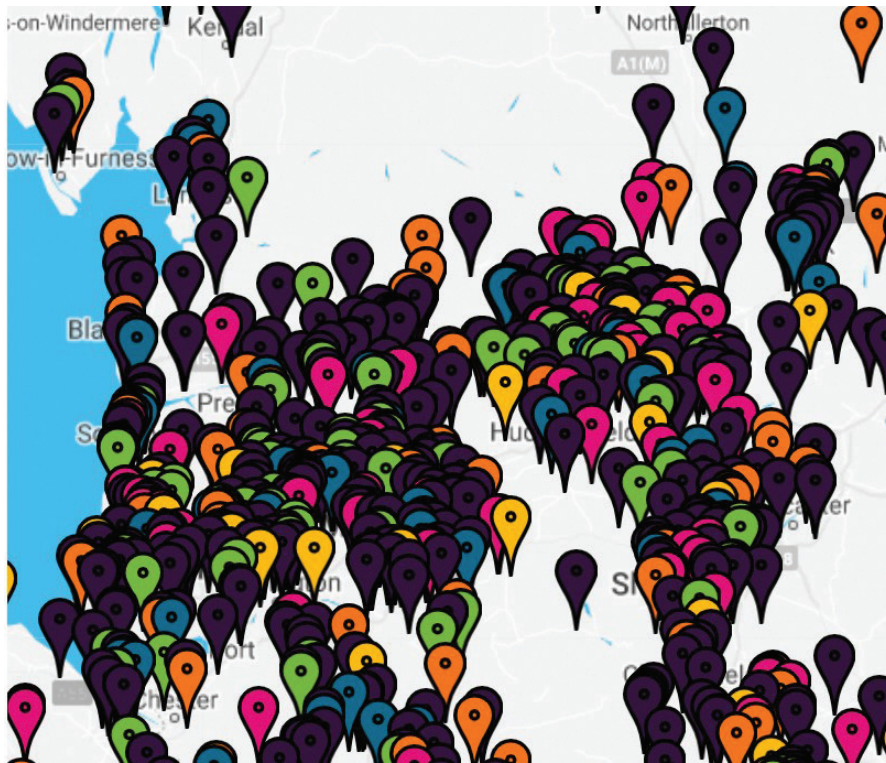


Figure 26: SquarePeg attendance map (see <https://www.teamsquarepeg.org/map-campaign>), showing the prevalence of 'school refusal' in the North West of England.

The increase in numbers of pupils refusing to attend school is an increasing matter of concern reported in the mainstream media. The Guardian newspaper reported on 14 November, under the title "It was damaging him": the spiralling number of children refusing to go to school',²³ that government data from 2018–19 indicated that 770,000 pupils were persistently absent in England, with an increase in the numbers of pupils who miss more than half their schooling from 39,000 in 2015–16 to 60,000.²⁴ The Covid-19 pandemic is likely to be making this situation worse, with OFSTED reporting that of the 121

school visits conducted in October 2020, a third of schools reported an increase in the number of pupils not attending school or leaving to be home educated. Campaign group 'Not fine in School'²⁵ reported that almost 1,000 new members had joined their closed Facebook group since the start of the school term in September 2020, an increase in membership of 8%.

With government referring to physical attendance at schools as a central evaluation metric and a moral duty,²⁶ and threatening parents with fines,²⁷ there was nevertheless reduced attendance as a result of Covid-19.²⁸

²² <https://www.teamsquarepeg.org/map-campaign>

²³ <https://www.theguardian.com/education/2020/nov/14/it-was-damaging-him-the-spiralling-number-of-children-refusing-to-go-to-school>

²⁴ <https://www.gov.uk/government/statistics/pupil-absence-in-schools-in-england-2018-to-2019>

²⁵ <https://notfineinschool.co.uk/>

²⁶ <https://metro.co.uk/video/boris-johnson-assures-schools-safe-reopen-september-2226816/>

²⁷ <https://www.theguardian.com/education/2020/nov/14/it-was-damaging-him-the-spiralling-number-of-children-refusing-to-go-to-school>

²⁸ <https://www.bbc.co.uk/news/education-54908149>

Theme 6: Trust

The educational, social, and economic implications of Covid-19 are an uncharted territory for policymakers and the decision-makers, in local and national governments, as well as for teachers, learners, and parents. In this section we discuss evidence that relates to trust in government and trust in the online world.

The uncertain and dynamic reality of the school lockdown led to the daily reliance of schools on

government advice, support and guidelines. Figure 27 and the full table in Appendix H (containing 141 entries, as documented until the end of October 2020, and providing further details), clearly show a timeline of confusing messages and an ever-changing stream of instructions and advice from the government. These instructions changed, often quite rapidly – and occasionally even disappeared from the Department for Education website,²⁹ and contained multiple conflicts in the advice and guidance they provided.

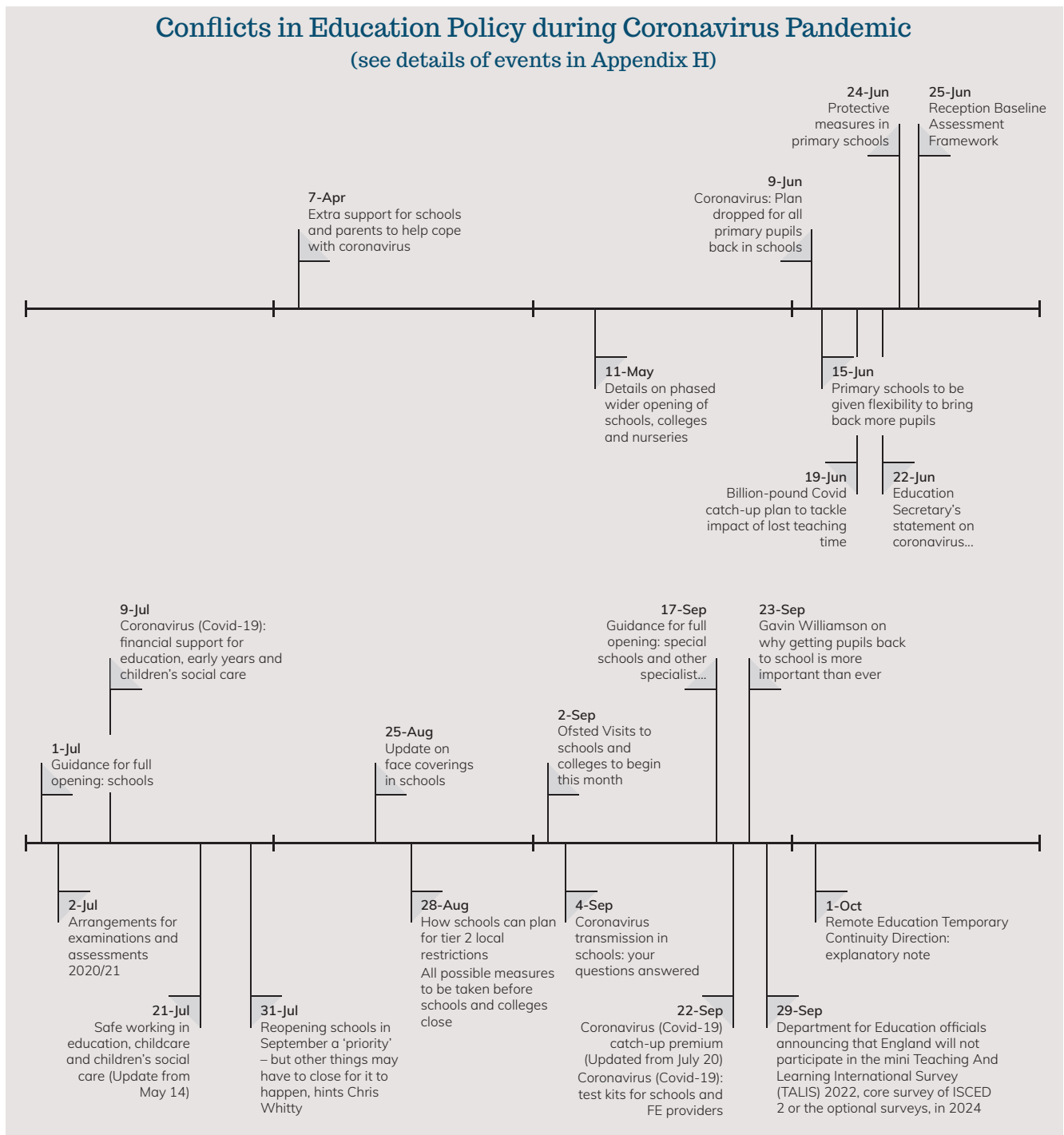


Figure 27: Conflicts in education policy during the Covid-19 pandemic (details in Appendix H)

²⁹<https://www.tes.com/news/hapless-dfes-school-Covid-guidance-goes-missing>

A ParentKind³⁰ survey showed that seven in ten parents felt the government is managing children's education during the pandemic 'not at all well' or 'not very well,' and more than three quarters (76%) of parents felt that the government has not listened to them.

Headteachers were left confused and having to make decisions with incomplete information. In Chapter 5 of this report, the evidence of this confusion becomes clearer. The challenge of trying to manage the confusing messages and guidelines from the government was high on almost all of our respondents' lists of concerns, and the extent to which they felt supported by the government was almost negligible.

One of the headteachers we interviewed told us:

'I know there are points at which I get more guidance, and I physically look at it. I can't even bring myself to open it right now. Because you just get saturated with it. I think one of the things that would have helped enormously is if when they updated something, they told you, which part of that document had been updated, rather than just sending it out, and then you having to trawl through it, to find the bit that was new or different. And I think it would have been really helpful to have a clearer idea, early on, about what was actually statutory and what was guidance. I think that was quite confusing. And I think as with lots of headteachers in particular, we were quite upset by some of the messages that the government were giving having done our absolute best to respond to all of the guidance to them which you then didn't need to do.' [Headteacher, State Primary]

Other interviewees commented that the guidelines would have been useful if they had separated out the recommendations and statutory sections and if they had been released with time for schools to read and act on them:

'It was good. I liked having guidelines. But I liked having guidelines that were released at 12 o'clock in the afternoon, not midnight. Because when they were released at midnight, I was often on the playground at 8.45 welcoming the key worker kids and the vulnerable kids, answering questions about government policy that I didn't actually even know was government policy.' [Martin Lumb, Headteacher, State Primary]

³⁰ <https://www.parentkind.org.uk/uploads/files/1/Coronavirus%20Parent%20Survey%20-%20England.pdf>

Trust in the online world

Concerns about the use of surveillance or tracking technologies that allow EdTech companies to collect information about students is a long-standing issue.³¹ During the lockdown a wide range of apps and online software were used for learning. Most of our interviewees reported using Microsoft Teams and/or Google Suite. Most of these were provided free to schools during the lockdown, and most schools quickly set up accounts for pupils, if they did not already have them. However, many companies did not consider safeguarding issues due to the urgency of the need to go online (among other reasons). Most of our interview participants mentioned that safeguarding was at the forefront of their provision for remote teaching. In primary schools, particularly, safeguarding and privacy were a big issue, and this stopped some schools from engaging with particular pieces of software. Research by Avast³² shows that more than one in five children (21%) admit to having had bad online experiences during the Covid-19 lockdown. Of those who cited negative online experience, 72% had received unkind messages, 72% had received unsolicited and inappropriate content, 71% had received unwanted contact from a stranger, 67% had received a malicious video call, and 58% had accidentally downloaded a virus onto their device.

From the parents' perspective, it was not always clear why safeguarding was an issue for the school:

'And the plan, the feedback I got was we're not going to do any online learning because safeguarding, which I thought was a real cop out. The safeguard at their age is just an adult in a room and it has to be in a downstairs space. That's a complete utter cop-out.'
[Judy Ripley, Parent]

One of the big debates in the global educational community is about whether to ask, or demand, students to use their cameras during remote synchronous lessons. While delivering a synchronous lesson with cameras on is a privacy hazard, shutting the cameras off might lead students to be more distracted.³³ It is worth bearing in mind that the whole discussion is based on the notion that a camera, or in general a synchronous interaction, is the most similar experience to the kinds of experiences students are used to from face-to-face teaching. However, online synchronous learning can be very cognitively overloading (for example, for the students to watch themselves during long periods, or having to watch the teacher's and peers' talking heads, which can be tiring). In addition, online learning opens a whole new world of asynchronous learning delivery, use of smaller groups, and many more affordances that could potentially ease many of those privacy debates.

³¹ https://www.edweek.org/ew/articles/2014/04/16/28privacy_ep.h33.html

³² <https://EdTechnology.co.uk/schools/one-in-five-children-under-12-admit-to-having-bad-online-experiences-in-lockdown/>

³³ <https://www.popsci.com/story/science/media-multitasking-memory-neuroscience/>

Chapter 4: The EdTech sector and the EdTech companies

The EdTech sector

The findings from the multiple Covid-19 studies reviewed in this report show very clearly that EdTech has, and continues to be, an important factor in sustaining learning and communication between teachers and students. During school closures, many children struggled to learn at home, and some of them fell behind. EdTech became a lifesaver for some teachers, parents, and learners. Many EdTech companies provided free support to help alleviate the effects of the pandemic on learning. Going back to school also resulted in increased use of EdTech.

The UK (and London specifically) is one of the world's top destinations for education and learning technology.³⁴ There are 1,200 EdTech companies based in the UK, 1,000 of which are based in London.³⁵ Thirty-five per cent of all European investment in EdTech companies goes to the UK. This equates to £178 million per year and means that the UK attracts the highest amount of venture capital and angel funding investment in its EdTech companies of any European nation.³⁶ The UK is expected to be worth £3.4 billion by 2021 (out of a total £100 billion UK education market) and is growing at 22% year on year. Based on a sample of 102 EdTech companies, the average expected growth of EdTech companies in the 2020–22 period is expected to be 29% per year.³⁷ This is to be expected given that 99.5% of UK EdTech companies are SMEs by the European Commission's definition, i.e. they have revenues of less than £40 million per year.³⁸ UK EdTech exports currently generate £170 million per year.³⁹

To find out more about the EdTech company community within the education ecosystem, we conducted a second round of surveys with EdTech companies (start-ups and SMEs) to find out more about how they were coping with the pandemic and what they were learning. Figure 28 shows the distribution of company size amongst our responses and illustrates that the majority of companies (77%) had ten employees or less and only 5% had more than 100 employees. There are estimated to be around 1,000 small- and medium-sized companies, including start-ups, in Britain that are involved in EdTech. This includes large, small, and start-up ventures.⁴⁰ It is hard to estimate how many of these companies are SMEs or start-ups (less than 250 employees), but it is reasonable to suggest that our survey sample represents about 5% of this community.

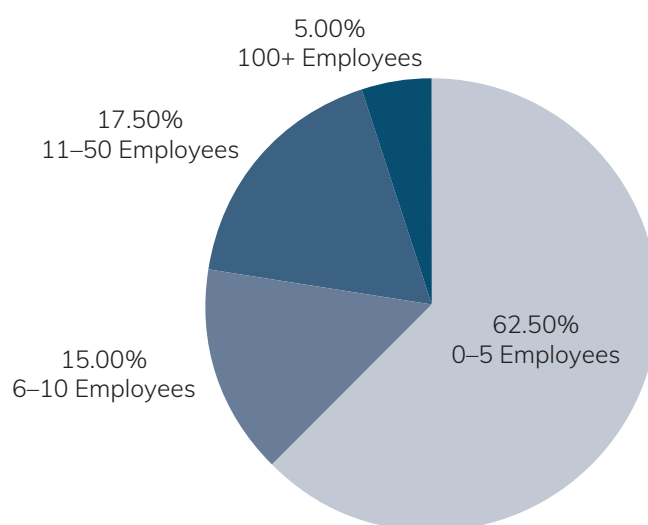


Figure 28: The size of EdTech companies in England responding to the survey, sampled in September/October 2020, n=41

³⁴ https://www.ednfoundation.org/wp-content/uploads/EdtechUK_LP_report.pdf

³⁵ <https://edtechnology.co.uk/latest-news/the-uk-ranks-1-in-edtech-venture-capital-funding-in-europe/>

³⁶ <https://edtechnology.co.uk/latest-news/the-uk-ranks-1-in-edtech-venture-capital-funding-in-europe/>

³⁷ <https://www.fenews.co.uk/press-releases/47967-embargoed-coronavirus-crisis-puts-spotlight-on-uk-edtech-companies-as-schools-and-teachers-embrace-online-learning>

³⁸ <https://edtechnology.co.uk/latest-news/2020-vision-edtech-in-2020-with-alexander-shea/>

³⁹ <https://www.gov.uk/government/news/edtech-strategy-marks-new-era-for-schools>

⁴⁰ <https://www.ednfoundation.org/wp-content/uploads/Edtech-UK-Vision-2020.pdf>

Within this sample, Figure 29 illustrates the target audiences towards which these companies focus their products and services. A large number focus

on school aged learners, but there is a substantial group of work with post-16 learners in colleges, the workplace, and higher education.

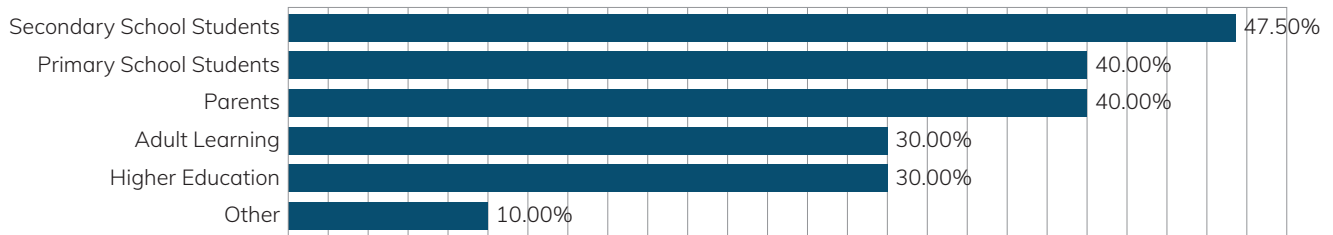


Figure 29: Target audience of EdTech companies in England, sampled in September/October 2020, n=41

The sort of technology used and the way it changed over time

We wanted to probe the manner in which teachers, parents, EdTech companies, and school leaders reported on their schools' technology use over the past eight months. Figure 31 shows the results of this exploration and illustrates

that the most popular activities for schools were live (synchronous) lessons, digitally marked assignments, and the provision of downloadable activities. There was also a substantial number of respondents who reported their use of subject-specific software and technology to support collaborative learning.

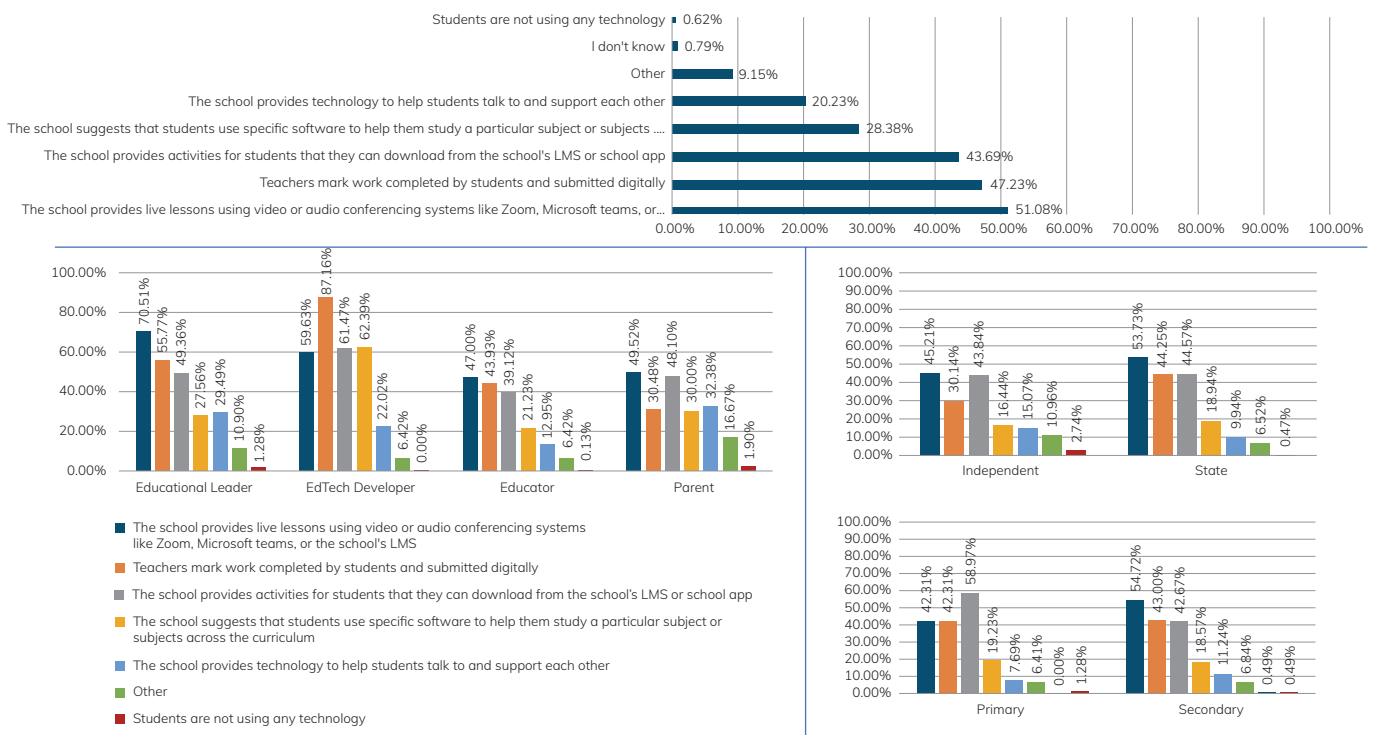


Figure 30: Technology used by all educational stakeholders (upper figure), and broken down by role (EdTech developer, educational leader, educator, and parent) - bottom left, by school type (state or independent) and by school level (primary and secondary) - bottom right, n=1,300

When looking at the breakdown of technology used (as shown in the lower half of Figure 30), it is clear that primary schools put more emphasis on asynchronous, as opposed to synchronous, learning and that independent

schools used more collaborative learning than state schools.

We also asked our respondents to what extent they were using, offering, or recommending free or reduced-price technologies. All of the

educational leaders, a third of the teachers, and almost half of the parents who responded reported using or recommending free technologies,

as can be seen in Figure 31. Almost two-thirds of the EdTech company respondents reported offering free technologies during the lockdown.

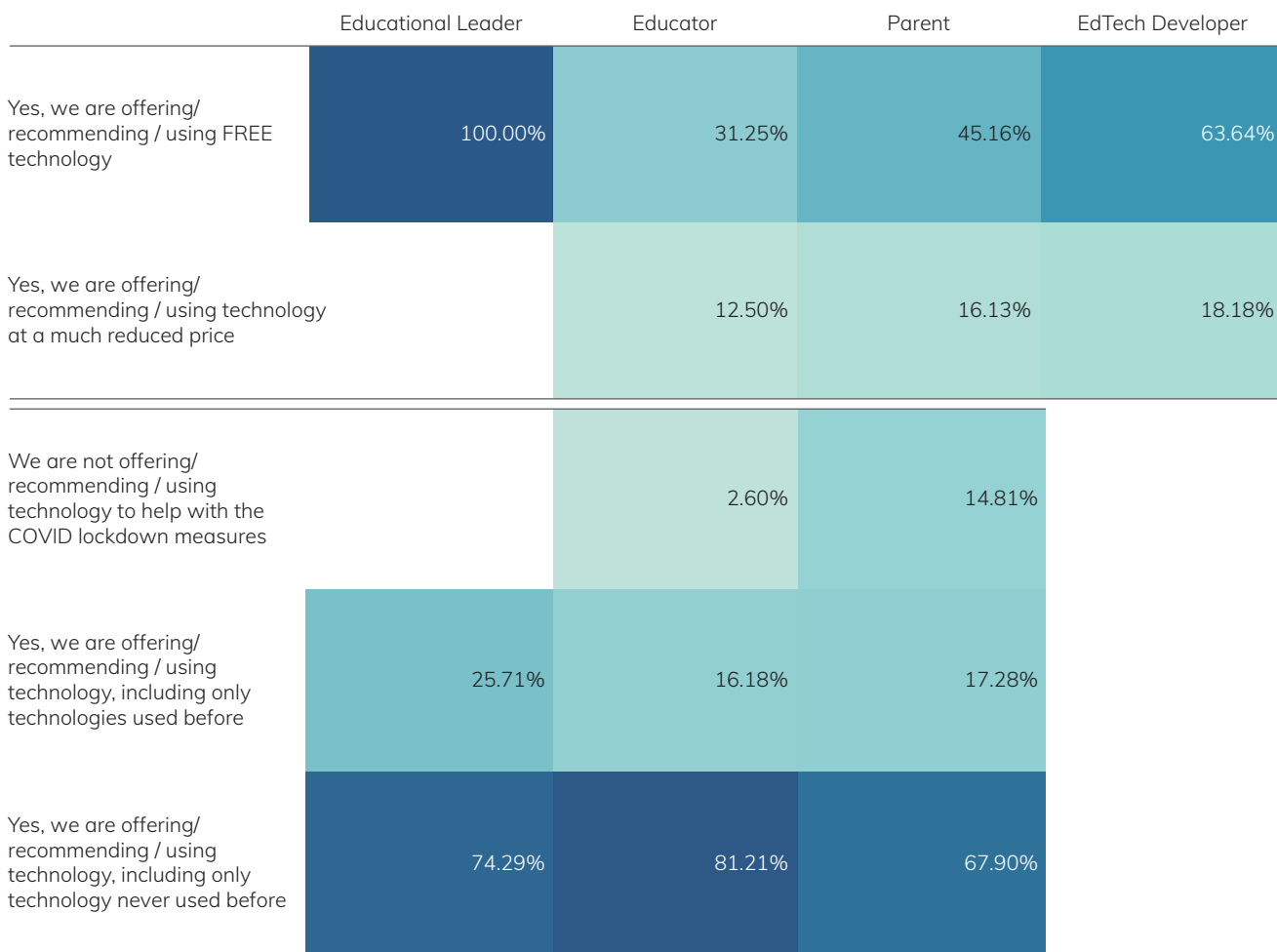


Figure 31: How many of each role are using technology at a reduced price or free (upper figure) and are they using new tech or just tech used before (bottom figure)

When asked if they were using, offering, or recommending technologies they used before Covid-19 or using new alternatives, more than two-thirds of educational leaders (74%), teachers (81%), and parents (68%) reported using or recommending technologies that included resources they had never used before. In comparison, 26% of educational leaders, 16% of teachers and 17% of parents said that they were only recommending or using

technologies they had used before. Figure 32 shows the same data as Figure 30 but distributed temporally across the period from 22 April to 4 September 2020. We can see that there was an increase in technology use in the spring and

during lockdown, including technologies not used previously. Educational leaders reported less technology use and their pattern of usage was not evenly spread over the months. Teachers and parents' use of technology was more evenly spread.

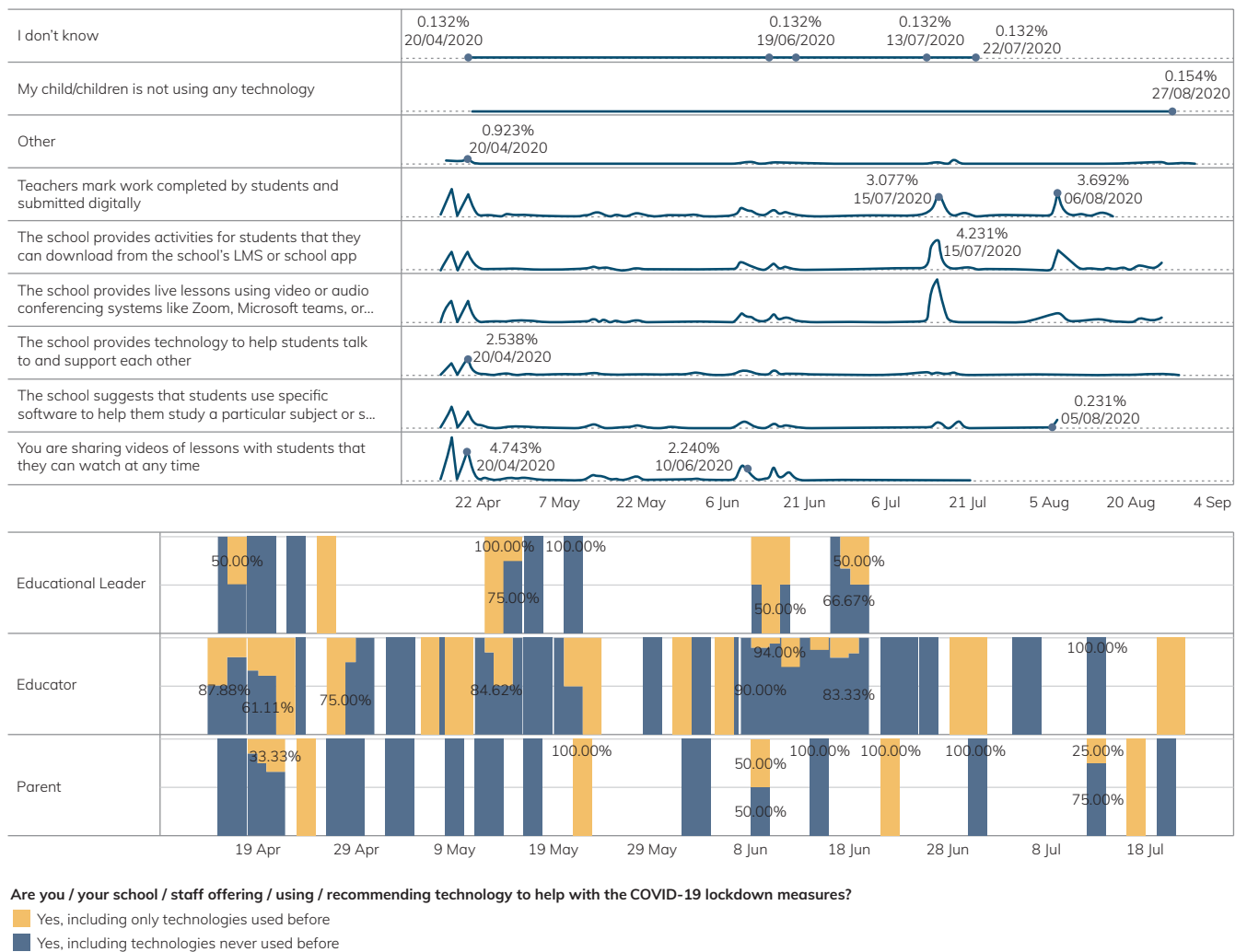


Figure 32: Timeline of type of technology used (upper figure) and timeline of the split between new and already used technology (bottom figure)

EdTech learning from lockdown

The lockdown provided an unexpected opportunity for EdTech companies to introduce new technology to the educational sector. Companies who offer EdTech, and some that were not previously particularly active in the education space, increased and/or changed some of their products and/or services in response to the Covid crisis. For example, Amazon introduced Amazon Kids offering books, videos, music, and educational content. Zoom also made changes to its products and practices to address educational requirements.

We wanted to know if the companies we surveyed were using this opportunity to collect data to learn about how their products and/or services were being used.

Figure 33 shows the patterns of data collection amongst the EdTech companies we surveyed,

as sampled in April, June, and then again during September/October. It is evident that the number of companies that collected no data reduced from 30.43% at the beginning of lockdown to 10% by the time the school year re-started in autumn 2020. The highest increase in the data collection method involved using interviews (from 4.35% in April to more than 50% in September/October).

However, data collected via interviews provides useful but limited information so we asked what other data sources our EdTech respondents were using to collect evidence about their products or services.

The data collection method that would be the easiest to scale is the use of logs or clickstream data to collect evidence about the way a product or service is being used, and yet the adoption of this data collection method increased the least, moving from 26% in to 32% in September/October.

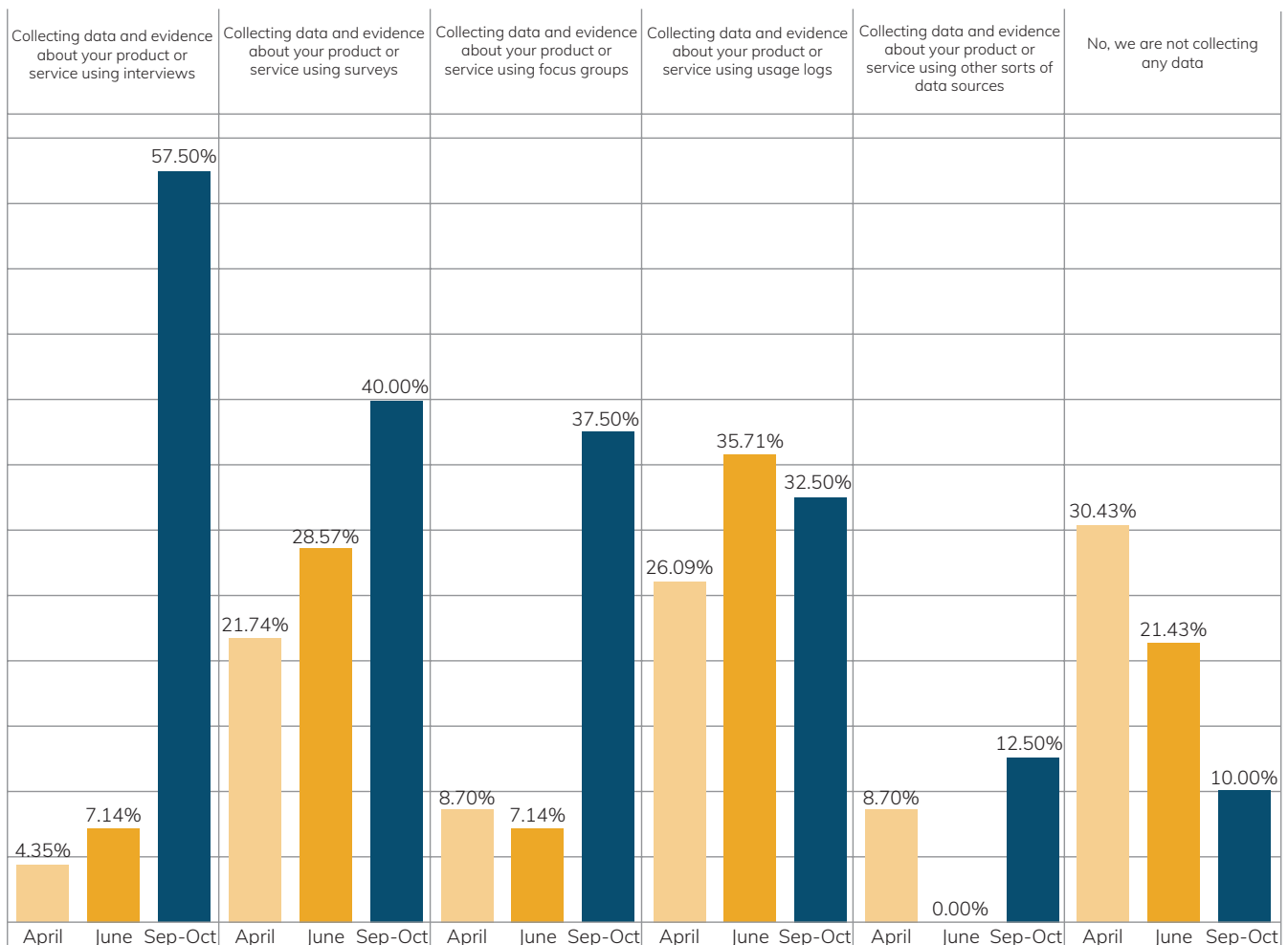


Figure 33: EdTech company use of data, sampled in April, June and September/October 2020, n=78

Figure 34 shows the plans that EdTech companies were making to change their product as a result of the lockdown. There was initial enthusiasm amongst respondents to adapting their product or service during lockdown, with 39% reporting that they had thought about changes and were starting to plan

how they would make them, and 57% reporting that they had already made changes in May 2020. In the Autumn of 2020, the number of respondents thinking and planning was 36%, a slight dip from May 2020, and the number of respondents who said they had already made changes was 46%.

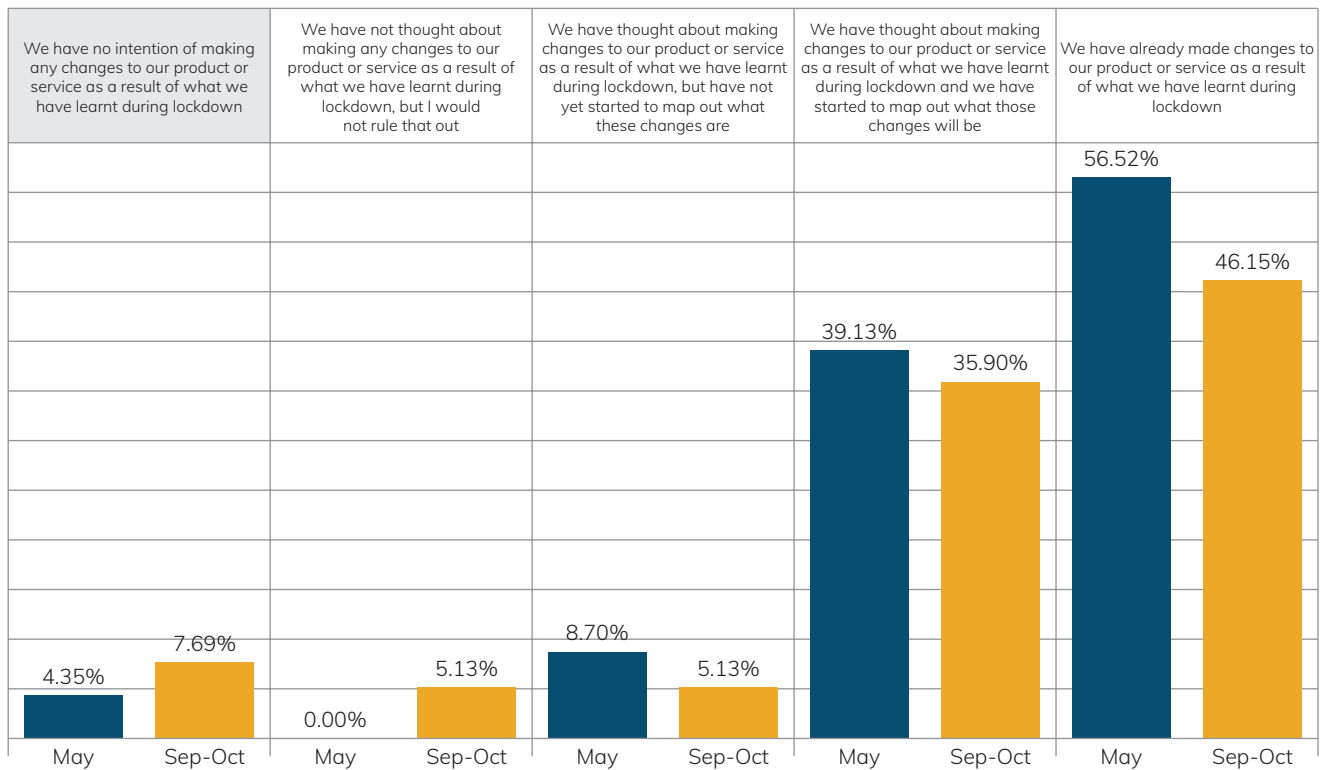


Figure 34: EdTech companies reporting changes to product or service as a result of lessons learnt from the lockdown, sampled in May and September/October 2020, n=63

The nature of the changes made to products or services by EdTech companies as a result of lockdown learning is reflected in Figure 35, which illustrates the main types of changes that companies made. It illustrates that the most

common adaptations were to take the product online, add functionality to support home learning, expand functionality, and scale or to build in support specific to Covid-19 restrictions, such as social distancing.

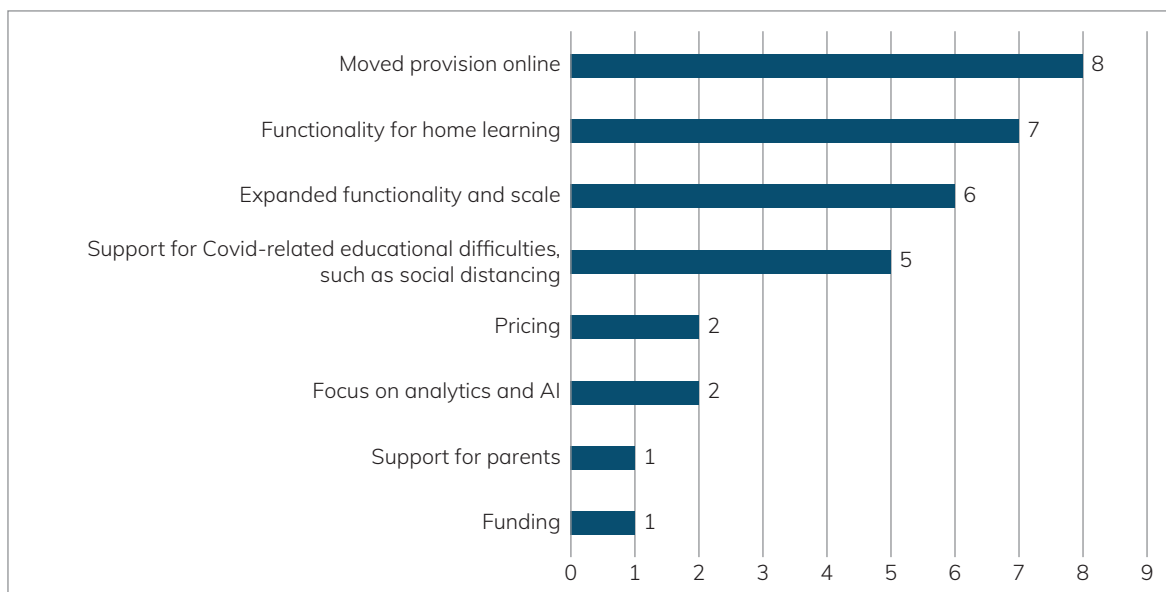


Figure 35: Main types of changes, as reported by EdTech companies, n=32

EdTech companies' concerns and support

When asked in April, June, and then again in September/October 2020, the most pressing concern reported by EdTech companies in April was paying rent on company premises that were not being used during lockdown, which rated 4.9 on a scale of 1 to 10. This remained the main concern in June, with a raised rating of 5.08. By the autumn of 2020, the main concern being reported was the onboarding of too many customers for the companies to be able to meet their needs effectively, rated 5.07.

In April, the third most highly rated concern was inadequate or inaccessible government support, rated 4.47, but this had reduced to the least-rated concern by the autumn of 2020 with a rating of 3. In June, the main concern remained paying rent, but worries about staff being ill was now the second highest rated concern at 4.25 and concerns about supporting staff who were working remotely had increased to 4, which made it the fourth highest-rated concern.

Worrying about when lockdown or Covid-19 restrictions will end and what that will mean for business was not rated highly as a concern, but it did increase over time, rising from an initial rating of 3.18 in April, to 3.42 in June and 3.55 in the autumn of 2020.

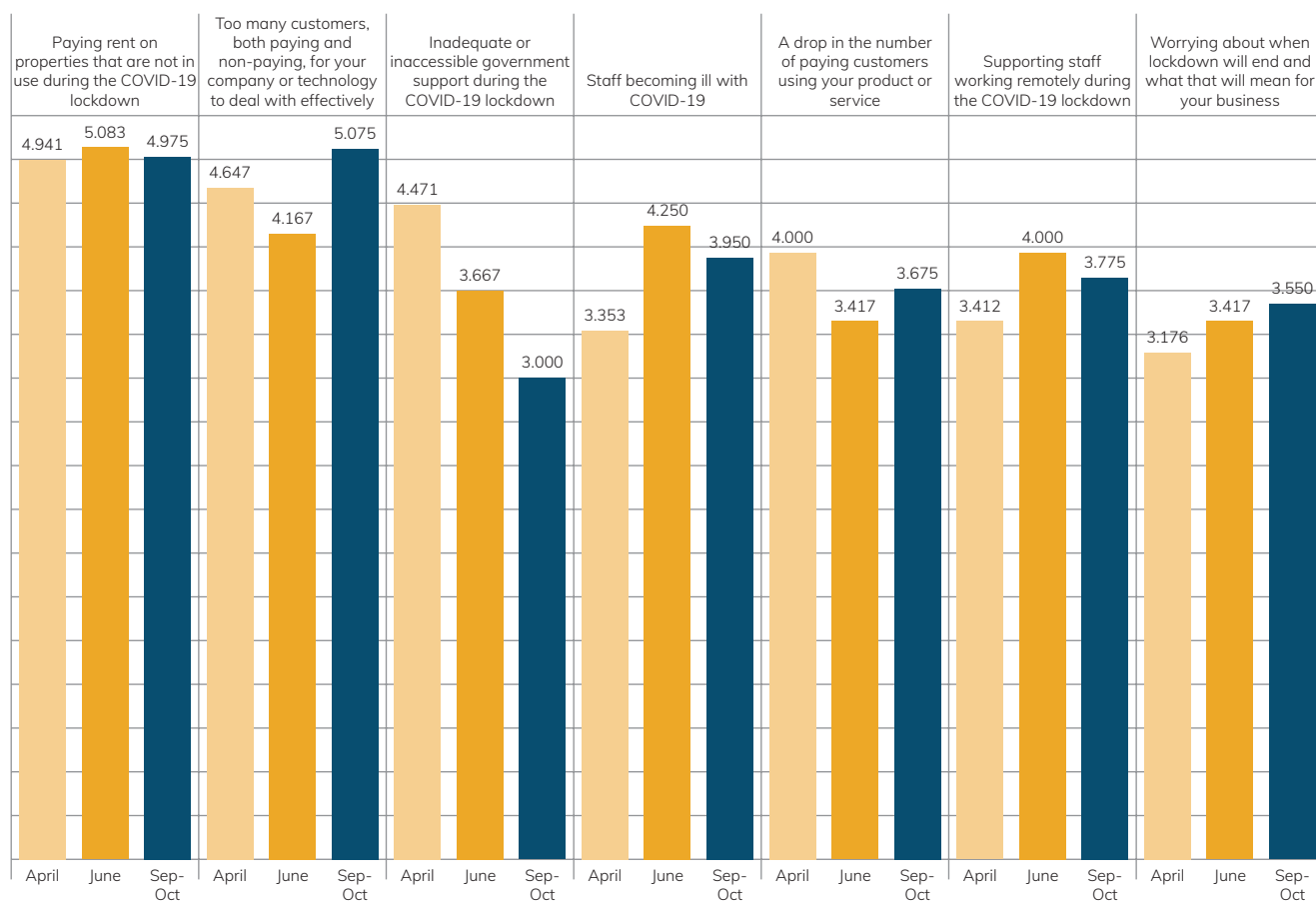


Figure 36: English EdTech companies' main concerns on a scale of 0 to 10, sampled in April, June, and September/October 2020, n=70

EdTech companies' concerns about paying for physical properties did not change significantly and stayed very high on the list. Figure 37 shows how our respondents dealt with working in the office or at home. Forty-five per cent of the companies reported that their staff were all working remotely, with 27.5% in rented premises, and 17.5% in a shared workspace.

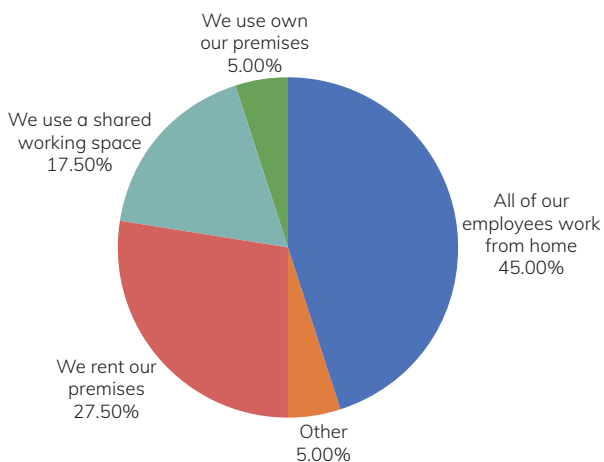


Figure 37: Premises of EdTech companies in England, sampled in September/October 2020, n=41

In the same way that we were interested in how other educational stakeholders were being supported during the disruption caused by Covid-19, we also asked our EdTech sample about their experiences. Figure 38 illustrates that colleagues were the most common form of support (73.39%), management (58.72%), and family (56.88%).

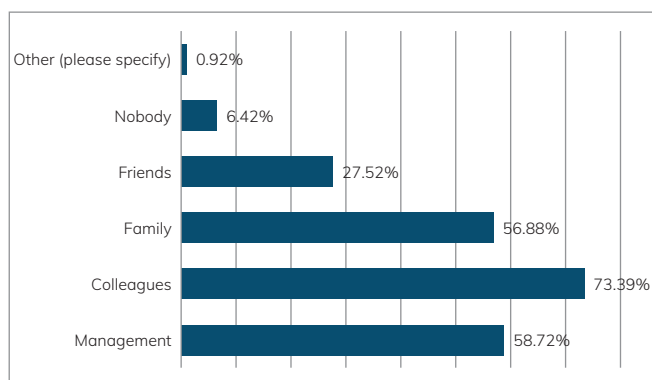


Figure 38: England EdTech companies' support systems, sampled in April and May 2020, n=110

The future outlook for EdTech

The increased use of EdTech due to the Covid-19 disruption to education could precipitate a rosy future for EdTech companies in Britain. Researchers expect that more blended learning approaches may be implemented in schools, mixing classroom and online learning, to continue the fight to reduce the detrimental impact of Covid-19 in schools and the community.⁴¹ A recent report by London & Partners⁴² and Dealroom⁴³ highlights London as the major European EdTech hub and states that it has notable potential for growth. London's EdTech ecosystem is the largest in

Europe with an estimated value of \$3.4bn, and it is the only city in Europe in the global EdTech top 10 by investment.⁴⁴ However, when we asked our EdTech respondents about their views on the prospect for the EdTech ecosystem in May and then again in September/October, the response was less positive. We have seen an increase of 10% in EdTech companies stating that the EdTech ecosystem is weaker due to Covid-19. The number of respondents who stated that they believed that the EdTech ecosystem was definitely **stronger** due to Covid-19 restrictions had dropped slightly from 22% in May to 21% in autumn 2020 (Figure 39).

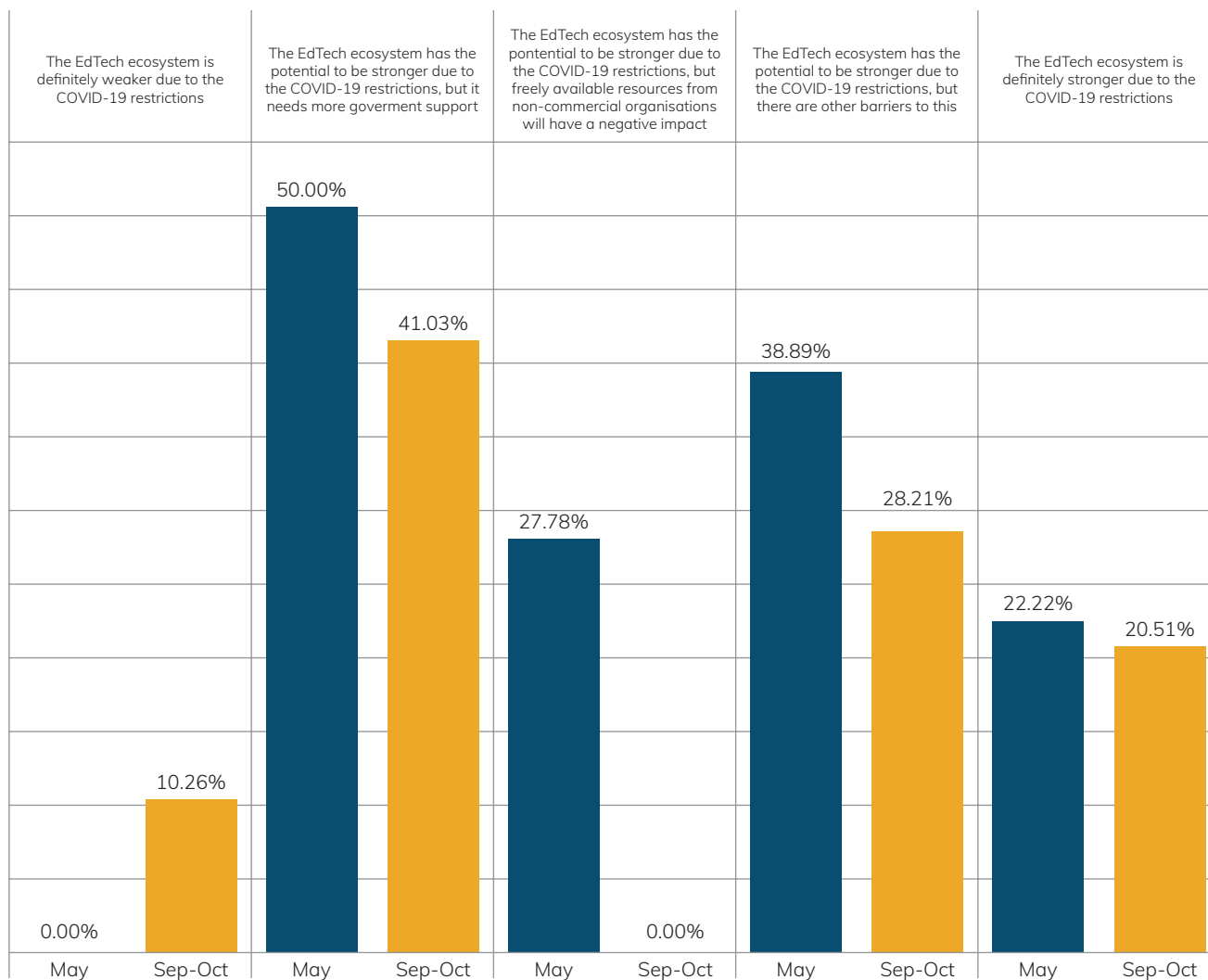


Figure 39: English EdTech companies' views on the EdTech ecosystem due to Covid-19, sampled in May and September/October 2020, n=58

⁴¹ <https://edtechhub.org/>

⁴² <https://www.londonandpartners.com/>

⁴³ <https://dealroom.co/>

⁴⁴ <https://blog.dealroom.co/wp-content/uploads/2020/09/EdTech-vFINAL.pdf>

In May, 50% of respondents reported that they believed that the EdTech ecosystem had the potential to be stronger due to the Covid-19 restrictions, but that it needs more government support. Thirty-nine per cent of the respondents agreed that prospects were good but that there were other barriers to overcome besides government support. At that point in time there was also some concern about the negative impact on the sector of free resources being made available by non-commercial organisations. However, their concern about free resources having a negative impact on the EdTech market and their concern about government support have reduced.

However, the reduced reporting of positivity about the EdTech ecosystem was not reflected in reports about EdTech company respondents' feeling of optimism. Overall, when asked if they were generally more or less optimistic about the future than they were before Covid-19, EdTech respondents reported increased levels of optimism between May and autumn 2020, moving from 26% saying they are more optimistic about the future than they were before the Covid-19 pandemic in May to 49% in autumn 2020 (Figure 40).

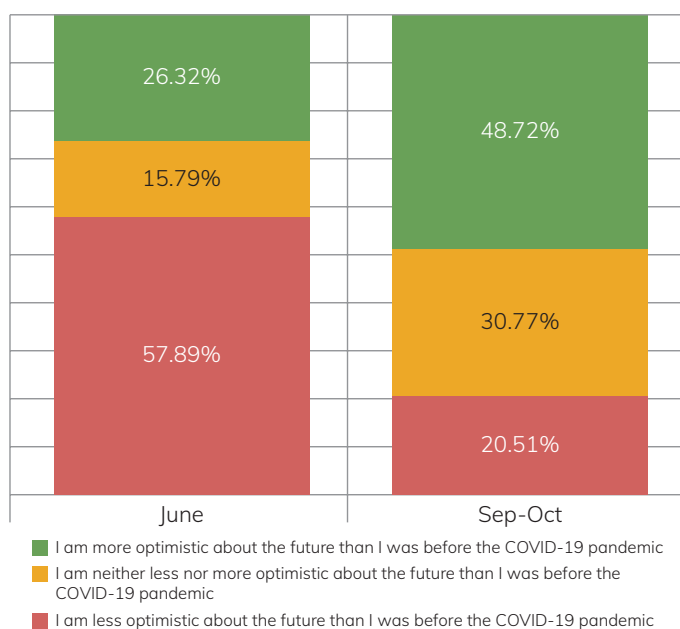


Figure 40: English EdTech companies' optimism, sampled in June and September/October 2020, n=59

The World Economic Forum⁴⁵ examination of the effects of Covid-19 on education concludes that it is necessary to combine the power of technology with the power of communities: 'The factory-inspired, 19th-century model of education made sense when there were severe limitations on teaching resources. Today there are innumerable digital learning platforms powered by AI that are struggling to find customers.' Despite some concerns, that while online education works for some people, it is not effective for everyone and not in every area (for example see Selwyn and Jandric, 2020), there is an agreement that there is 'a fundamental need to belong, learn, and share'. We need meaningful communities because they are force multipliers. They make learning fun and create a peer-to-peer accountability mechanism that shapes a culture of learning (World Economic Forum, 2020).

⁴⁵ <https://www.weforum.org/agenda/2020/08/how-edtech-will-transform-learning-in-the-covid-19-era/>

Chapter 5: Not all school leaders and teachers are the same

In the spring of 2020, the closure of schools meant that education became a home-based, technology-enabled activity with limited face-to-face opportunities. School leaders found themselves in the unenviable position of balancing the provision of support to students and staff, whilst attempting to reduce the impact of school closures on millions of children, and wading through numerous pages of government guidelines and regulations. Schools leaders had to work in a context where there was little to no predictability and no certainty or end in sight. What can the evidence tell us about the impact of the Covid-19 lockdown and ongoing restrictions on school leaders and teachers?

As seen in the following statement by an interviewee, it is clear that school leaders were under a lot of pressure to make decisions and make sure their school(s) and community worked together effectively:

'[...] so those were big challenges in dealing with the volume of feedback [...] we had to negotiate which things were really legitimate, and which things were just – you know – we're in the pandemic [...] there are some things which are not going to be perfect right now [...] we were responding and reacting. We were trying to be proactive, so from a leadership perspective, trying to block out the noise of like a couple [of] really local parents, be really strategic, and also trying to get it right about supporting staff, letting those who really wanted to run, run, but also those who are less competent and maybe were doing a lot of childcare [...]' [Head of Sixth Form, Independent All-through]

Harris (2020), writing in a Compact Guides series for the Chartered College of Teaching⁴⁶ argues that leading others at a distance requires 'establishing clear protocols of engagement around online communication and collaboration to ensure the experience is positive for all participants. This includes creating boundaries around online communication with colleagues and scheduling dedicated time slots for discussion. These boundaries need to be respected to give work colleagues the time and space to do other things and to meet other needs – family, friends, etc.'

In their study, Brink et al. (2020) suggest that 85% of staff members reported that they had found school communication, as well as the expectations from them by the school leadership to be clear. When parents were asked the same question, more than 70% reported that they found the communication and messages from the school clear.

The Edurio study mentioned previously (Brink et al., 2020) reported that one in five school staff found it difficult to stay on top of their work. A closer look at the percentage of staff who found it difficult revealed that leadership and IT support staff have struggled most. This indicates that school leaders and IT support staff felt more responsible for the implementation of the remote learning activities and consequently had more responsibilities.

Another area of concern for teachers was how they were being perceived by the media and parents in terms of how they approached remote education. Ashbury and Kim (2020) interviewed 24 primary and secondary school teachers with a range of experience and carried out a thematic analysis of the interview data. They identified four themes: (1) heroes or villains?; (2) key workers or not?; (3) voiceless and disrespected; and (4) appreciated locally. The researchers concluded that 'teachers reported discomfort and distress about media reports that asked them to be heroes and criticised them as villains when they questioned the safety of staff and students returning to school buildings. They resented the negative way in which their profession has been portrayed by the media and the ramifications of public opinion. Teachers were also angry and frustrated by what they perceived as the government's refusal to consult with them as a profession, and their failure to communicate effectively. However, teachers also reported feeling more valued than ever by their students' parents'.

Support systems

Teachers' workload is an ongoing issue, even before the pandemic, as evidenced in the National Foundation for Educational Research (NFER) survey carried out October last year,⁴⁷ which found that over a quarter of the teachers who were polled were considering leaving their jobs within twelve months due to workload pressures, stress, and anxiety.

⁴⁶ <https://my.chartered.college/about/>

⁴⁷ <https://www.nfer.ac.uk/publications/lfsb01/lfsb01.pdf>

Support systems are a central mechanism for helping to reduce stress and anxiety in all stakeholder groups (Brink et al., 2020). More than 80% of parents and staff who felt involved with shaping their school's response to Covid-19 also felt they were part of the school community. Communication, and clarity of decisions and support, were the highest factor that correlated with both parent and staff confidence in a school's response to Covid-19 (Brink et al., 2020). Staff who felt that communication from school

leadership was clear were four to five times more likely to feel confident about their school's handling of the disruption than those staff who did not feel that communication was clear (Brink et al., 2020).

Figure 41 shows the support systems as reported by our survey respondents (all stakeholders except EdTech companies). More than 30% felt supported by colleagues and school leaders, and less than 2.5% felt supported by the government.

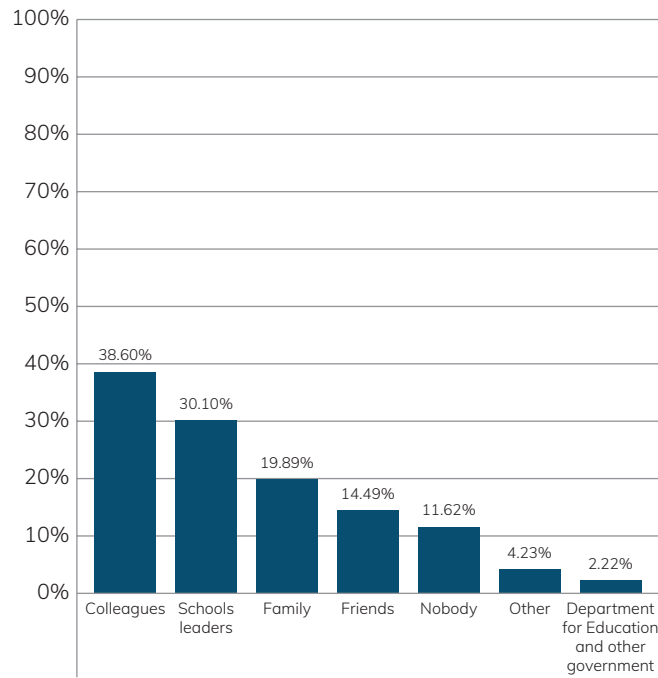


Figure 41: Support systems of respondents

When looking into the support systems used across all stakeholders (including EdTech companies) in Figure 42, it seems that overall, educators felt the least supported by colleagues. Family and friends were also important sources of support, particularly for EdTech companies.

The proportion of parents stating that nobody supported them (21%), was higher than for educators and EdTech companies, where less than 10% of respondents reported this. The feeling of lack of support by governmental agencies is clear across the board.

	Educational Leader	Educator	Parent	Educational Technology Developer
Colleagues	49.00%	24.39%	38.26%	73.39%
Family	17.00%	9.49%	21.74%	55.96%
Friends	25.00%	8.13%	13.91%	27.52%
Nobody	14.74%	9.76%	20.95%	6.42%
Other	6.41%	3.34%	6.67%	3.67%
Department for Education and other governmental agencies with guidelines and advice	1.79%	2.64%	1.05%	

Figure 42: Educational stakeholders support systems

The importance of support networks

In Chapter 2 and Figure 3 of this report, we showed that, when asked to score their personal feelings during the six months from April to July 2020, our respondents reported a decline in their feelings of positivity. We wished to explore the relationship between respondent's feelings of positivity and their responses to questions about the support available to them. In particular, we wanted to know if those respondents who felt supported by their colleagues were also the same respondents who expressed feeling more positive. We applied a Mann-Whitney U test to determine if there was a relationship between the

feelings of positivity expressed by the different stakeholder groups and their reports about the support provided by colleagues. We found some statistically significant differences that led us to conclude the support systems are a core construct of functioning educational ecosystems.

Figure 43 below shows that respondents who felt supported by colleagues reported a significantly higher ($p \leq 0.05$) positive feeling score than those who did not feel supported by colleagues. This difference is significant, although the range in values is greater amongst respondents who felt supported by colleagues as illustrated by the size of the boxes in Figure 43.

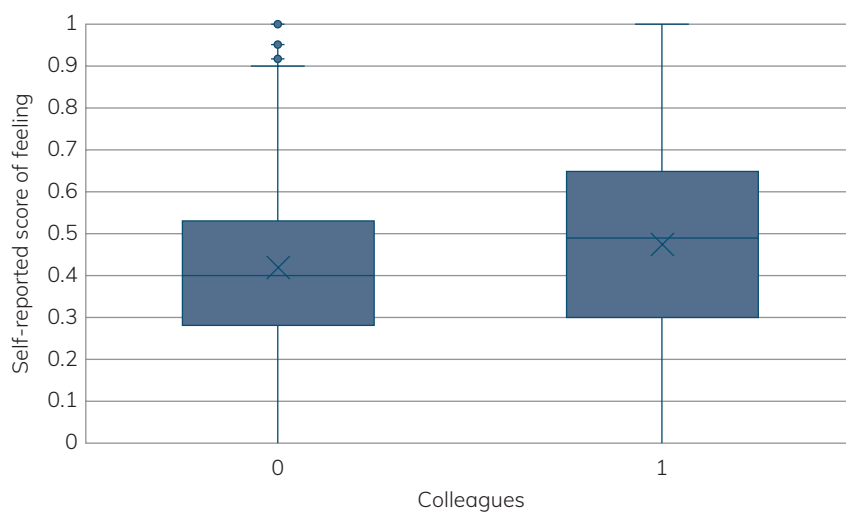


Figure 43: Differences in the reported feelings of positivity between educational stakeholders and the support provided by their colleagues

We also used the Mann-Whitney U test to look at the feelings of stakeholders relating to the support, or lack of support, of family members. This comparison (illustrated in Figure 44) shows a significantly more positive ($p \leq 0.001$) score

for those reported being supported by family members. Once again, the range in scores for feelings of positivity were greater amongst respondents who reported feeling supported by family.

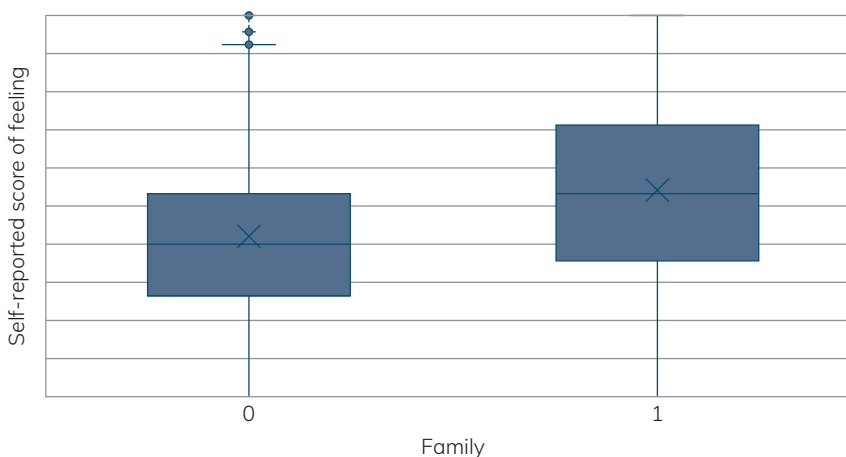


Figure 44: Differences in reported feelings of positivity and reporting being supported by family

But what about the stakeholders who reported that nobody supported them, or that they did not need support? Figure 45 illustrates the results of A Mann-Whitney U test conducted to determine if there was a significant difference in confidence in the sustainability of remote education among those who did not feel supported (Figure 7 in Chapter 2). Specifically, we compared the confidence of those reporting not being supported and not needing support to those not being supported but needing support. Those who said that they were not being supported, but that they needed support, reported significantly higher levels of confidence in the sustainability of remote education (mean rank = 64.22) than those who said they did not need any help (mean rank=52.25) ($p<=0.05$).

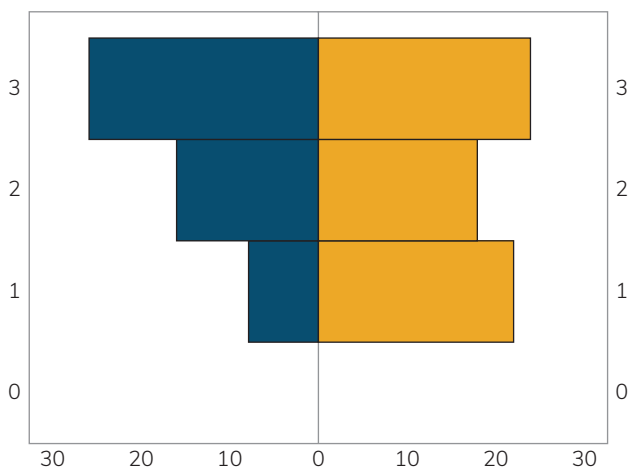


Figure 45: Differences in the reported level of confidence in the sustainability of remote education and reports of not needing support (in blue and to the left, n=64), and not being supported but needing support (in yellow and to the right, n=50)

When comparing the educational stakeholders' level of enjoyment of remote education (Figure 4 in Chapter 2), we found that those who felt supported by their school leadership showed a significantly higher level of enjoyment (mdn=1.95) in comparison to those who said they do not need support (mean rank=52.25) and did not feel supported by school leadership (mdn=1.80) ($p<=0.05$) (see Figure 46).

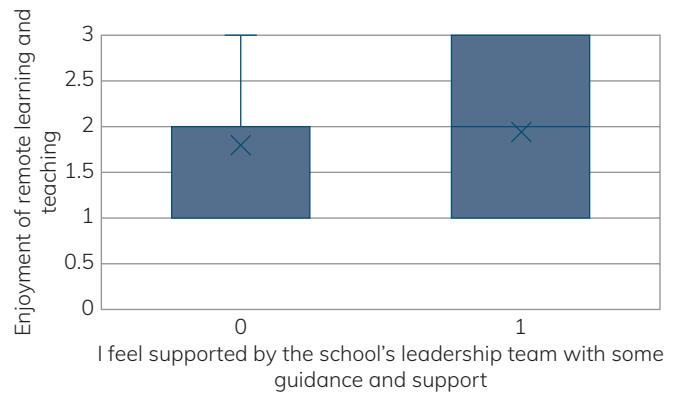


Figure 46: Differences in the reported enjoyment of remote teaching and learning stakeholders reporting being supported by school leaders

Similarly, those feeling supported by school leadership reported a significantly higher level of positive feeling (Figure 3 in Chapter 2) than those reporting not being supported by school leadership ($p<=0.001$) (Figure 47).

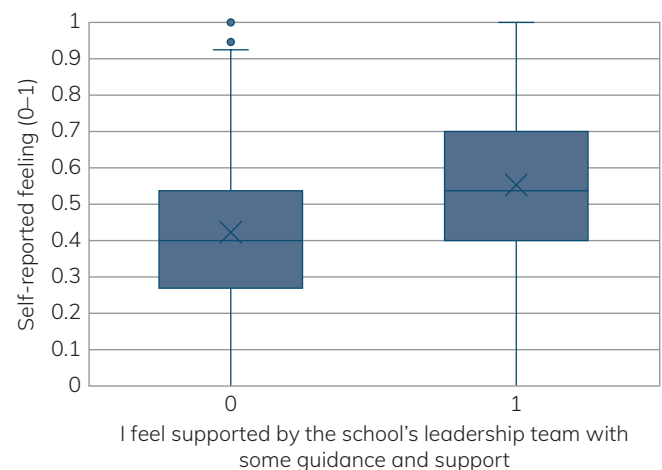


Figure 47: Differences in the reported feelings of positivity and stakeholders reporting being supported by school leadership

The analysis presented in Figures 43 to 47 illustrates the importance of feeling supported in order to result in positive feelings. However, the importance of working together collaboratively and feeling supported is not just something of value to adults; the use of collaborative technologies for students is also known to be of great value for learning.⁴⁸

⁴⁸ https://www.oecd.org/pisa/Combined_Executive_Summaries_PISA_2018.pdf

We wondered, therefore, if there was a relationship between educational stakeholders' who reported feeling supported and those who reported using technology for student collaboration. Figure 48 illustrates the findings from a Mann-Whitney U

test showing significantly higher scores for feeling positive (Figure 3 in Chapter 2) ($p \leq 0.001$) reported by those using technology to support collaboration amongst their students.

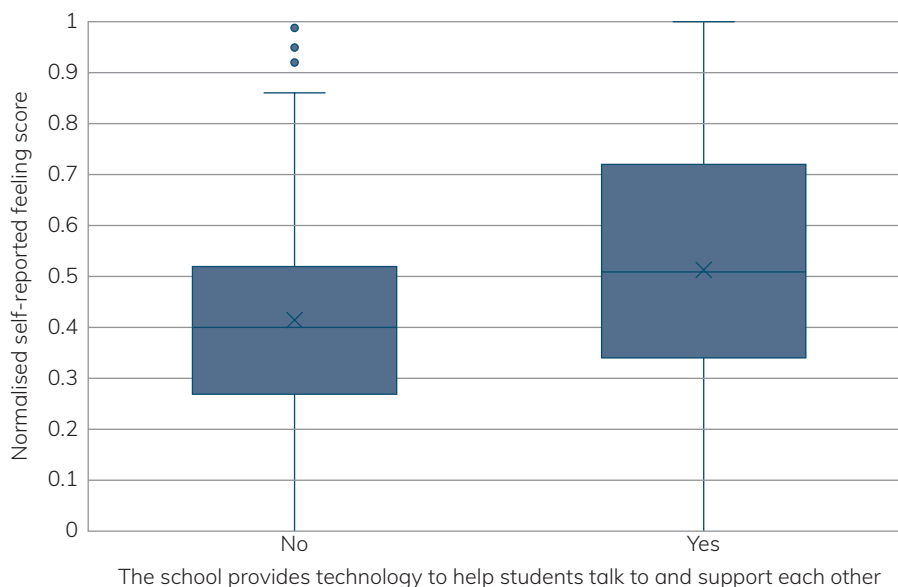


Figure 48: Use of collaborative technology and feelings of positivity amongst educational stakeholders

Within the interview data, we also found reports of headteachers appreciating the pedagogical use of collaborative technologies:

'So that is all going to build up so we'll definitely make more and better use of that [...] and forums with children, debating things and so on and that's something which could move into a home learning situation in normal times they could debate and discuss and go along with a thread ...' [Alison Wyld, headteacher at a state primary school]

One size does not fit all

Regardless of the resources at their disposal, school leaders are on the front line of managing the Covid-19 disruption. Research shows that the implementation of information and communication technology (ICT) in schools is dependent on the headteacher's leadership style and that these style characteristics can be defined through a 'leadership style' framework (Hadjithoma-Garstka, 2011). For example, a headteacher might be characterised as having an 'affiliative' style and a 'people come first' approach. Alternatively, a headteacher may emphasise high standards for performance through a 'pacesetting leadership style'. The responsibility and pressure of Covid-19 on school leaders is evident in the data presented in this report, and preparation and training for school leaders is clearly important to support their handling of such emergencies.

The data we present also evidences great differences between educational leaders, teachers, and parents, all of whom were, and are, required to support student learning to a lesser or greater extent. The leadership styles framework can act as a useful tool for developing leaders and we were curious to explore the way in which we

could provide a framework to guide the way in which future support is provided to educational stakeholders to improve their application of technology in the achievement of learning.

We therefore conducted a cluster analysis on the various data variables that we were able to collect for 1559 of our survey respondents. The data was not adequate for a factor analysis, so we had to use three groups of variables to cluster the survey responses:

1. the use of support systems by respondents;
2. the main educational opportunities respondents identified as arising from the pandemic;
3. the main concerns stakeholders reported facing in the context of school education.

Our analysis of this data resulted in five clusters as illustrated in Figure 49. We named the five clusters after the five elements: Earth Movers (yellow), Aeronauts (light blue), Fire Tamers (red), Water Pilots (dark blue), and Space Seekers (purple) as illustrated in Figure 49 (for further detail of the various variables as distributed among the clusters to Appendix G).

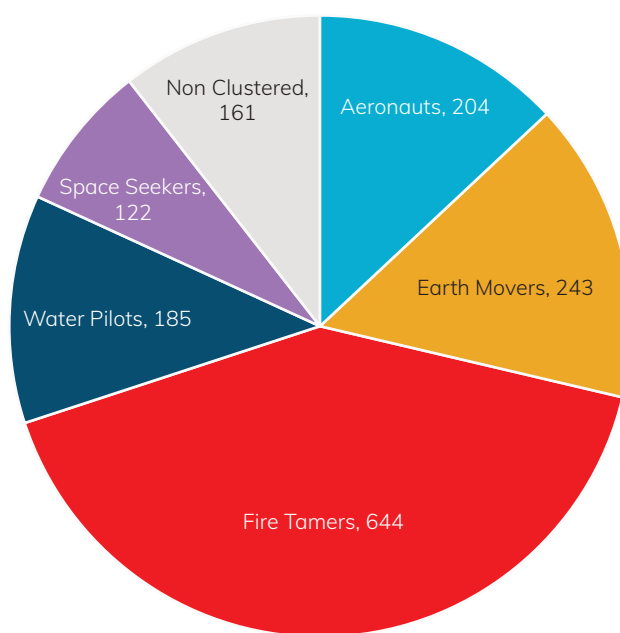


Figure 49: Cluster sizes of 1599 educational stakeholders

Figure 40 illustrates the five clusters of educational stakeholders. Table 1 describes those five clusters in more detail, and is supported by data illustrated in Figures 40 to 42, and Appendix G. In the

companion volume about the recommendations and implications of the evidence presented in this volume, we suggest different support strategies for members of each cluster.



Aeronauts

Aeronauts are ready to fly and relish trying new things and learning. They feel well-supported, optimistic and recognise the value of technology to help learners reach for the sky.



Aeronauts comprise slightly more of **independent school** than **state school** members.



There are slightly more **secondary school** than **primary school** members.



Earth Movers

Earth Movers are focused on the pedagogical grounding. They are keen to develop the infrastructure that supports schools, and are keen to promote well-being and communications.



There are more **independent school** than **state school** stakeholders in this group.



There are more **primary school** than **secondary school** Earth Movers.



Fire Tamers

Fire Tamers are the largest group. They put their energy into tackling the challenges that get in the way of learning. Give them the right tools, support and resources and they will shine brightly!



This group has more **state school** than **independent school** members.



There are more **secondary school** members than **primary school** ones.



Water Pilots

Water Pilots smoothly sail through turbulent waters to steer around obstacles. When they land they are ready to dry off and get tech-savvy.



Water Pilots are mostly from **independent schools**.



More or less evenly spread between **primary** and **secondary schools**.



Space Seekers

Space Seekers are constantly looking for the right learning space for each child. They do their jobs well and once they've mastered the basics, will use technology to deliver effective learning for students.



Slightly more **independent school** stakeholders than **state school**.



Space Seekers are mostly from **primary schools**.

Figure 50: Illustrations of the five clusters

Table 1: Description and the suggested support strategy for various clusters

Cluster	Description
<p>The Aeronauts</p>	<p>The Aeronauts recognise the value of technology, feel well-supported and can communicate well with parents. Confident and optimistic about the use of technology in education, they are eager to make progress and explore new ways of leveraging technology for teaching and learning. This group is aware of the poor infrastructure and technical skill limitations that may restrict their progress and tries to seek ways to overcome these potential stumbling blocks. They are also very concerned about children falling behind. The top three most reported technologies they use include: synchronous live and recorded lessons (comparatively more than other groups), activities for students that they can download, and marking work submitted by students digitally.</p> <p>The group comprises slightly more independent than state school stakeholders, slightly more secondary school than primary school stakeholders, and a fairly even spread of leaders, teachers and parents.</p>
<p>The Earth Movers</p>	<p>The Earth Movers are focused on ensuring all students' basic needs are met, including students with SEN, and are keen to promote well-being and communication. They are less aware of the value of technology, and less knowledgeable about technology than most other groups. They are also the least well-supported and empowered group. While they reported less use of technology in general, the top three technologies they used were: activities for students that they can download, synchronous live and recorded lessons (comparatively less than all other groups except the Fire Tamers), and marking work submitted by students digitally.</p> <p>The group comprises more independent school than state school stakeholders, more primary school than secondary school stakeholders, and an uneven representation of stakeholder groups with slightly fewer teachers and more parents.</p>
<p>The Fire Tamers</p>	<p>The Fire Tamers are the largest group. They are aware of the value of technology, and feel supported, but less so by their leaders. They are not too concerned about children falling behind and are more worried about tackling the challenges of communication with parents, physical health, and confusing messaging from the government. While this group is least confident and optimistic about technology in education, they made use of the greatest variety of technologies and comparatively more use of technology to support social and collaborative needs than any other group.</p> <p>In terms of composition, this group has more state school than independent school stakeholders, more secondary school than primary school stakeholders, and membership is spread across leaders, teachers, and parents.</p>
<p>The Water Pilots</p>	<p>The Water Pilots recognise the value of technology and are keen on opportunities for technical upskilling for teachers. Although they feel well supported by their leaders, they are not too confident and optimistic about technology in education and did not enjoy remote education. Notwithstanding these sentiments, Water Pilots reported the highest use of synchronous live and recorded lessons and used downloadable and live lessons at a very high rate. Their reported use of collaborative and subject-specific technologies was comparatively less than other groups. This group is also the least worried about communication with parents, or infrastructure.</p> <p>They are represented by more independent than state school stakeholders, a rather even distribution of primary and secondary school stakeholders, and more teachers but slightly fewer parents and leaders.</p>

The Space Seekers

The **Space Seekers** value technology for its potential to facilitate communication with parents and bridge students' well-being needs. Like Water Pilots, they reported using comparatively less collaborative and subject-specific technology than others, but used downloadable materials and digital marking more than others. Evidentially, their use of technology was the least diversified. The top three technologies they used include: marking work submitted by students digitally, activities for students that they can download, and synchronous live and recorded lessons, although their reported use of this last technology was less than average. Feeling less supported by their leaders, and worried about confusing messaging from the government, students falling behind and work-life balance, this group is not confident about technology in education.

Space Seekers consist of more primary school than secondary school stakeholders, slightly more independent than state school stakeholders, and are represented by an even spread of leaders, teachers, and parents.

Figure 51 shows the distribution of cluster membership between the different stakeholder types and schools.

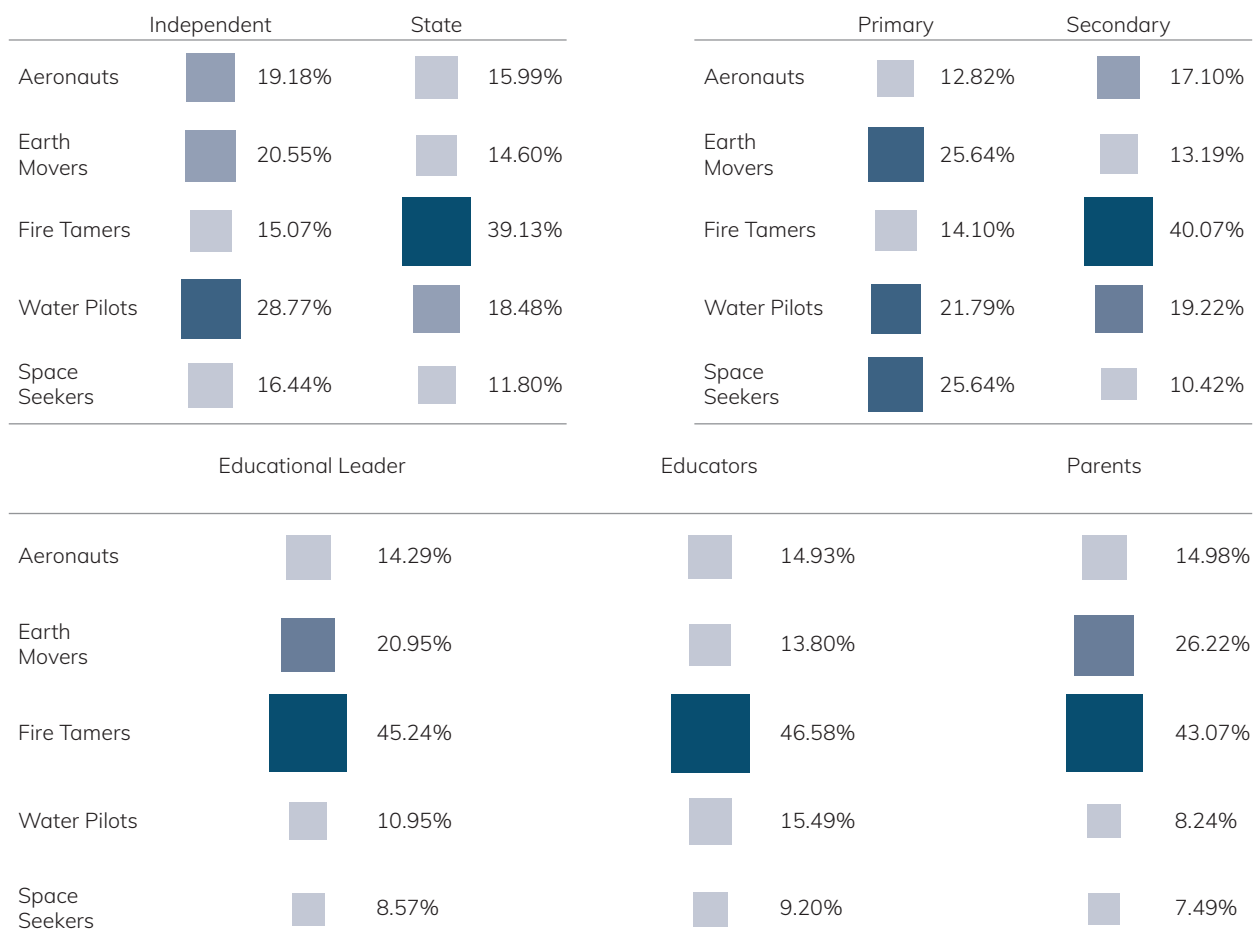


Figure 51: Cluster distribution by roles, school types and school levels

Figure 52 illustrates the different enjoyment levels, optimism, and confidence in the sustainability of remote education amongst the five clusters and shows that these factors were not evenly distributed. Confidence was statistically different across the five clusters ($p < 0.05$).

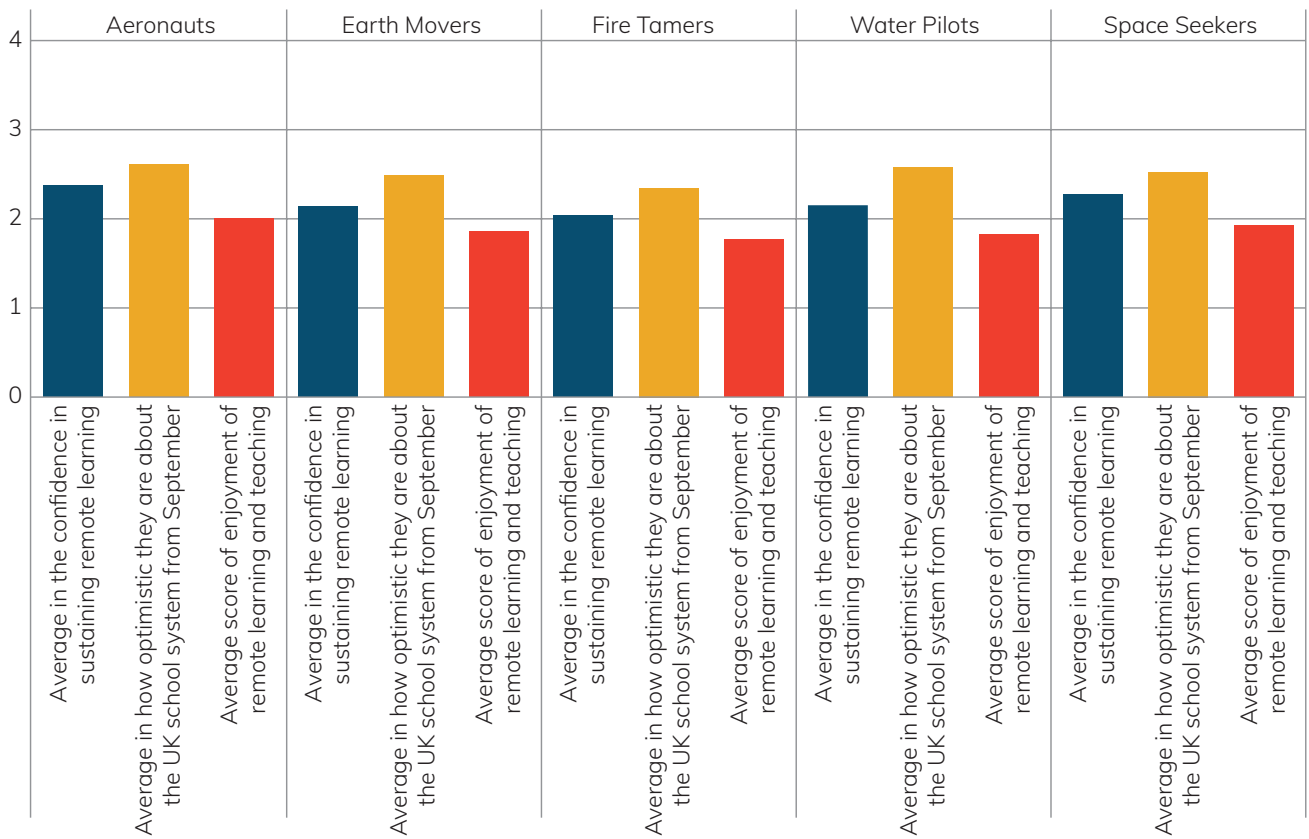


Figure 52: Differences in optimism, confidence and enjoyment between clusters. The confidence level was the only variable showing statistically significant differences

Finally, Figure 53 shows the way that different technologies were used by members of the different clusters.

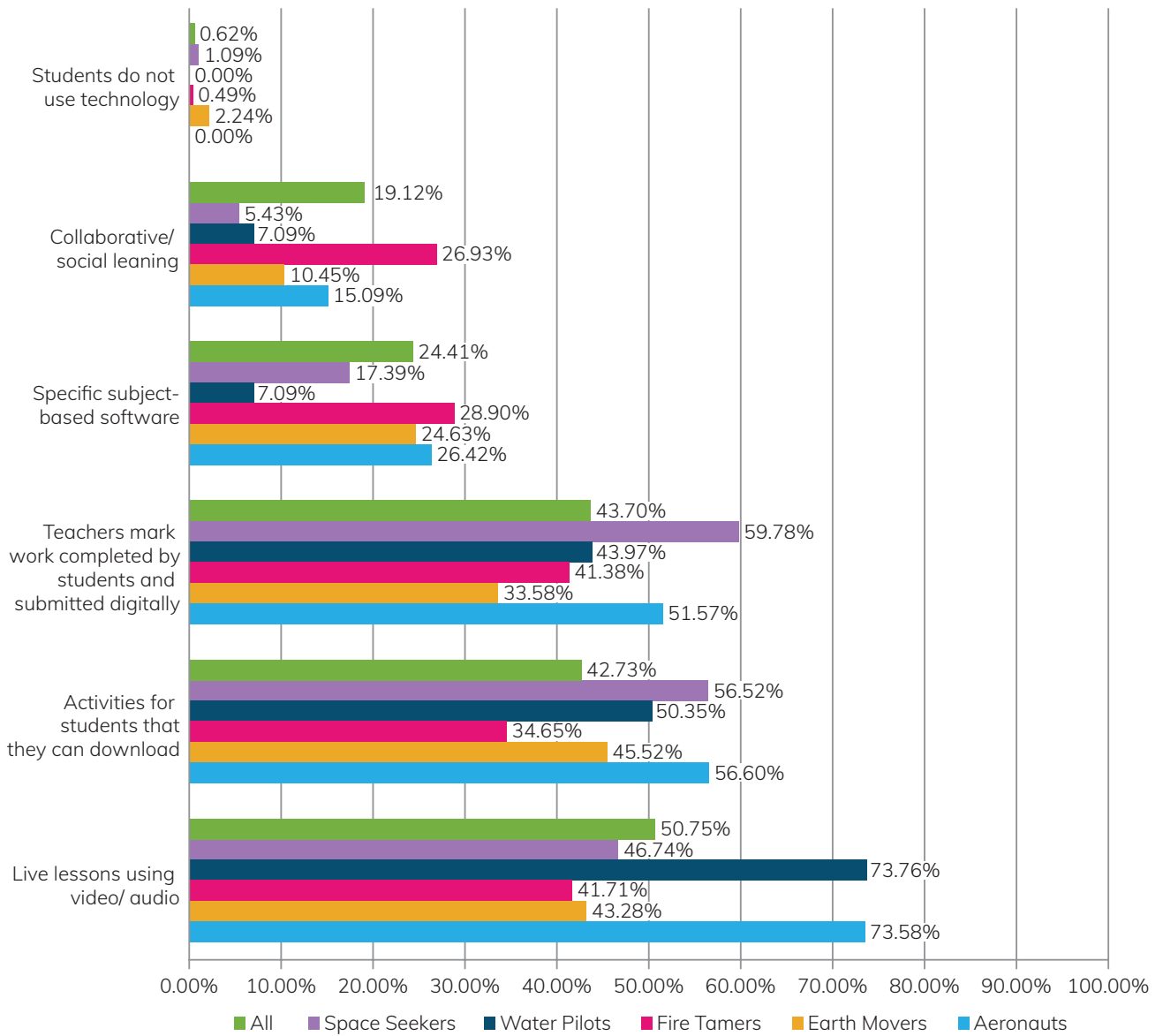


Figure 53: Tech use by clusters, according to 1136 of the clustered respondents

Chapter 6: Methodology

As soon as the pandemic broke and it was clear that its effect on educational ecosystems would be enormous, we began to collect data from as diverse a set of sources as possible, and from a wide range of educational stakeholders to include as many voices, concerns, and opportunities as possible. We wanted qualitative, as well as quantitative, data to enable us to see behind the numbers and develop an understanding of the how and why questions as well as the what was happening data. We adopted a 'T-shaped' strategy for data collection and analysis, which involves casting the data collection net broadly at

the outset to encompass a wide set of research questions and collecting data from smaller cohorts and samples across a broad range of issues. Subsequently, and on the basis of our emerging findings and the findings being reported by others, we were able to focus on a narrower, more targeted subset of research questions and to drill into them more deeply.

Figure 54 illustrates our research strategy. It lists the types of subjects, data sources, research questions and methodologies we used, both as our focus and in a complementary role.

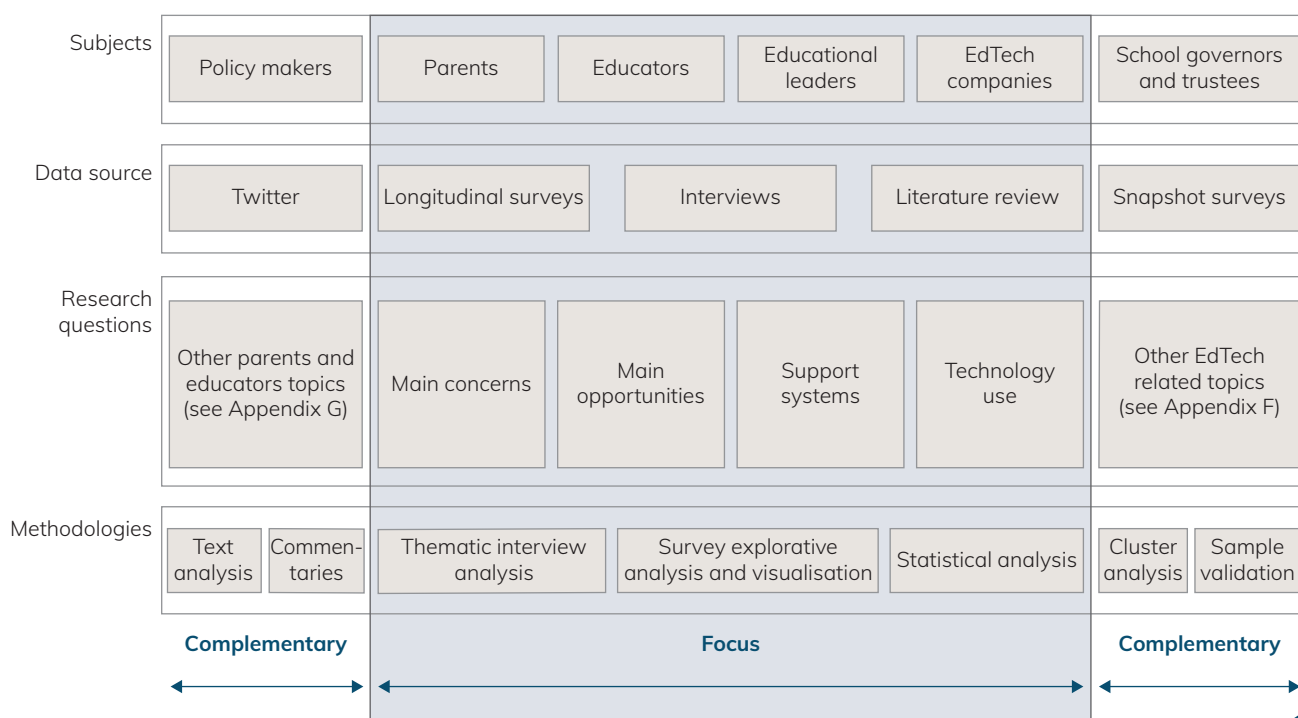


Figure 54: The T-shaped research strategy

Table 2 below details our data sources:

Table 2: List of data sources

Form of Data Collection	Start Date	End Date	Audience	Structure	Number of Valid Respondents
Survey 1	04/04/2020	17/08/2020	Educators, Educational Leaders, Pupils, Parents, Governors, Policy Makers, EdTech Developers	7-Question Survey	760
Survey 2 – Educators / Parents	06/07/2020	03/09/2020	Educators, Educational Leaders, Parents	9-Question Survey	542
Survey 2 – EdTech Developers	18/08/2020	14/10/2020	EdTech Developers	9-Question Survey	40
Interviews – Educators	17/07/2020	07/09/2020	Educators	Semi-structured Interview	46
Interviews – Parents	11/08/2020	07/09/2020	Parents	Semi-structured Interview	31
Teacher Tapp ⁴⁹ (validation sample)	16/09/2020	16/09/2020	Educators	3-Question Survey	6448
Parent Ping ⁵⁰ (validation sample)	16/09/2020	16/09/2020	Parents	3-Question Survey	540
Question for the Day	20/04/2020	12/06/2020	Educators, Educational Leaders, Pupils, Parents, Governors, Policy Makers, EdTech Developers	Single Daily Question	3351 responses as of 3 December 2020
Question for the Week	15/06/2020	Ongoing	Educators, Educational Leaders, Parents, EdTech Developers	Single Weekly Question	1882 responses as of 3 December 2020
Twitter Harvesting	18/08/2020	02/10/2020	By pre-selected tags, language, and geography		
Literature Review					

⁴⁹ <https://teachertapp.co.uk/>

⁵⁰ <https://parentping.co.uk/>

Data collection

We launched our first survey on 4 April 2020, constructed in partnership with Cambridge University Press. Educators, educational leaders, policymakers in education, parents, school governors, pupils, and EdTech developers were invited to participate. This initial survey comprised seven substantive questions, which measured how well the participants believed they and their stakeholders were performing if technology was being used to mitigate the difficulties of lockdown, and for what specifically this technology was being used. The questions remained broadly similar across groups, except in the case of EdTech developers, who were asked whether they were offering a free trial for their product, and what their product aimed to do.

Participants were invited to engage with the first survey through a variety of channels, including Educate Ventures' social media accounts. Cambridge University Press also provided assistance in inviting prospective participants. The final question on that survey invited participants to sign up to daily follow-up questions. The first daily question was circulated on 20 April 2020. The content of these questions was variable, sometimes aiming to measure participants' responses to ongoing issues with education during the lockdown, and, at other times, relating to issues in the news (see details in Appendix E). The questions were identical between participant groups, except for EdTech developers who received a different daily question. Daily questions were discontinued on 12 June 2020 and were replaced by weekly questions starting from 15 June 2020. Weekly questions were sent to all participant groups until 6 July 2020. Following this date, weekly questions were sent to educators, educational leaders, parents and EdTech developers only. Weekly questions to EdTech developers were discontinued after 10 August 2020. Weekly questions are still being sent out to volunteer participants and are an ongoing lens through which we can learn about the manner in which the English education system is, or is not, leveraging the power of technology to support teaching and learning.

On 6 July 2020, a second nine-question survey was launched. The design of this second survey was informed by our analysis of the evidence from the first survey. It was provided to educators, parents, and educational leaders. The nine substantive questions included some that had been asked previously, for example through the question for the day or the question for the week. We stopped collecting responses to the second survey on 3 September 2020 when the new school year started.

A second survey designed solely for EdTech companies was launched on 18 August 2020. This survey asked nine substantive questions, some of which had previously been used in the regular follow-up questions for the day. Data collection for this survey ended on 18 October 2020.

Our main survey respondents

Across the six months of data collection from April to September 2020, a range of educational stakeholders engaged with our data collection. One thousand seven hundred and sixty-six respondents answered our core set of substantive surveys (this number represents the number of respondents after omitting incomplete responses and irrelevant responses due to reasons such as the respondent living outside the UK). In total, 5233 responses were received to our question for the day and question for the week data collection (number recorded on 3 December 2020).

Figure 55 shows how our survey respondents were distributed across different educational roles, school levels, and school types.

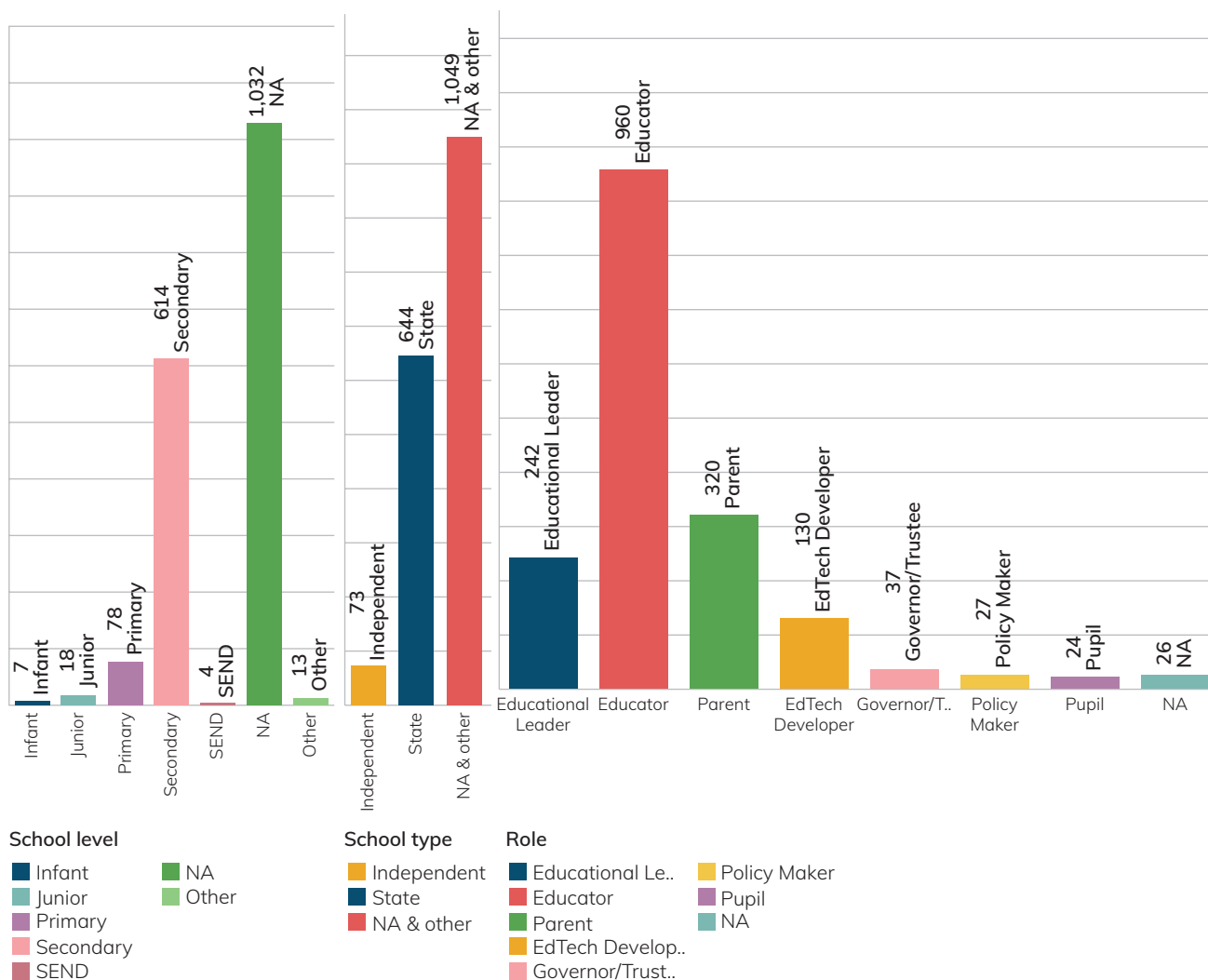


Figure 55: Number of respondents to the multi-question surveys

Figure 56 illustrates the distribution of survey responses over time and illustrates peaks of activity when each of the two surveys were released, or when we reminded potential participants that the survey existed.

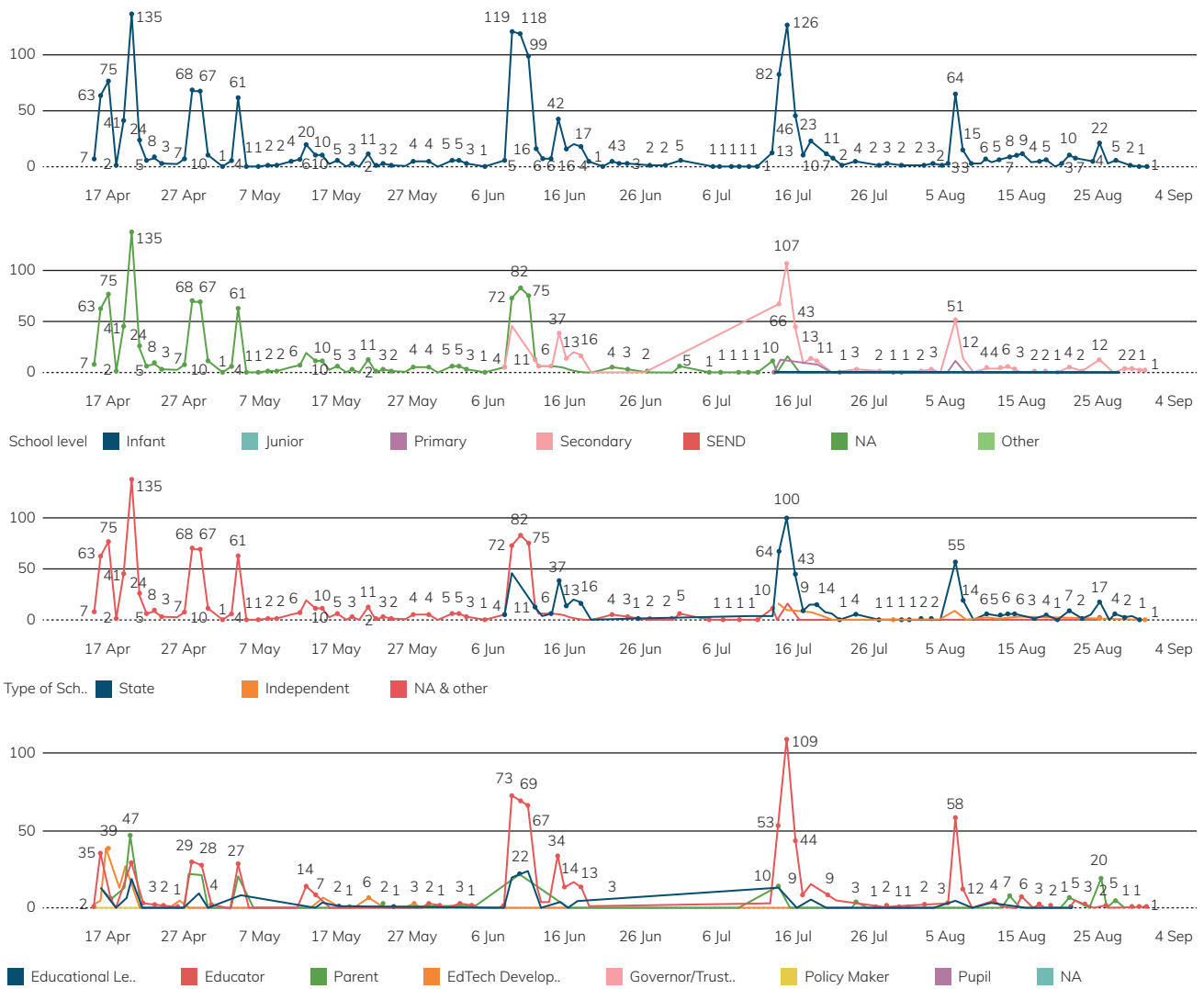


Figure 56: Timeline of respondents of our core set of questions

Interviews data collection

From 17 July to 7 September 2020, we conducted semi-structured interviews with educators and educational leaders. The questions asked during these interviews were structured around the following topics:

- How much technology use had/had not increased;
- The main barriers and challenges that had been faced;
- The support systems that were available;
- The anticipated future changes to the curriculum and teaching;
- Teachers' professional development needs;
- Support for vulnerable and SEN children;
- Leadership during the lockdown.

From 11 August to 7 September 2020, we conducted semi-structured interviews with parents. Parents were asked questions regarding their child/ren's school:

- Before the pandemic;
- The effect of lockdown and having children at home on their job and other responsibilities;

- The type of technologies used by children to learn at home, parents' opinions on the effectiveness of technology in helping children learn, and support provided from school during the lockdown.

The interview questions were informed by the emerging findings from our own surveys and regular questions, as well as the unfolding narrative about the impact of Covid-19 on the education system. The purpose of the interviews was to dig deeper into some of the emerging issues, which was not possible through a survey. The educators who took part in the interviews were mainly teachers and members of their school's Senior Leadership Team. We conducted a total of 46 interviews with educators, including nine interviews with independent school teachers/leaders and 37 state school teachers' leaders. We have also conducted 30 interviews with parents of children in England (plus one in Northern Ireland). The distribution of the geographical locations of interviewees can be seen in the map provided in Figure 57 below.



Figure 57: The geographical locations of our interview participants

Twitter data collection

To overcome some of the biases and limitations (such as the limited number of respondents), we also used the Twitter API to collect tweets from a pre-selected set of tags related to technology and education on two dates: before the opening

of the school year (18 August 2020) and after the opening of the school year (2 October 2020). Tweets were limited to English language and to England. Figure 58 shows the number of tweets we were able to harvest for each of those tags in August (in blue) and October (in orange).

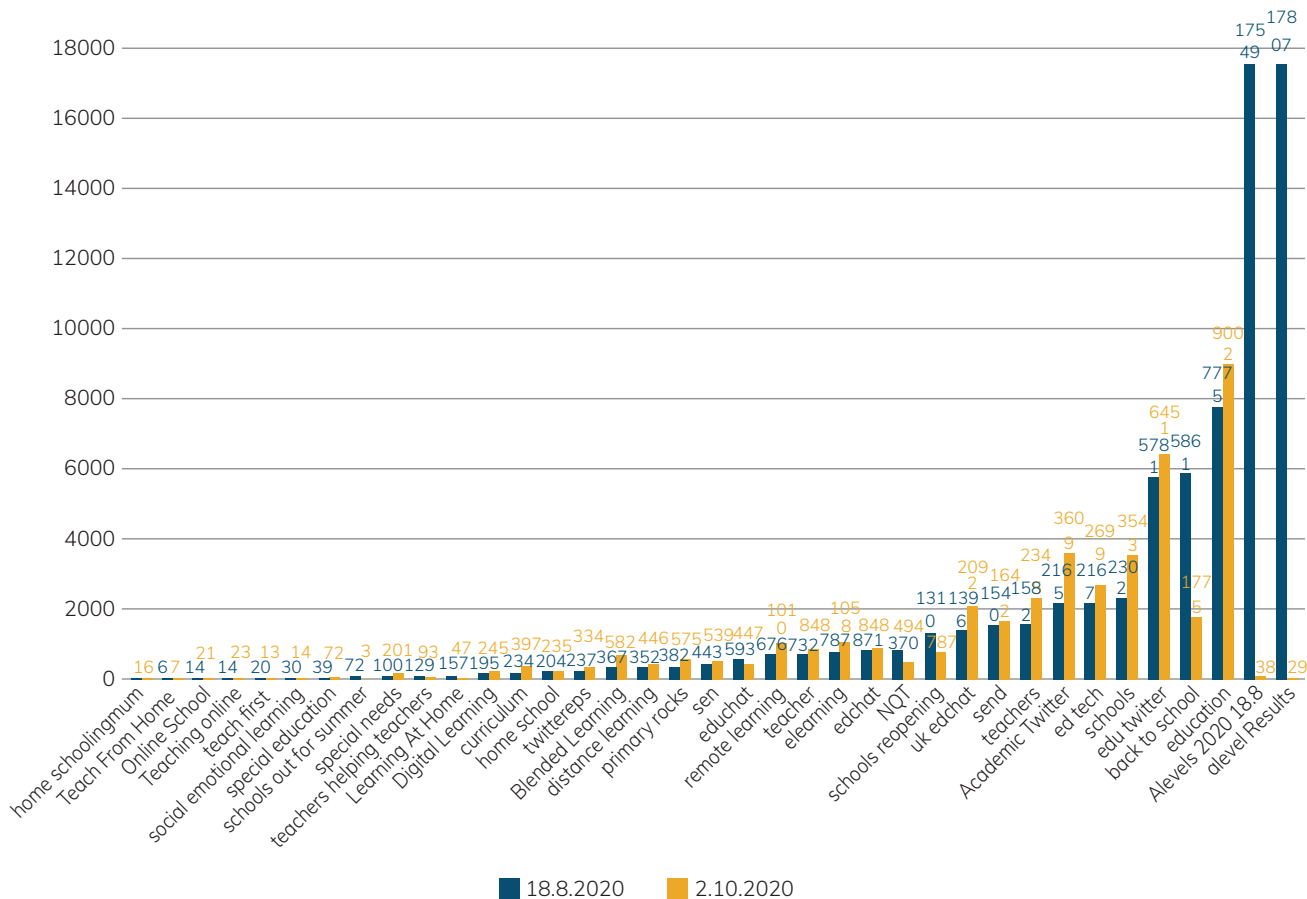


Figure 58: Number of tweets harvested from our pre-made list of hashtags

Collaboration with Teacher Tapp and Parent Ping

The difficulty of gaining access to participants necessitated the use of non-random sampling, which obviously exposes our findings to accessibility bias (bias due to certain groups being unable to access our data collection activities). For example, we had a strong representation of state secondary school stakeholders that might bias our results. Thus, we are not able to rigorously and with statistical precision (for example, use margins of error and confidence intervals) conclude about the whole population of English school stakeholders. To overcome this concern, three questions were composed, which were circulated through a collaboration with Teacher Tapp and Parent Ping.⁵¹ These are two apps that are used by teachers and parents respectively, where participants are provided with daily questions to

answer. Both sets of survey questions were circulated on 16 September 2020, as we sought responses to the questions that had proved interesting in our survey and regular question data collection streams.

To respect the privacy of our survey respondents, we did not collect any identifying details about them. This decision has a limiting effect on our ability to draw conclusions, but we felt it was vital to adhere to this limitation. Other limitations typical to data collected by surveys is the potential for bias in the questions, the possibility that some people will refuse to respond, or simply that respondents were not completely honest in their responses. We are an experienced and highly qualified team of researchers and went to considerable effort to mitigate the impact of these limitations. Nevertheless, it is important to recognise that they exist and inevitably have some impact on the results of the research conducted.

⁵¹ <https://parentping.co.uk/>

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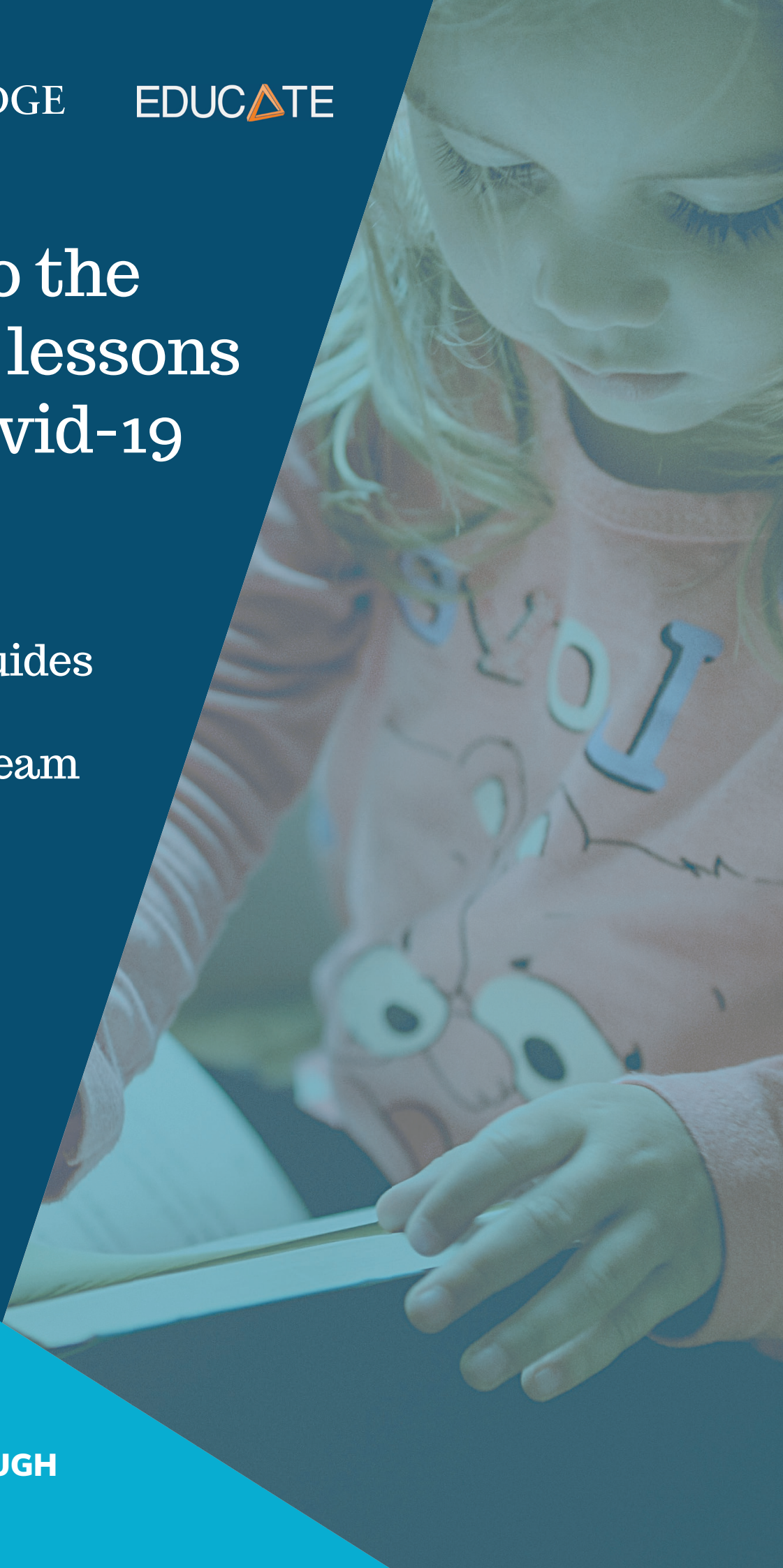


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Tips on using technology for effective online learning

How can a school support online learning?

Online teaching can be a very challenging experience, especially for teachers, who, while very experienced in face-to-face instruction, are still new to online pedagogy. School support is one of the major factors for online learning success.

Some examples of how schools can support teachers are to:

- encourage teachers to be online students themselves – there is no better learning than experience.
- facilitate (whether online or not) discussion opportunities between teachers (either within or outside the school). Encourage teachers to share what is working, and what is not.
- encourage teachers to attend formal relevant professional development courses.
- support teachers in using detailed student records analytics. Analytics that expose metrics of progress and participation (and not just summative assessments) can provide eyes and ears for the teacher to understand who their students are, where they struggle and what kind of support they need.
- Engagement and belongingness are the best predictors of student learning outcomes and should be the focus of the online teaching, rather than physical attendance. When considering the elusive concept of engagement, there is a need to consider sub-dimensions, such as cognitive engagement, teacher-learner engagement, peer engagement and the wider schools'/ ecosystems' engagement.
- Online learning should smartly combine synchronous and asynchronous modes of learning and a few different media types such as video, simulations, serious games, and augmented reality.
- Assessment is key: it is one very important channel of support. For it to be effective, it must be authentic, continuous, systematic, formative, and well connected to feedback. Topics that need to be considered are what is being assessed, who is engaged in the assessment (for example, the students themselves, peers, the teacher), the reason for assessing (for example, to develop self-regulated learning skills) and how to assess (for example, by collecting a range of data sources).
- Communities are one of the best learning resources available when going online. They need to be smart and secure if they are to leverage the power of online communities to support classrooms discussions, but also out of class collaboration. For example, between teachers, headteachers and EdTech providers.
- Inclusive infrastructure is a required enabler for everyone to be able to participate in learning, at all times.

Moving to effective remote learning

There are a few basic and well-researched practices that should be considered when moving into an in-and-out-of-school reality. These practices are designed to respond to some of the inherent risks, such as the loneliness, overloading and learner fatigue, and supporting educational stakeholders:

- The organisational factor: online courses are a team effort. Unlike face-to-face teaching, the teacher cannot be the sole provider. In an ideal world, subject experts, instructional designers, students' representatives, and technology experts should all be part of a systematic process of designing and delivering effective pedagogies and materials.

Some suggested design principles for instructional videos from Russ Mayer

Principle	Description
Dynamic drawing	People learn better from a video lecture when the onscreen instructor draws graphics on a board while lecturing rather than referring to already drawn graphics.
Gaze guidance	People learn better from a video lecture when the onscreen instructor shifts gaze between the audience and board while lecturing rather than looking only at the audience or board.
Generative activity	People learn better from a video lecture when they are asked to engage in summarising during learning.
Perspective	People learn better from a video lecture that is filmed from a first person perspective rather than a third person perspective.
Subtitle	People learn better from a video documentary or show in the learner's second language when printed subtitles are added or used to replace spoken words.
Seductive details	People do not learn better from a multimedia lesson when extraneous video is added.

Table 1. Some suggested design principles for instructional videos from Russ Mayer¹

How to use online learning discussions

Why use group discussions?

There are many reasons for using conversations as a central learning tool. Pedagogically, it is an efficient tool to distribute diverse knowledge, to offer students the opportunity to be more active and therefore more involved in their learning and to link students' existing knowledge and personal experiences to new concepts and problems.

Culturally, discussions as a primary communication tool are very effective in developing the students' dialogic abilities, as opposed to question-and-answer or listen-and-tell kinds of dialogues, and to add an informal flavour to their formal learning, improving their ability to listen and critically evaluate other people's opinions.

When facilitated effectively, group discussions celebrate and sustain the differences and similarities in individual and collective identities and expose students to out-of-home flavours and colours.

Neuroscientifically, group discussions use language to explicitly build connections in our long-term memory, connect our own existing knowledge and experience to newly introduced concepts, and as a result, spark new ideas.

Lastly, moderated group discussions are a very basic citizenship tool. The ability to debate, reason, argue, question and critically evaluate

ideas are at the very heart of any healthy democracy.²

Why asynchronous online discussions?

Online learning affords the possibility to encompass different geographies and time zones. Having everything written and stored digitally makes the discussion cumulative: the discussants have the ability at any time to go back, re-read and re-connect to previously posted material.

In this way, the group becomes a creative entity, in the sense that the discussion is not done merely for the purpose of interacting, but also to create and persist a digital collective outcome. Doing this asynchronously, allows the less outgoing students to have a more secure environment to think and deliberate before speaking and allow everyone to listen before carefully responding.

Why are online discussions so challenging?

Evidence shows that when compared to face-to-face learning, fully online learning is more academically challenging, especially for students who are less prepared academically and for minority groups.

To be effective, online learning requires a lot of planning and moderation, and thus must be accompanied by institutional support. Most importantly, it is essential to remember that student-centred online learning requires a high degree of student self-autonomy and responsibility-taking. It is therefore crucial that the teacher is able to offer the right support. Specifically, the teacher must be present and lead the community to manifest the appropriate academically and emotionally supportive presence.

It is the structured building of human interaction within a course that will prevent students from feeling alone and dropping out, and to help them take advantage of the great potential of online learning.

So, how do I make online discussions work?

Blended learning, which includes both face-to-face and online learning, is usually the preferred setting to achieve optimal learning outcomes. However, this is not always possible, which makes understanding the required support systems for students even more crucial. Here we list some best practices in the cognitive, social, emotional, and school support aspects of online asynchronous learning group discussions. These are drawn from empirical evidence and from our own experience.

How do I humanise online discussion?

Humanising online learning is probably the most crucial and effective component to support learners. The experience of having an authentic and empathetic teacher is basic to effective learning, but even more so when teaching is done through a technology-mediated environment. Here are a few tips for humanising learning:

- **Manifest a human presence.** For example, post a welcome video, and share your own angle to online learning and the subject matter. Offer synchronous meetings, and supportive video messages from time to time.
- **Begin the course with an ice-breaking task.** This will foster a sense of belonging and overcome possible technical barriers. For example, begin with a self-introduction task encouraging the students to get familiar with their fellow learners and the online platform. Some examples might include asking them to post videos, images or texts to tell the group something about their study environment, the story of their name, or simply what they are expecting to achieve in this course.

Bringing their own voice and unique background into the learning experience will help the students better integrate into the community.

- **Add touch points during the term.** This will nudge those who are behind. Offer some feedback (eg, using video or audio) and try to generally express a notion of the teacher's presence and awareness of the student's progress or lack of progress. Using data about students' engagement can support teachers in doing so. For example, research shows that on-time submission is a strong outcome and retention indicator. Getting in touch with those who are behind might prevent lack of engagement.

How do I tackle the cognitive aspects of online teaching?

Unlike general discussion on social media, discussions as part of a learning community are rooted in pedagogical goals. The pedagogical goal, and the teachers' expectations from students, must be made clear before designing the online discussion – which is merely a tool – and not the goal in itself. Generally speaking, we assume that the teacher knows their students' background, their digital literacy level and their academic abilities best, as well as what she or he hopes to achieve by using online discussions and the taught subject matter.

Another aspect to consider is whether the goal of the discussion should be more focused on the benefits of the interaction itself, or whether the focus should be on the collective outcome. Also, the necessary level of structuring and moderation is different for each group, subject matter and teacher. In general, research shows that structured collaboration is more effective than free collaboration. A structured discussion builds on the natural convergence of a discussion and sub-groups, and in doing so, focuses the groups' resources and efforts towards the pedagogical goal.

Examples of discussion goals and designs

- The pedagogical goal in a basic setting might be to help the students form a supportive, inclusive digital community, to help them listen carefully to one another and to engage in a collective, constructive discussion. This might be fostered by a semi free-form conversation about common topics of personal interest, where the moderation

should be focused on tolerance, participation and inclusion. Working in small groups might help develop accountability and a more intimate type of collaboration.

- A possible goal could be to learn a language. In this case, the focus would be to engage the students in a discussion, perhaps in a subject that is close to their hearts, and to encourage them to write and read through conversation with each other.
- Another goal could be to expand the students' own knowledge base in a specific subject, to help them share, expand and clarify their own thinking, by collaboratively crafting a shared knowledge base. This might require a much more structured approach to the discussion. For example, by providing the students with a course concept-bank and asking each student to choose two to three concepts, study them, post a concise definition, and add some relevant materials. Later on in the course, the students could be asked to react and engage with other students' materials, to add more examples and to relate their own concepts and knowledge to other students' materials. At the end of the term, a collective knowledge base would be available to the whole community to learn from and to help others to better grasp the scope of the subject matter.
- A more academically advanced goal would be to help students deepen their reasoning in a specific subject. This might be best harnessed by a more confrontational type of discussion, such as a debate. In this case, the discussion should be focused on helping the students research and study to form an opinion, to argue, explain and bring evidence to their standpoint.

Tips on how to support the cognitive side of learning in online discussion

- Always make sure you provide your students with clear instructions and requirements beforehand, including a very clear grading rubric to help them understand what is expected of them.
- Try to respond promptly to questions – be reactive.
- Use weekly announcements and recapturing of last week's progress to create a sense of teacher presence.
- Meta discussion. For some groups it is advised to moderate a discussion about

the discussion. To help the students reflect on group dynamics, possible conflicts, and difficulties they might encounter within this and other digital conversation opportunities.

- Maintain a dedicated Q&A section in the online platform, so that students experiencing a technical difficulty, or an off the subject area administrative question can find an address.
- Empower students. In some groups it is advised to nominate 'special roles' to students, by asking them to take ownership of a certain discussion moderation or a certain subject to teach and influence others. Use system badges and impact scores to encourage those who are taking a more active role within their community.
- Encourage and maintain a tolerant environment: mistakes and misconceptions are allowed. Specifically, misconceptions are better dealt with when out in the open, than when hidden away.
- Always encourage the learners to first explore what their peers are talking about, before contributing to the discussion. While reading and listening, they are invited to react, respond and comment on their fellows' contributions. Expose your students to the views in others' responses as an opportunity to engage them further, rather than them engaging in a discussion's endpoint.
- Structure your questions to promote thoughtful answers. Structure your feedback to encourage forward thinking.
- Encourage elaborated answers, support by evidence and the use of rich media.
- Posting content is not the only form of active learning. Different students have different preferences for active learning. Make your students understand that listening is also a form of active learning. Also, encourage them to link and organise content – this is another type of a very beneficial contribution to the community.

Come together to make technology's adoption in education sustainable

Here is an example of community building from Singapore.

Singapore Learning Designers Circle

The Ministry of Education's Educational Technology Division

Singapore Learning Designers Circle (SgLDC) is a network learning community run by the Educational Technology Division (ETD) of the Ministry of Education (MOE). The group provides a safe space for educators to collectively inquire into the use of technology in education. Membership is restricted to educators in Singapore schools and related MOE HQ staff, and currently stands at more than 16,000 members.

Educators on SgLDC support each other by sharing lessons, resources and articles. They also engage one another in conversations about the use of technology in teaching and learning, including:

- crowd-sourcing for lesson ideas
- deepening their understanding of pedagogical approaches and learning theories
- reflecting on their current practices
- collaborative troubleshooting and brainstorming to address challenges encountered.

A team from ETD looks into the administration and moderation of conversations. This team also actively culls good stories and creates structures to help new members navigate the space, such as curated lesson units and targeted posts. The moderator team uses the following strategies to nurture a welcoming, dynamic community that is co-owned by its members:

'Promote learning through active posting of relevant content and resources and webinars such as "#TechyTuesday", where ETD shares weekly technology tips on the use of various technology tools.

Encourage participation and contribution through creation of a safe space. **Promote community norms** through recognition and affirmation. **Deepen discussions** among members through creation of communities of interest.

During the suspension of school in April–May 2020 due to COVID-19, SgLDC became a critical platform to support teachers as they transitioned to Home-Based Learning. In addition to sharing innovative ideas and lessons, and collaborative troubleshooting for Home-Based Learning, educators also used SgLDC to post notes of encouragement to each other to help tide over this challenging period. Membership of SgLDC during this period increased sharply from 8000 to 14,000 educators.

Practical guidance for headteachers and leaders

	Key findings	Guidance
Staff	Teachers are the most concerned community about work–life balance. However, support systems were a central mechanism shown to help/ reduce stress/anxiety in all stakeholder communities.	<p>How well are your IT subject lead/tech staff performing? Are you clear about needs/issues arising? Consider wellbeing and training needs.</p> <p>Consider appointing an IT technician from an apprenticeship scheme. This may be more cost-effective than a class teacher continually coming out of class.</p> <p><i>Economies of scale.</i> Is there scope to develop a network of collaboration and expertise across schools – to share expertise in more meaningful ways?</p> <p><i>Assessment.</i> Have schools taken different approaches to wellbeing/workload from which lessons could be learnt?</p>
Students	Concerns raised about emotional wellbeing.	<p>Consider conducting a survey to find out about your families':</p> <ul style="list-style-type: none"> • internet connectivity • number of devices per family • availability of devices for children to use without sharing with parents or siblings. <p>Are we clear on which students are young carers in school? How are you differentiating your communications or their work/resources to meet their needs?</p> <p>Consider best-practice strategies for returning to school when lockdown ends.</p>
		<p>Effective home access to suitable technology and a quiet, dedicated space to study.</p> <p>Are your children eligible for the government laptop scheme? Would your parents in your catchment value a help sheet/ guidance on issues to think about when providing a working space for their children?</p>
		<p>The wellbeing of some students was actually improved.</p> <p>Consider surveying parents, children, teachers and support staff to find out which children and why? Are there any patterns evident? What new approaches could be made as a consequence?</p>
	SEND	Lack of support for SEND.

	Key findings	Guidance
Parents	More than half of the parents were concerned about 'falling behind'.	<p>What data do you have to support/not support this assertion for your context?</p> <p>What issues are highlighted as a result?</p> <p>How will you communicate your findings to parents and provide reassurance?</p>
	Increased parental engagement.	<p>What benefits have you observed in your context?</p> <p>How can you capitalise on this and move from involvement to engagement?</p> <p>Can you build more effective communication with parents via video conferencing platforms by:</p> <ul style="list-style-type: none"> • regular meetings and book-in surgeries which replace parents' evenings' and/or reports • sharing good practice for home learning, keeping safe online, etc.
Communication	Communication, clarity of decisions and support were the highest correlating factors with both parents and staff confidence in the leaderships handling of the disruption.	<p>Consider developing a communication strategy for all stakeholders as this will reduce stress and anxiety.</p> <p>Going forward, how will you involve parents and staff in the development of your strategy?</p>
	Attendance issues as a result of the lockdown are questioned.	<p>Consider codes and approaches relating to those children with high anxiety and ECHP plans or non-attenders.</p> <p>How will the code affect the parent's/child's anxiety?</p> <p>Does it really reflect the emotion behind the behaviour?</p>
Technology	The need for an appropriate physical infrastructure.	<p>Who is making the decisions on infrastructure and on what evidence is this based?</p> <p>Do you have a:</p> <ul style="list-style-type: none"> • costed strategic plan for this area (3 years)? • rolling plan of repair, maintenance and replacement?
	The need to upskill teachers.	<p>Consider the CPD needs of all staff – teachers, support, admin – against the Strategic Development Plan for technology.</p> <p>What are your own minimum quality standards needed in this respect?</p> <p>What skill/competency level does your technology lead have in this area?</p> <p>How do you communicate and keep up-to-date in this regard with those making key decisions?</p> <p>Consider contacting the demonstrator schools programme for support. (See <https://www.gov.uk/government/publications/EdTech-demonstrator-schools-and-colleges-successful-applicants/about-the-programme>.)</p>

	Key findings	Guidance
	<p>The need for an appropriate pedagogical approach.</p>	<p>Begin your intended learning outcomes for the school's/ learner's context and not the medium of teaching, then decide on the connectivity and technology needed to deliver the learning both in school and remotely.</p> <p>Clarify/determine a shared understanding of a <i>blended learning</i> approach.</p> <p>Develop an agile and evidenced-informed practice – specifically, to:</p> <ul style="list-style-type: none"> • think about the most effective ways to deliver the curriculum (ie, which parts are best suited to the mode of remote/online delivery and which parts better left to traditional in-class teaching) • flex the curriculum to lend itself to the digital format • conduct research about where and when digital technology has the greatest impact on students' development and learning in your context and for your pupils. <p>Consider:</p> <ul style="list-style-type: none"> • the organisational factor. Online courses are a team effort. Unlike face-to-face teaching, the teacher cannot remain the sole provider. Subject experts, instructional designers, students' representative, technology experts should all be part of a systematic process of designing and delivering effective pedagogies and materials. • engagement, presence (and therefore belongingness), as the best predictors of student learning outcomes must take the front seat and focus on teaching, rather than attendance. When considering the elusive concept of engagement, there's need to be considerations of sub-dimensions such as cognitive engagement, teacher-learner engagement, peer engagement and wider schools'/ecosystems' engagement. • multi-modal learning. Online learning should smartly combine synchronous and asynchronous modes of learning and few media types such as video, simulations, serious games, and augmented reality. <p>Assessment is key, as it is one very important channel of support. For it to be effective, it must be authentic, continuous, systematic, formative, and well connected to feedback. Topics that need to be considered are what is being assessed (quality is a lot more about engagement and learning outcome), who engaged in the assessment (for example, the students themselves, peers, AI, analytics), why is assessment needed (for example, to develop self-regulated learning skills) and how to assess (for example, by collecting as many data sources to mirror and reflect on).</p> <p>Communities are one of the best learning resources available when going online; there's need to be considered a smart and secure way to use the power of online communities – to support classroom discussions, but also out of class collaboration: teachers, headteachers and EdTech providers.</p> <p>Inclusive infrastructure is a required enabler for everyone to be able to participate in learning, at all times.</p>

	Key findings	Guidance
	Deeper thought needs to be given on EdTech solutions that best achieve specific educational outcomes.	<ul style="list-style-type: none"> • Understand your own needs. • Conduct an inventory. • Ask for evidence. • Try before you buy. • Learn from the data.
	Privacy restrictions put barriers to engaging in synchronous online learning.	<p>Consider communicating with other schools to see how they dealt with privacy and safeguarding, and their evidence to support their approach.</p> <p>What approach have you taken with staff – do you have meetings? Is wellbeing discussed? What is your evidence base for your approach?</p> <p>Consider advice from NAACE (the National Association of Advisors for Computers in Education) and other key organisations.</p>

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Appendix C1: Validation of core survey responses with Teacher Tapp's¹ statistics

Table 3: Validation of support systems

Who supported you with the transformation to remote learning during lockdown, and how? (Tick all that apply)	All	Primary	Secondary	Private	State-funded	Primary Private	Primary State-funded	Secondary Private	Secondary State-funded	Our Infant	Our Junior	Our NA	Our Other	Our Primary	Our Secondary	Our SEND	All our stats
I was supported by the school's leadership team with some guidance and support	49%	45%	53%	53%	48%	58%	44%	51%	53%	50%	50%	7%	40%	38%	38%	67%	30%
I was professionally supported by colleagues, friends and family	42%	36%	47%	50%	41%	35%	35%	52%	45%	50%	25%	0%	20%	44%	55%	33%	51%
I was emotionally supported by colleagues, friends and family	48%	46%	50%	62%	46%	46%	44%	64%	49%	50%	0%	0%	40%	31%	45%	67%	41%
I was supported by the Department of Education or other governmental agencies with guidelines and advice	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	13%	0%	0%	0%	2%	67%	3%
I was supported by someone else	5%	5%	5%	7%	5%	15%	5%	5%	6%	50%	0%	3%	0%	8%	3%	0%	3%
I did not feel supported although I wanted help	9%	10%	7%	9%	9%	4%	11%	8%	7%	0%	0%	0%	20%	10%	7%	0%	7%
I felt confident and did not want help	16%	16%	17%	14%	16%	14%	17%	15%	17%	0%	25%	0%	40%	10%	8%	0%	9%

¹ <https://teachertapp.co.uk/>

Table 4: Validation of opportunities

What are the main educational opportunities you see resulting from the pandemic? (Select up to TWO)	All	Primary	Secondary	Private	State-funded	Primary Private	Primary State-funded	Secondary Private	Secondary State-funded	Our Infant	Our Junior	Our NA	Our Other	Our Primary	Our Secondary	Our SEND	All our stats
Improved use of technology for learning	59%	54%	65%	67%	58%	73%	52%	64%	63%	50%	50%	31%	0%	49%	70%	0%	59%
Improved technical skills among teachers	35%	32%	38%	53%	32%	56%	29%	52%	35%	25%	38%	0%	20%	26%	37%	33%	34%
Improved technical skills among learners	17%	14%	21%	28%	15%	35%	11%	28%	19%	0%	25%	0%	40%	5%	10%	33%	10%
Teachers empowered by an increased understanding of online teaching	24%	20%	28%	31%	23%	14%	19%	32%	26%	0%	0%	0%	20%	18%	20%	33%	18%
Improved communication between home and school	26%	33%	19%	7%	28%	0%	35%	7%	22%	25%	13%	20%	60%	36%	19%	67%	22%
More personalised and effective use of education technology	18%	16%	20%	24%	17%	33%	15%	23%	19%	25%	25%	0%	40%	15%	10%	0%	11%
Improved systems for emotional wellbeing	13%	18%	8%	5%	14%	7%	20%	4%	8%	0%	0%	0%	20%	5%	3%	0%	3%
New opportunities for learners struggling with formal face-to-face learning	18%	13%	23%	18%	18%	6%	12%	18%	23%	25%	0%	35%	0%	23%	15%	33%	17%
Another opportunity	5%	6%	5%	4%	6%	0%	6%	5%	5%	25%	0%	47%	0%	5%	3%	0%	9%

Table 5: Validation of concerns

What are the main challenges you were facing in the context of school education during the school lockdown? (Select up to TWO)	All	Primary	Secondary	Private	State-funded	Primary Private	Primary State-funded	Secondary Private	Secondary State-funded	Our Infant	Our Junior	Our NA	Our Other	Our Primary	Our Secondary	Our SEND	All our stats
Work-life balance	38%	34%	41%	61%	35%	68%	30%	60%	37%	25%	13%	26%	40%	44%	49%	33%	42%
Physical health and safety	11%	12%	10%	9%	12%	19%	12%	7%	10%	0%	25%	3%	20%	13%	4%	0%	5%
Confusing messages and guidelines from government and local authorities	43%	49%	37%	27%	45%	16%	50%	29%	39%	25%	25%	0%	20%	36%	29%	33%	29%
Lack of online teaching expertise	23%	24%	23%	22%	23%	9%	25%	21%	21%	25%	0%	0%	0%	15%	12%	67%	12%
Lack of technical knowledge or poor infrastructure (e.g. internet connectivity)	17%	18%	17%	18%	17%	3%	18%	19%	17%	25%	38%	0%	0%	15%	10%	0%	11%
Boredom and loneliness of learners	19%	18%	21%	24%	18%	9%	17%	27%	20%	0%	25%	0%	60%	13%	23%	33%	21%
Learners falling behind	39%	33%	45%	17%	41%	7%	35%	19%	50%	25%	13%	17%	0%	18%	48%	0%	38%
Lack of communication between schools and parents	10%	12%	7%	3%	10%	4%	12%	2%	8%	25%	25%	0%	0%	8%	3%	0%	4%
Choosing the most appropriate learning resources	21%	24%	17%	22%	21%	27%	23%	20%	17%	0%	0%	0%	20%	8%	5%	0%	5%
Another challenge	10%	10%	10%	13%	10%	19%	9%	14%	10%	25%	0%	0%	0%	13%	9%	33%	8%

Appendix C2: Validation of core survey responses with Parent Ping's² statistics

Table 6: Validation of support systems

Who supported you with the transformation to remote learning during lockdown?	All	pre	pre-pri	pre-pri-sec	pri	pri-sec	sec	All our stats	Our Infant	Our Junior	Our Other	Our Primary	Our Secondary
I was supported by the school's leadership team with some guidance and support	30%	15%	37%	40%	28%	28%	42%	26%	50%	38%	43%	41%	39%
I was professionally supported by colleagues, friends and family	18%	16%	21%	20%	16%	16%	20%	30.53%	0%	38%	0%	36%	32%
I was emotionally supported by colleagues, friends and family	36%	24%	48%	40%	41%	39%	28%	27.37%	0%	25%	29%	25%	30%
I was supported by the Department for Education and other governmental agencies with guidelines and advice	1%	4%	0%	0%	2%	2%	0%	1.05%	0%	0%	0%	0%	2%
I was supported by someone else	5%	5%	10%	0%	5%	3%	3%	6%	0%	0%	0%	14%	8%
I did not feel supported although I wanted help	13%	2%	11%	0%	20%	15%	9%	26.32%	0%	50%	43%	29%	20%
I felt confident and did not want help	27%	22%	21%	20%	26%	31%	33%	11.58%	50%	0%	0%	7%	16%

² <https://parentping.co.uk/>

Table 7: Validation of opportunities

What are the main educational opportunities you see resulting from the pandemic?	All	pre	pre-pri	pre-pri-sec	pri	pri-sec	sec	All our stats	Our Infant	Our Junior	Our Other	Our Primary	Our Secondary
Improved use of technology for learning	56%	55%	60%	60%	53%	54%	62%	35%	0%	38%	0%	43%	22%
Improved technical skills among teachers	20%	11%	24%	20%	23%	17%	23%	32%	50%	25%	14%	36%	32%
Improved technical skills among learners	18%	12%	14%	0%	19%	21%	21%	15%	100%	13%	0%	21%	10%
Teachers empowered by an increased understanding of online teaching	18%	26%	14%	0%	14%	17%	24%	17%	50%	0%	14%	14%	20%
Improved communication between home and school	25%	27%	30%	80%	25%	27%	18%	25%	0%	38%	14%	21%	16%
More personalised and effective use of education technology	20%	10%	31%	0%	24%	21%	13%	23%	0%	50%	14%	25%	20%
Improved systems for emotional wellbeing	8%	6%	10%	0%	10%	6%	6%	5%	0%	0%	0%	11%	4%
New opportunities for learners struggling with formal face-to-face learning	26%	23%	26%	0%	25%	32%	26%	30%	0%	13%	14%	11%	36%
Another opportunity	7%	6%	5%	0%	9%	5%	7%	14%	0%	0%	57%	7%	14%

Table 8: Validation of concerns

What were the main challenges you were facing in the context of school education during the school lockdown?	All	pre	pre-pri	pre-pri-sec	pri	pri-sec	sec	All our states	Our Infant	Our Junior	Our Other	Our Primary	Our Secondary
Work-life balance	59%	46%	76%	60%	67%	59%	41%	33%	50%	63%	29%	39%	46%
Physical health and safety	6%	5%	4%	0%	6%	3%	12%	12%	0%	25%	0%	7%	14%
Confusing messages and guidelines from government and local authorities	22%	22%	27%	20%	18%	23%	25%	24%	0%	25%	29%	25%	24%
Lack of online teaching expertise	10%	9%	7%	20%	9%	11%	13%	14%	0%	13%	43%	7%	14%
Lack of technical know-how or poor infrastructure (e.g. internet connectivity)	5%	6%	4%	0%	5%	5%	8%	13%	0%	0%	0%	25%	10%
Boredom and loneliness of learners	34%	21%	32%	20%	34%	41%	42%	17%	0%	13%	29%	14%	18%
Learners falling behind	13%	12%	10%	0%	12%	17%	18%	27%	50%	38%	57%	36%	24%
Lack of communication between schools and parents	16%	5%	11%	20%	22%	20%	13%	9%	50%	13%	14%	11%	6%
Choosing the most appropriate learning resources	12%	10%	12%	0%	23%	9%	1%	6%	0%	0%	0%	4%	10%
Another challenge	13%	11%	15%	20%	12%	18%	12%	10%	50%	0%	0%	7%	18%

Appendix D: EdTech specific surveys

Table 9: EdTech specific surveys

Question Code	Date	Provisional Question Title	Primary Question
04_27e	27/4	Concerns of effect of Lockdown on Business	What are the biggest concerns for you at the moment? Please rank in order of priority.
04_28e	28/4	Data Collection for Research on Product Efficacy	Educators and parents are telling us that one of the things they need now is evidence about what works well with remote education. Are you collecting data and evidence about how your product or service is supporting education during COVID-19?
04_30e	30/4	Ability to Communicate during Lockdown	Please tell us more about your business during Lockdown.
05_01e	1/5	Management around Prospect of Further Restrictions	After more than a month of Lockdown, we want to know how you are feeling about the prospect of the situation continuing. Please choose the statements that are closest to your view.
05_04e	4/5	Product Changes as Result of Lockdown	Today's question is about the changes that you may or may not be likely to make to your product or service as a result of what you have learnt during Lockdown.
05_05e	5/5	Benefits to Business from Tech Use during Lockdown	How are you planning to ensure that your business is able to benefit from all the technology use during Lockdown after Lockdown ends?
05_06e	6/5	Online Learning Traps	In a recent report published on EdSurge, '5 Traps That Will Kill Online Learning' were identified. To what extent do you agree that these are traps that educators are falling into? Are there other traps that you would add to this list to help schools avoid them? Please tell us if so. (https://www.edsurge.com/news/2020-05-01-5-traps-that-will-kill-online-learning-and-strategies-to-avoid-them).
05_07e	7/5	Investment into Tech during Lockdown	Last year Barclays produced a report that encouraged investors into EdTech. We would like to know if you think investment in EdTech will increase faster due to COVID-19 and in which areas. Please rank in the order in which you agree with these statements, with 1 being the statement you most agree with. (https://www.investmentbank.barclays.com/our-insights/education-technology-out-with-the-old-school.html).
05_11e	11/5	Use of AI in Business	Today, we would like to ask you about your thoughts about how Artificial Intelligence (AI) could be useful in your business.
05_12e	12/5	Social Media Use	Today, we would like to ask what social media channels you believe are most useful for you when communicating with your customers in education. Please rank in order of importance to you.
05_13e	13/5	Employment Profile	Today, we would like to ask about the types of people you employ in your business. Please tick all the appropriate boxes.
05_14e	14/5	Employment Profile 2	Today, we would like to ask you a little more about you and/or your team. Please tick all the appropriate boxes.
05_15e	15/5	Prospering as a result of Lockdown	On Tuesday at the Financial Times' Digital Boardroom online conference on a session about "Tech in the limelight: Innovation and disruption as responses to the pandemic" Sonali De Rycker, a Partner at Accel, made the following statement about small businesses surviving and prospering through the crisis. Do you agree?
05_20e	20/5	Conversion of free users to premium	Today, we would like to ask you about how customers who have benefited from free or reduced cost offers for your product or service will convert to long-term customers.

05_21e	21/5	Data Collection for Understanding of Staff Exp	Today, we would like to ask you about the data you use to learn more about your business, in particular your staff. Please tell us which types of data you use to help you understand more about your business.
05_22e	22/5	Access to Research	Today, we would like to ask you about your ability to access relevant research evidence to help you decide how best to support your customers during the COVID-19 restrictions. Please select all the statements that apply to you.
05_23e	23/5	Impact of Extended Lockdown on Business	Today, we would like to ask you about the impact that you believe an extended period of Lockdown/restrictions in educational institutions will have on your business.
05_27e	27/5	Attractiveness to Investors due to Covid-19	Today, we would like to ask your views about your business' attractiveness to investors due to COVID-19. Please check all boxes that apply.
05_28e	28/5	Effects on EdTech Ecosystem	Today, we would like to ask your views about the EdTech ecosystem currently.
05_29e	29/5	Accessibility to Less Advantaged Users	Today, we would like to ask you about the extent to which your product or service is accessible to less advantaged users.
06_01e	1/6	Loosening of Restrictions & Product Demand	Today, we would like to ask for your prediction about the impact that easing of Lockdown restrictions will have on demand for your business. Please check the box that most closely represents your view.
06_02e	2/6	Loosening of Restrictions & Team	Today, we would like to ask for your prediction about the impact that easing of Lockdown restrictions will have on your team. Please check the box that most closely represents your view.
06_03e	3/6	Impact on Strategy	Today, we would like to ask your opinion about the impact that COVID-19 has had on your long-term business vision and strategy.
06_04e	4/6	Impact on Expenses	Today, we would like to ask your opinion about the impact that the work at home and travel restrictions have had on your business costs.
06_05e	5/6	Optimism about the Future	Today, we would like to ask you about your personal feelings.
06_08e	8/6	Concerns of effect of Lockdown on Business	As some learners return to school, we are asking you to revisit some of the questions we asked right at the start of the survey. Today, we would like to know what the biggest concerns are for you at the moment. Please rank in order of priority.
06_09e	9/6	Data Collection for Research on Product Efficacy	As with yesterday, we are re-visiting some of our original questions to see if and how people's views have changed as some learners start to return to school. Today, we would like to ask you: Educators and parents are telling us that one of the things they need is evidence about what works well with remote education. Have you been collecting and are you continuing to collect data and evidence about how your product or service is supporting education during COVID-19?
06_10e	10/6	Online Learning Traps	We are continuing with this week's theme of re-visiting questions we asked much earlier in the survey. Today, we would like to ask you: to what extent do you agree that these are traps that educators have been/are falling into? Are there other traps that you would add to this list to help schools avoid them? Please tell us if so.
06_11e	11/6	Ability to Communicate during Lockdown	Today, we would like to revisit this question from the start of our survey and ask you to please tell us more about your business during Lockdown and as it eases.
06_12e	12/6	Investment into Tech during Lockdown	As Lockdown eases and some students return to school, but the prospect of a second wave of infection is still on the horizon, we would like to revisit a question about whether or not you think investment in EdTech will increase faster due to COVID-19 and in which areas. Please rank in the order in which you agree with these statements with 1 being the statement you most agree with. (https://www.investmentbank.barclays.com/our-insights/education-technology-out-with-the-old-school.html).

06_15a	15/6	2-Metre Distancing Rule	Today, we are moving to a Question for the Week. Many thanks for all your answers to date, they are extremely useful and we will share the findings of our research when the analysis is done. Today, we would like to ask you about the 2-metre distancing rule and its application in schools. Please select the statement that is closest to your view.
06_22e	22/6	Economic Impact of Schools Reopening	Today's Question for the Week is about the statement by the government last week that it expects all schools to have all pupils back at school from September 2020. Please tell us briefly what economic impact you believe this will have on your business and why.
06_29e	29/6	Staff Recruitment	Today's Question for the Week is about staff recruitment. A clear sign of recovery in the labour market post the pandemic Lockdown would be an increase in the number of job vacancies. We would like to know if you are recruiting/are planning to recruit new staff to join your business.
07_06e	6/7	Govt Funding of EdTech	This week's Question for the Week is about the government's funding of EdTech during the crisis, such as that provided to Oak Academy without a tendering process. Please select the answer that is closest to your view about this.
07_14e	14/7	Utility of Research Findings	Today's Question for the Week is about the type of research findings that would be most useful for you. As you know we have been conducting this survey for some months now and have quite a lot of data from educators and parents. As we analyse this, we will make the findings available to you and, to help us, we would like you to check the box for the type of research finding you would find most useful.
07_20e	20/7	Optimism about Business	This week's Question for the Week is about your optimism about your business as Lockdown regulations are eased, but the prospect of another wave of COVID-19 infections and Lockdowns is still real.
07_27e	27/7	Customer Expectation	This week's Question for the Week is about your expectations about your customer base come September. Please select the statement that is closest to your views.
08_03e	3/8	Impact of Second Wave	This week's Question for the Week is about the impact that a second wave of COVID-19 infections and local Lockdowns will have on your business. Please select the answer that is closest to your opinion, or select 'other' and tell us what you think.
08_10e	10/8	Impact of Broadband Connectivity	This week's Question for the Week is asking your thoughts about the impact on your business of the quality of broadband connectivity both you and your customers can rely upon.
08_17a	17/8	A-level Grading Algorithm	This week's Question for the Week is about the consequences of the decision to use an algorithm to decide A-level and GCSE grades and what should now happen. Please select the statements that are closest to your view.

Appendix E: Parents, educators and educational leaders' specific surveys

Table 10: Parents, educators, and educational leaders' specific surveys

Question Code	Date	Provisional Question Title	Primary Question
04_20a	20/4	Potential Difficulties using EdTech	How strongly do you agree or disagree with the following statements?
04_21a	21/4	Potential Positive Uses of EdTech	How strongly do you agree or disagree with the following statements?
04_22a	22/4	Long-term effects of Covid-19 on use of Tech	To what extent do you agree with these statements?
04_23a	23/4	Reaction to New Ways of Working	Please tell us how much you agree with the following statements.
04_24a	24/4	What Would Make Working Effectively Easier?	What would make your work easier during Lockdown? Please rank the following suggestions in order of preference with the most useful at the top.
04_27a	27/4	Training for Remote Learning	Educators have told us that they would like more knowledge and expertise to help them teach remotely. If training was available now, how would you and your staff prefer to learn? Please rank in order of preference.
04_28a	28/4	Sustainability of Remote Learning	How sustainable is the remote education that you are delivering over the longer term should Lockdown be extended? Please select the statement that best describes your view.
04_29a	29/4	Biggest Lockdown Concern	Please tell us your biggest concern during Lockdown. Please select the response closest to your view.
04_30a	30/4	SEN during Lockdown	This question is about children with Special Educational Needs (SEN). We would like to know if you have any SEN learners in your school/s. If so, we would like to know the nature of their needs and how well you feel able to address their needs during Lockdown.
05_01a	1/5	Prospect of Further Restrictions	After more than a month of Lockdown, we want to know how you are feeling about the prospect of the situation continuing. Please choose the statements that are closest to your view.
05_04a	4/5	Positive Learning Impacts of Lockdown	One of the interesting things we have heard from some educators is that Lockdown has had some unexpectedly positive impacts on their school/s. We would like to know if this is something that you have experienced. Please select as many options as are relevant for you, or add your own thoughts to the 'other' box at the end.
05_05a	5/5	UNICEF Remote Learning Statements	Please tell us how much you agree or disagree with these statements. [Today's questions are informed by Unicef's Framework for Reopening Schools report.] (https://www.unicef.org/documents/framework-reopening-schools).
05_06a	6/5	Online Learning Traps	In a recent report published on EdSurge, '5 Traps That Will Kill Online Learning' were identified. To what extent do you agree that these are traps that people are falling into? Are there other traps that you would add to this list to help colleagues avoid them? Please tell us if so. (https://www.edsurge.com/news/2020-05-01-5-traps-that-will-kill-online-learning-and-strategies-to-avoid-them).
05_07a	7/5	Curriculum and Teaching Adjustments	Yesterday the Department for Education offered advice about adapting the curriculum and adjusting teaching practices during the coronavirus shutdown (links provided below). We would like to know if you agree with these three suggestions for schools? Would these benefit your child/children?

05_11a	11/5	Pedagogical Impact of School Closures	Today, we would like to ask if you agree with these statements about the impact of school closures during COVID-19 from a report published last week by researchers at the LSE (details at the end). You do not need to read the report to answer the questions.
05_12a	12/5	Achievement Deficits	Today, we would like to ask if you agree with the statements below about what can be done if achievement deficits result from the COVID-19 Lockdown when schools reopen.
05_13a	13/5	Continuing Use of Tech After Lockdown	Today, we would like to ask you about these suggestions about what we should be planning to do/continuing to do with respect to technology after Lockdown.
05_14a	14/5	Continuing Use of Tech After Lockdown 2	Today, we would like to ask you about a few more suggestions about what we should be planning to do/continuing to do with respect to technology after Lockdown.
05_15a	15/5	Student Engagement with Remote Materials	Today, we would like to ask you about what is engaging your child/children when using technology during Lockdown. Please check the boxes for the statements you believe to be true.
05_18a	18/5	Engagement through Tech after Lockdown	Today, we would like to ask you about the way technology, including your products or services, is or is not going to enable the schools you work with to continue working with all students when Lockdown restrictions are relaxed for some students. Please check the statement you believe to be most appropriate for you.
05_19a	19/5	Changes to Schools	Today, we would like to ask you about the type of changes you think will happen in schools, because of the way technology has been used during Lockdown. Please check all the statements you believe to be true.
05_20a	20/5	Device Adequacy	Today, we would like to ask you if you have enough devices available in your home for you to work independently.
05_21a	21/5	Difficulty & Time Spent Remote Learning	Today, we would like to ask you if your experience aligns with the following statements about learning while COVID-19 restrictions are in place.
05_22a	22/5	Student Work Quality	Today, we would like to ask you about the quality and quantity of work received from pupils. Please select the statements that most reflect your situation.
05_26a	26/5	Use of Free Trials for EdTech Products	Today, we would like to ask you if you (or your parents) have signed up for free trials of normally paid-for educational products or services.
05_27a	27/5	Most Positive EdTech Features	Today, we would like you to think about the technology that you are using to support you remotely, and consider which of the following features have made the most positive impact on your learning during this period? Please rank the answers below.
05_28a	28/5	Feasibility of Social Distancing in Schools	Today, we would like to ask, when your school begins to reopen, how effectively do you think they will be able to maintain social distancing measures (e.g. limited number of students per classroom, maintaining physical distance between students, increased sanitation of the school, regular thorough hand washing, etc.)?
05_29a	29/5	School Reopening Dates	Today, we would like to ask when you believe that your child/children's school will be able to cope with all students returning to the school's premises every school day.
06_01a	1/6	Student Loneliness	Today, we would like to ask for your thoughts about feelings of loneliness amongst pupils at your school. Please select the statement that most represents your views for the age group of the pupils at your school. Your response can reflect your views about your own feelings or your views about the pupils at your school more generally.
06_02a	2/6	Student Boredom	Today, we would like to ask how often you are feeling bored currently.
06_03a	3/6	Daily Exercise	Today, we would like to ask you how much daily exercise you are taking while COVID-19 restrictions have been in place.

06_04a	4/6	Communication with Parents	Today, we would like to ask about the effectiveness of school communication with you and your family during Lockdown restrictions.
06_05a	5/6	Optimism about Education	Today, we would like to ask about how optimistic you feel about your education, as more students start returning to school.
06_08a	8/6	Training for Remote Learning	As some learners return to school, we are asking you to revisit some of the questions we asked right at the start of the survey. Today, we would like to know if training is available now to help you understand more about how to use technology to support online learning. How would you prefer to learn? Please rank in order of preference.
06_09a	9/6	Sustainability of Remote Learning	As with yesterday, we are re-visiting some of our original questions to see if and how people's views have changed as some learners start to return to school. Today, we would like to ask you: How sustainable is the remote education that you are experiencing over the longer term should you not be able to return to school yet? Please select the statement that best describes your view.
06_10a	10/6	Biggest Lockdown Concern	We are continuing our theme for this week, which is to revisit some questions we asked much earlier in this survey. Today, we would like to know about your biggest concern during Lockdown. Please select the response closest to your view. Please think about these statements in the current context where some learners are at school, whilst others remain working remotely from home.
06_11a	11/6	Positive Learning Impacts of Lockdown	Today, we would like to revisit this question - we would like to know if you have seen some benefits to Lockdown for some students. Please select as many options as are relevant for you, or add your own thoughts to the 'other' box at the end.
06_12a	12/6	Prospect of Further Restrictions	As Lockdown eases and some children return to school, but the prospect of a second wave of infection is still on the horizon, we would like to revisit a question about how you are feeling about the prospect of the situation continuing. Please choose the statements that are closest to your view.
06_15a	15/6	2-Metre Distancing Rule	Today, we are moving to a Question for the Week. Many thanks for all your answers to date, they are extremely useful and we will share the findings of our research when the analysis is done. Today, we would like to ask you about the 2-metre distancing rule and its application in schools. Please select the statement that is closest to your view.
06_22a	22/6	Pupil Engagement	Today's Question for the Week is about pupil engagement. It is based upon a piece of research published by NFER last week (see details at the end of this questionnaire).
06_29a	29/6	September Return to School	Today's Question for the Week is about returning to school in September. The proposal that all pupils should return to schools as from September has not been greeted with universal approval. We would like to know what you think is most likely to happen. Please tell us which of these answers is closest to your view.
07_06a	6/7	Confidence in Regulations	This week's Question for the Week is about your confidence in the regulations being put in place to prevent the further spread of COVID-19 as Lockdown restrictions are changed. Please tell us which of these answers is closest to your view.
07_20a	20/7	Parents on Holiday	This week's Question for the Week is about your vacation plans. Which of these statements most accurately describes your intentions?
07_27a	27/7	Use of Time During School Holidays	This week's Question for the Week is about how you and your child/children intend to spend the school vacation time. Please select the sentence that best reflects your plans.
08_03a	3/8	Optimism About September Return	This week's Question for the Week is about how optimistic you now feel about your child/children returning to school in September 2020 with the prospect of increased COVID-19 infections on the horizon.

08_10a	10/8	Planning for September	This week's Question for the Week is about the amount of planning you have done for your child to be learning from home from September for at least some of the time.
08_17a	17/8	A-level Grading Algorithm	This week's Question for the Week is about the consequences of the decision to use an algorithm to decide A-level and GCSE grades and what should now happen. Please select the statements that are closest to your view.
08_24a	24/8	Concerns About New School Year	This week's Question for the Week is about the new school year and the issues that are concerning you the most at the current time. Please select the option that most represents your greatest concern, or tell us what you are most concerned about through the 'other' option.
09_01a	1/9	Concerns About Physical Return of Students	This week's Question for the Week is about the new school year and how anxious you feel about your child/children returning to the school building this week. Please select up to three options that most represent your view, or tell us what you believe through the 'other' option.
09_07a	7/9	Management of Return of Students	This week's Question for the Week is about how the new school year has started and, in particular, how your pupils are coping. Please select the answer that most represents your view, or tell us what you believe through the 'other' option.
09_14a	14/9	Implications of Spike in Infections	This week's Question for the Week is about the spike in infection numbers and their implications for your school. Please select the answer that most represents your view, or tell us what you believe through the 'other' option.
09_21a	21/9	Suspected Infections in Schools	This week's Question for the Week is about your experience of suspected COVID-19 infections in your school. Please select the answer that most represents your view, or tell us what you believe through the 'other' option.
09_28a	28/9	Maintaining F2F Teaching in Autumn	Today's Question for the Week is about maintaining Face to Face (F2F) teaching at school during the autumn term. We would like to know what you think is most likely to happen. Please tell us which of these answers is closest to your view, or use the 'other' option to tell us your views.
10_05a	5/10	Support During Increasing Infections	Today's Question for the Week is about where you are finding support available to you for your child/children's education as the rise in COVID-19 infections continues. Please tell us which of these answers is closest to your view, or use the 'other' option to tell us your views.
10_12a	12/10	Planning for Remote Learning	Today's Question for the Week is about the formal planning that your school has conducted to prepare for situations where some, many or all children are working remotely for a period of time. Please tell us which of these answers is closest to your view, or use the 'other' option to tell us your views.
10_19a	19/10	Utility of Guidance	Today's Question for the Week is about the guidance that you find most useful as you navigate through the ongoing COVID-19 disruption. Please tell us which of these answers is closest to your view, or use the 'other' option to tell us your views.

Table 11: Classification of questions

Pedagogical Concerns during Lockdown	Business Development	Non-Pedagogical Concerns During Lockdown	Concerns Following Lockdown	Concerns Regarding Return to School	Research During Lockdown	Ability to work & Communicate effectively in Lockdown	Wellbeing
04_21a	04_27e	04_29a	04_22a	06_15a	04_28e	04_20a	06_01a
04_27a	05_01e	05_26a	05_01a	06_15a	05_21e	04_23a	06_02a
04_30a	05_05e	05_20e	05_05a	06_29a	05_22e	04_24a	06_05e
05_04a	05_07e	05_28e	05_13a	07_06a	05_29e	05_20a	06_03a
05_06a	05_11e	04_30b	05_14a	08_03a	06_09e	04_30e	07_20a
05_07a	05_12e	05_13b	05_18a	08_10a	07_14e	06_11e	
05_11a	05_13e	05_14b	05_19a	08_24a		08_10e	
05_12a	05_14e	07_06e	05_28a	09_01a			
05_15a	05_15e	08_03e	05_29a	09_07a			
05_21a	05_23e	06_04a	05_04e	09_14a			
05_22a	05_27e	06_10a	06_01e	09_21a			
05_27a	06_03e	10_19a	06_02e	09_28a			
05_06e	06_04e		04_30c	10_05a			
05_22b	06_08e		07_27e				
04_28a	06_12e		08_17a				
06_10e	06_22e		06_05a				
06_08a	06_29e		06_12a				
06_09a	07_20e		07_27a				
06_11a			08_17a				
06_22a							
10_12a							

Table 12: Missing values

Feeling score	Confidence in sustaining remote learning	Enjoyment of remote mode of learning	Optimism about the UK's school system from September	I am able to deal with most difficulties I encounter when using tech	I feel professionally supported By colleagues, friends and family...	I feel emotionally supported by colleagues, friends and family	If I have any difficulties with my work during the COVID-19 Lockdown	I feel anxious about education at my school during the COVID-19 Lockdown	Are you /your school staff offering Using /recommending technology?	The school provides live lessons using video or audio conference...	The school provides activities for students that they can download...	Teachers mark work completed by students and submitted digitally...	The school suggests that students use specific software to help...	The school provides technology to help students talk to and ...	You are sharing videos of lessons with students that they can...	I don't know	My child/ children are not using any technology
Valid	422	635	516	66	540	540	61	60	548	1300	1300	1300	1300	759	759	1300	1300
Missing	1344	1131	1250	1700	1226	1226	1705	1706	1218	466	466	466	466	1007	1007	466	466
Valid	1299	759	759	540	540	540	540	1299	540	667	541	541	541	609	541	541	541
Missing	467	1007	1007	1226	1226	1226	1226	467	1226	1099	1225	1225	1225	1157	1225	1225	1167
Valid	58	126	690	541	541	541	541	541	541	690	541	541	149	149	60	149	149
Missing	1708	1640	1076	1225	1225	1225	1225	1225	1225	1076	1225	1225	1617	1617	1706	1617	1617

Appendix F: Missing values in the main longitudinal survey

Appendix G: Details on the five clusters' attributes

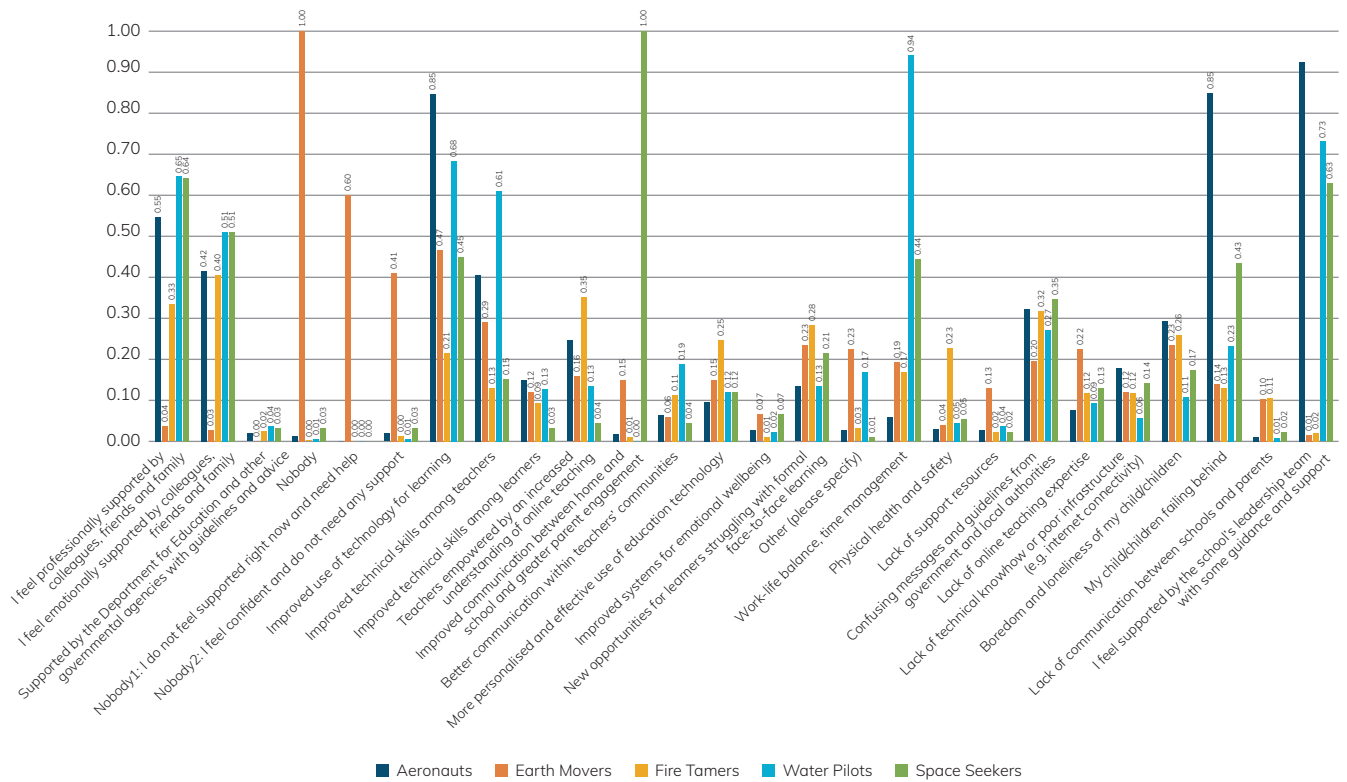


Figure 9: The normalised values of the clusters centres' attributes

Appendix H: Governmental guidelines and the reaction to them around Covid-19 in England's schools

Table 13: Timeline of governmental guidelines and correspondence with regard to the educational policy during Covid-19 and reactions to them 27/2–26/10/2020; colour-coded by the Department of Education's website tagging systems: Green – guidance; statutory guidance, Light blue – speech; news story; promotional material; oral statement to parliament; blog, Pink – transparency data; official statistics; official statistics announcement, Yellow – Press release; correspondence; decision, Uncoloured – collection, red font – an event indicated as a conflict, confusing message or unclear how to follow.

Date	Day of Week	Title	Detail	Conflict	Amended/ Updated?	Word Count of Associated Guidance (if applicable)	Detail	Conflict	Comment on Conflict
27/2/2019	Wed	Reception Baseline Assessment Framework	New assessment structure for Reception pupils due to be implemented in Sept 2020.	Concerns that it is not suitable to implement this in the current context.	No	2 Documents, 2,207, 844	New assessment structure for Reception pupils due to be implemented in Sept 2020.	Concerns that it is not suitable to implement this in the current context.	Reception baseline assessment and social distancing expectations.
17/2/2020	Mon	Coronavirus (COVID-19): travel advice for educational settings	Advice for educational settings, and their students and staff, who are travelling or planning to travel during the coronavirus (Covid-19) outbreak.		Yes, 25 March, 5 May, 5 October		Advice for educational settings, and their students and staff, who are travelling or planning to travel during the coronavirus (Covid-19) outbreak.		
18/3/2020	Wed	Government announces the closure of all schools until further notice			No	Guidance that is linked, as it existed at time of press release no longer available, superseded			
19/3/2020	Thu	Providing school meals during the coronavirus (COVID-19) outbreak	Guidance for schools and local authorities on school meals arrangements during the coronavirus (Covid-19) outbreak.		Yes, see link	3 Documents: 1787, 1811, 778	Guidance for schools and local authorities on school meals arrangements during the coronavirus (Covid-19) outbreak.		

19/3/2020	Thu	Critical workers who can access schools or educational settings. (Updated from March 19)	List of critical workers (key workers) who can send their children to school or other educational settings during the coronavirus (Covid-19) outbreak.		Yes, see link		List of critical workers (key workers) who can send their children to school or other educational settings during the coronavirus (Covid-19) outbreak.		
20/3/2020	Fri	Taking exams during the coronavirus (COVID-19) outbreak. (Updated from March 20)	What schools, colleges and students need to know about cancelled GCSEs, AS and A-levels and other qualifications in 2020, and the plans for taking future exams.		Yes, see link	2903	What schools, colleges and students need to know about cancelled GCSEs, AS and A-levels and other qualifications in 2020, and the plans for taking future exams.		
21/3/2020	Sat	Coronavirus (COVID-19): guidance on isolation for residential educational settings	Guidance to support management of children and young people in residential educational settings, including boarding schools, residential special schools and children's social care.		Yes, see link		Guidance to support management of children and young people in residential educational settings, including boarding schools, residential special schools and children's social care.		
22/3/2020	Sun	Check if your nursery is eligible for business rates relief due to coronavirus (COVID-19)	Description of business rate holidays for nurseries.		No		Description of business rate holidays for nurseries.		
22/3/2020	Sun	Recording attendance during the coronavirus (COVID-19) outbreak	What educational settings need to do when recording attendance in the educational settings status form from 1 September 2020.		Yes, 12 October, 20 October	756	What educational settings need to do when recording attendance in the educational settings status form from 1 September 2020.		

23/3/2020	Mon	Providing apprenticeships during the coronavirus (COVID-19) outbreak (Updated from March 23)	This document sets out guidance for apprentices, employers, training providers and assessment organisations in response to the impact of coronavirus (Covid-19).		Yes, see link		This document sets out guidance for apprentices, employers, training providers and assessment organisations in response to the impact of coronavirus (Covid-19).		
23/3/2020	Mon	Actions for FE colleges and providers during the coronavirus (COVID-19) outbreak	Sets out what further education (FE) providers need to know for the autumn term so that students of all ages can benefit from their education and training in full.		Yes, see link	2 Documents: 18,337, 703	Sets out what further education (FE) providers need to know for the autumn term so that students of all ages can benefit from their education and training in full.		
24/3/2020	Tues	Actions for early years and childcare providers during the coronavirus (COVID-19) outbreak	What childcare services early years settings, childminders and local authorities need to provide during the coronavirus (Covid-19) outbreak.		Yes, see link	2 Documents, 19,188, 689	What childcare services early years settings, childminders and local authorities need to provide during the coronavirus (Covid-19) outbreak.		
1/4/2020	Wed	Induction for newly qualified teachers during the coronavirus (COVID-19) outbreak	Guidance about changes to newly qualified teacher (NQT) inductions during the coronavirus (Covid-19) outbreak.		Yes, 1 May, 13 August		Guidance about changes to newly qualified teacher (NQT) inductions during the coronavirus (Covid-19) outbreak.		
3/4/2020	Fri	Coronavirus (COVID-19): guidance for children's social care services	Advice about coronavirus (Covid-19) for local authorities and their partners to help support and protect vulnerable children.		Yes, see link		Advice about coronavirus (Covid-19) for local authorities and their partners to help support and protect vulnerable children.		

3/4/2020	Fri	Direction issued to the Chief Regulator of Ofqual	Directions from Gavin Williamson to Sally Collier, Chief Regulator of Ofqual, about awarding results for qualifications being assessed summer 2020.		Yes, 9 April & 22 October	3 Documents: 2,310, 885, 1101	Directions from Gavin Williamson to Sally Collier, Chief Regulator of Ofqual, about awarding results for qualifications being assessed summer 2020.		
7/4/2020	Tues	Extra support for schools and parents to help cope with coronavirus	Government package of support, including additional funding and high-quality resources, to help schools deal with the challenges posed by coronavirus.	Concerns that the package does not cover the loss of income which many schools earn from activities such as hiring out facilities.	Yes, 24 June & 10 July	N/A	Government package of support, including additional funding and high-quality resources, to help schools deal with the challenges posed by coronavirus.	Concerns that the package does not cover the loss of income which many schools earn from activities such as hiring out facilities.	
7/4/2020	Tues	Coronavirus (COVID-19): initial teacher training (ITT)	Information for providers about managing initial teacher training courses impacted by coronavirus (Covid-19).		Yes, see link		Information for providers about managing initial teacher training courses impacted by coronavirus (Covid-19).		
7/4/2020	Tues	School funding: exceptional costs associated with coronavirus (COVID-19)	Guidance on funding available to schools to support them with costs associated with coronavirus (Covid-19).		Yes, 24 June, 10 July	2,346	Guidance on funding available to schools to support them with costs associated with coronavirus (Covid-19).		
8/4/2020	Wed	Coronavirus (COVID-19): school and college performance measures (Updated from April 8)	Our approach to school and college accountability, performance tables and data during the coronavirus (Covid-19) outbreak.		Yes, 28 September		Our approach to school and college accountability, performance tables and data during the coronavirus (Covid-19) outbreak.		

10/4/2020	Fri	Covid-19 adoption support fund scheme to help vulnerable families			No				
14/4/2020	Tues	Coronavirus (COVID-19): keeping children safe online (Updated from April 14 2020)	Advice and guidance to help parents and carers keep children safe online during the coronavirus (Covid-19) outbreak.		Yes, 25 June	1532	Advice and guidance to help parents and carers keep children safe online during the coronavirus (Covid-19) outbreak.		
17/4/2020	Fri	Coronavirus (COVID-19): financial support for education, early years and children's social care	Funding and financial support available for education, childcare and children's social care organisations.	Criticisms that there is insufficient financial support to cover necessary safety measures and staff absences. Criticisms that financial support is difficult to access.	Yes, 22 April, 27 May, 9 July	8026	Funding and financial support available for education, childcare and children's social care organisations.	Criticisms that there is insufficient financial support to cover necessary safety measures and staff absences. Criticisms that financial support is difficult to access.	NEU member survey shows lack of trust in government to keep schools safe
19/4/2020	Sun	Education Secretary's statement on coronavirus (COVID-19)	Gavin Williamson on the government's response to the outbreak of coronavirus and support for disadvantaged pupils on remote learning.		No	N/A	Gavin Williamson on the government's response to the outbreak of coronavirus and support for disadvantaged pupils on remote learning.		ASCL comment on extra support for schools
19/4/2020	Sun	New major package to support online learning	Gavin Williamson announces free laptops for vulnerable and disadvantaged students.		Yes, 21 May & 16 July	418	Gavin Williamson announces free laptops for vulnerable and disadvantaged students.		
19/4/2020	Sun	Help children aged 2 to 4 to learn at home during coronavirus (COVID-19) (Updated from April 19)	Advice for parents and carers of early years children who have not yet started school.		Yes, 28 May, 16 July		Advice for parents and carers of early years children who have not yet started school.		

19/4/2020	Sun	Supporting your children's education during coronavirus (COVID-19)	Information, guidance and support for parents and carers of children who are learning at home.		Yes, 21 May, 16 July		Information, guidance and support for parents and carers of children who are learning at home.		
19/4/2020	Sun	Get help with technology during coronavirus (COVID-19)	Guidance for local authorities, academy trusts and schools on devices and support available to provide remote education and access to children's social care.		Yes, see link	1089	Guidance for local authorities, academy trusts and schools on devices and support available to provide remote education and access to children's social care.		
20/4/2020	Mon	Coronavirus (COVID-19): reducing burdens on educational and care settings	List of data collections, services or requests which will be cancelled, paused or will continue.		Yes, see link		List of data collections, services or requests which will be cancelled, paused or will continue.		
21/4/2020	Tues	Attendance in education and early years settings during the coronavirus outbreak: 23 March to 11 June 2020 (Updated from April 21 2020)	A summary of attendance in education settings up to 11 June 2020. From 23 June this information was published as official statistics.		Yes, see link		A summary of attendance in education settings up to 11 June 2020. From 23 June this information was published as official statistics.		
22/4/2020	Wed	Launch of Oak National academy	Oak National Academy launched this week.		No		Oak National Academy launched this week.		
24/4/2020	Fri	Changes to the admission appeals regulations during the coronavirus outbreak	Explains the temporary changes to the School Admission Appeal Regulations 2012 and provides guidance for managing appeals during the coronavirus (Covid-19) outbreak.		Yes, original date not specified		Explains the temporary changes to the School Admission Appeal Regulations 2012 and provides guidance for managing appeals during the coronavirus (Covid-19) outbreak.		

24/4/2020	Fri	Early years foundation stage: coronavirus disapplications			Yes, 26 September	4492			
24/4/2020	Fri	Schools to benefit from education partnership with tech giants	Thousands of schools to receive technical support to start using Google and Microsoft's education platforms.		No		Thousands of schools to receive technical support to start using Google and Microsoft's education platforms.		
24/4/2020	Fri	Get help with remote education	Information, guidance and support for teachers and leaders on educating children during the coronavirus outbreak.		Yes, see link		Information, guidance and support for teachers and leaders on educating children during the coronavirus outbreak.		
28/4/2020	Tues	New free online learning platform to boost workplace skills	Online platform 'The Skills Toolkit' to help people build their skills during the coronavirus outbreak and beyond.		No		Online platform 'The Skills Toolkit' to help people build their skills during the coronavirus outbreak and beyond.		
28/4/2020	Tues	Use of free early education entitlements funding during the coronavirus (COVID-19) outbreak	Funding for local authorities and early years providers through the early years dedicated schools grant (DSG) in the summer and autumn term 2020.		Yes, 20 July		Funding for local authorities and early years providers through the early years dedicated schools grant (DSG) in the summer and autumn term 2020.		
30/4/2020	Thu	Disapplication notice: school inspections legislation changes	Secretary of State for Education issues a seventh notice about changes to state-funded school inspections requirements during the coronavirus (Covid-19) outbreak.		Yes, see link		Secretary of State for Education issues a seventh notice about changes to state-funded school inspections requirements during the coronavirus (Covid-19) outbreak.		

30/4/2020	Thu	Modification notice: school registration legislation changes	Secretary of State for Education issues a seventh notice to modify pupil registration requirements for temporary pupils during the coronavirus (Covid-19) outbreak.		Yes, see link		Secretary of State for Education issues a seventh notice to modify pupil registration requirements for temporary pupils during the coronavirus (Covid-19) outbreak.		
30/4/2020	Thu	School attendance: guidance for schools	Covers registers and attendance codes (including circumstances due to coronavirus (Covid-19)), school hours and term dates, and improving school attendance.		Yes, 29 May, 6 August, 1 September	3 Documents: 6051, 1867, 2803	Covers registers and attendance codes (including circumstances due to coronavirus (Covid-19)), school hours and term dates, and improving school attendance.		
1/5/2020	Fri	Adapting teaching practice for remote education	Schools have been using various methods to adapt teaching practice for remote education to best meet the needs of pupils.		Yes, 21 May		Schools have been using various methods to adapt teaching practice for remote education to best meet the needs of pupils.		
2/5/2020	Sat	Emergency funding to support most vulnerable in society during pandemic	Communities Secretary announced £76 million additional funding to support survivors of domestic abuse, sexual violence and vulnerable children and their families and victims of modern slavery.		No	N/A	Communities Secretary announced £76 million additional funding to support survivors of domestic abuse, sexual violence and vulnerable children and their families and victims of modern slavery.		

4/5/2020	Mon	<u>Government support package for universities and students</u>	The government announced a range of measures to protect students and HE from the impact of coronavirus (Covid-19).		No		The government announced a range of measures to protect students and HE from the impact of coronavirus (Covid-19).		
5/5/2020	Tues	<u>Eligibility for government childcare offers protected</u>	Temporary measures to ensure critical workers will continue to be eligible for childcare offers if income changed due to pandemic.		No		Temporary measures to ensure critical workers will continue to be eligible for childcare offers if income changed due to pandemic.		
5/5/2020	Tues	<u>Adapting the curriculum for remote education</u>	Schools have been using various methods to adapt the curriculum for remote education to best meet the needs of pupils.		No		Schools have been using various methods to adapt the curriculum for remote education to best meet the needs of pupils.		
5/5/2020	Tues	<u>Keeping pupils motivated and engaged</u>	Schools are using various methods to keep pupils interested and motivated when learning remotely.		No		Schools are using various methods to keep pupils interested and motivated when learning remotely.		
5/5/2020	Tues	<u>Examples of supporting staff in curriculum planning. (Updated from May 5)</u>	An opportunity for schools to learn from each other's emerging practice as they develop their approaches to providing remote education.		Yes, 12 June		An opportunity for schools to learn from each other's emerging practice as they develop their approaches to providing remote education.		

11/5/2020	Mon	Details on phased wider opening of schools, colleges and nurseries	Schools, colleges and nurseries to begin to prepare to open to more young people from 1 June at the earliest, with protective measures in place.	Joint union produced alternative guidance for phased returns. Concerns that it is not clear how primary school children can remain effectively distanced.	Yes, 12 May, 1 June & 16 June	2 Documents: 5693, 1668	Schools, colleges and nurseries to begin to prepare to open to more young people from 1 June at the earliest, with protective measures in place.	Joint union produced alternative guidance for phased returns. Concerns that it is not clear how primary school children can remain effectively distanced.	ASCL comment on the reopening of schools
12/5/2020	Tues	Coronavirus (COVID-19): safer travel guidance for passengers	Walking, cycling, and travelling in vehicles or on public transport during the coronavirus outbreak.		Yes, see link		Walking, cycling, and travelling in vehicles or on public transport during the coronavirus outbreak.		
14/5/2020	Thu	Safe working in education, childcare and children's social care (Update from May 14)	Preventing and controlling infection, including the use of PPE, in education, childcare and children's social care settings during the coronavirus outbreak.	Mandated requirements for social distancing and mask wearing are not feasible and, as a result, are not being followed.	Yes, see link	6482	Preventing and controlling infection, including the use of PPE, in education, childcare and children's social care settings during the coronavirus outbreak.	Mandated requirements for social distancing and mask wearing are not feasible and, as a result, are not being followed.	Government failing on promise that schools would be Covid secure
16/5/2020	Sat	Education Secretary's statement on coronavirus (COVID-19)	Gavin Williamson on the government's response to the outbreak of coronavirus and plans to begin returning to school safely.		No		Gavin Williamson on the government's response to the outbreak of coronavirus and plans to begin returning to school safely.		
19/5/2020	Tues	£37 million to support children with complex needs	A multi-million-pound settlement will help low-income families with seriously ill or disabled children with the cost of equipment, goods or services.		No		A multi-million-pound settlement will help low-income families with seriously ill or disabled children with the cost of equipment, goods or services.		

19/5/2020	Tues	Safeguarding and remote education during coronavirus (COVID-19)	Guidance on how to follow safeguarding procedures when planning remote education strategies and teaching remotely during the coronavirus (Covid-19) outbreak.		Yes, 21 May, 6 October	1398	Guidance on how to follow safeguarding procedures when planning remote education strategies and teaching remotely during the coronavirus (Covid-19) outbreak.		
21/5/2020	Thu	School reports on pupil performance: guide for headteachers	Guidance for schools on writing statutory end of year reports for parents.		Yes, 18 June	1051	Guidance for schools on writing statutory end of year reports for parents.		
22/5/2020	Fri	Responsibility for autumn exams	Guidance for schools and colleges on who should enter students for autumn exams, the health arrangements for exams and the support DfE is providing.		Yes, see link	3 Documents: 2036, 4142, 2778	Guidance for schools and colleges on who should enter students for autumn exams, the health arrangements for exams and the support DfE is providing.		
24/5/2020	Sun	PM confirms schools, colleges and nurseries on track to begin phased reopening	From 1 June schools, colleges and nurseries are set to open to more children.		No		From 1 June schools, colleges and nurseries are set to open to more children.		
1/6/2020	Mon	Reception, Y1 and Y6 to return to school			No	N/A			
7/6/2020	Sun	Extra mental health support for pupils and teachers	Online resources and charity grants to help schools and colleges respond to the impact of coronavirus on mental health and wellbeing.		Yes, 10 June	781	Online resources and charity grants to help schools and colleges respond to the impact of coronavirus on mental health and wellbeing.		

9/6/2020	Tues	Coronavirus: Plan dropped for all primary pupils back in school	UK government drops aim for all primary school students to return before the end of the summer term.	ASCL notes that this was never a realistic aim.	No		UK government drops aim for all primary school students to return before the end of the summer term.	ASCL notes that this was never a realistic aim.	ASCL comment on plans being dropped to bring back all primary years
12/6/2020	Fri	Pastoral care in the curriculum	How schools can provide additional emotional and pastoral support for pupils when they return to school following the coronavirus (Covid-19) outbreak.		No		How schools can provide additional emotional and pastoral support for pupils when they return to school following the coronavirus (Covid-19) outbreak.		
12/6/2020	Fri	Identifying and addressing gaps in pupils' understanding	How schools can find out how much pupils know, and do not know, after a long period of remote education due the coronavirus (Covid-19) outbreak.		No	611	How schools can find out how much pupils know, and do not know, after a long period of remote education due the coronavirus (Covid-19) outbreak.		
12/6/2020	Fri	Planning a curriculum to teach at school and at home	Deciding what to teach during a phased return.		No		Deciding what to teach during a phased return.		
12/6/2020	Fri	Supporting staff in curriculum planning for a phased return	Examples of supporting staff in curriculum planning.		No		Examples of supporting staff in curriculum planning.		
12/6/2020	Fri	Making the most of reduced classroom time	Deciding what to teach in the classroom and what to teach at home.		No		Deciding what to teach in the classroom and what to teach at home.		
15/6/2020	Mon	Year 10, 12 and equivalent 16-19 FE students to receive f2f contact			No				

15/6/2020	Mon	Primary schools to be given flexibility to bring back more pupils	Headteachers are being encouraged to invite back more primary pupils before the summer, where they have capacity to do so.	Concerns that these changes do not compensate for the lack of a long-term plan agreed in collaboration with education professionals.	No		Headteachers are being encouraged to invite back more primary pupils before the summer, where they have capacity to do so.	Concerns that these changes do not compensate for the lack of a long-term plan agreed in collaboration with education professionals.	ASCL comment on flexibility for primary schools to bring back more pupils
16/6/2020	Tues	Laptops, tablets and 4G wireless routers progress data	Information about how many laptops, tablets and 4G wireless routers we have delivered or dispatched to local authorities and academy trusts.		Yes, 1 July, 27 August, 23 October		Information about how many laptops, tablets and 4G wireless routers we have delivered or dispatched to local authorities and academy trusts.		
17/6/2020	Wed	Early years and childcare: coronavirus (COVID-19)	What early years providers need to do during the coronavirus (Covid-19) outbreak.			Provides links to several pieces of guidance (all of which are referenced individually in this document).	What early years providers need to do during the coronavirus (Covid-19) outbreak.		
17/6/2020	Wed	Local authority children's services: coronavirus (COVID-19)	What local authority children's services need to do during the coronavirus (Covid-19) outbreak.		Yes, 2 July	Provides links to several pieces of guidance (all of which are referenced individually in this document).	What local authority children's services need to do during the coronavirus (Covid-19) outbreak.		
17/6/2020	Wed	Attendance in education and early years settings during the coronavirus (COVID-19) outbreak – 23 March to 23 July 2020	A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April.		Yes, 17 July		A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April.		

17/6/2020	Wed	Further and higher education: coronavirus (COVID-19) (Updated from June 17)	What colleges and universities and other providers need to do during the coronavirus (Covid-19) outbreak.		Yes, see link	Provides links to several pieces of guidance (all of which are referenced individually in this document).	What colleges and universities and other providers need to do during the coronavirus (Covid-19) outbreak.		
17/6/2020	Wed	Guidance for schools: coronavirus (COVID-19) (Updated from June 17)	What school leaders, teachers and school staff need to do during the coronavirus (Covid-19) outbreak.		Yes, see link		What school leaders, teachers and school staff need to do during the coronavirus (Covid-19) outbreak.		
18/6/2020	Thu	What parents and carers need to know about early years providers, schools and colleges during the coronavirus (COVID-19) outbreak (Updated from June 18)	Information for parents and carers about going back to schools, nurseries and colleges in the autumn term.		Yes, see link		Information for parents and carers about going back to schools, nurseries and colleges in the autumn term.		
19/6/2020	Fri	Billion-pound Covid catch-up plan to tackle impact of lost teaching time	New measures to help primary and secondary pupils catch up.	Concerns that this does not cover early years children.	No		New measures to help primary and secondary pupils catch up.	Concerns that this does not cover early years children.	The government announces £1 billion investment to support schools over the next two years
22/6/2020	Mon	Thousands of children to benefit from free meals and activities	Thousands of children in England to benefit from free meals and activities during summer 2020.		No		Thousands of children in England to benefit from free meals and activities during summer 2020.		
22/6/2020	Mon	Education Secretary's statement on coronavirus (COVID-19)	Gavin Williamson on the government's £1 billion Covid catch-up plan to tackle impact of lost teaching time.	Plans are welcomed, but criticisms present that unions were not consulted.	No		Gavin Williamson on the government's £1 billion Covid catch-up plan to tackle impact of lost teaching time.	Plans are welcomed, but criticisms present that unions were not consulted.	ASCL responds to one billion pound catch-up plan

23/6/2020	Tues	Attendance in education and early years settings during the coronavirus (COVID-19) outbreak: 23 March to 18 June 2020	A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April.		No		A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April.		
24/6/2020	Wed	Protective measures in primary schools	Guidance noting that primary pupils do not need to socially distance, claims that this has always been the case.	Complaints that this is in direct contradiction to previous guidance. Concerns that relaxing of 2m rule will not function to allow schools to return effectively in September.	Update to blog posted on 12 June		Guidance noting that primary pupils do not need to socially distance, claims that this has always been the case.	Complaints that this is in direct contradiction to previous guidance. Concerns that relaxing of 2m rule will not function to allow schools to return effectively in September.	Tweet from Kit Andrew: DfE Rewriting History over Claims that Schools have Never Needed to Keep Pupils 2m Apart; DfE 'disingenuous' over distancing confusion. say heads: ASCL comment on relaxation of social distancing rule
25/6/2020	Thu	Coronavirus (COVID-19): Keeping children safe from abuse and harm	Advice for parents and carers about the main risks children may be particularly vulnerable to at this time and information about available help and support.		No	2456	Advice for parents and carers about the main risks children may be particularly vulnerable to at this time and information about available help and support.		
25/6/2020	Thu	Coronavirus (COVID-19) Summer Food Fund	Guidance for schools and local authorities on providing vouchers to support pupils eligible for free school meals over the summer holiday period during the coronavirus (Covid-19) outbreak.		Yes, 30 June, 13 July		Guidance for schools and local authorities on providing vouchers to support pupils eligible for free school meals over the summer holiday period during the coronavirus (Covid-19) outbreak.		

30/6/2020	Tues	Attendance in education and early years settings during the coronavirus (COVID-19) outbreak: 23 March to 25 June 2020	A summary of attendance in education settings since Monday 23 March and early years settings since Thursday, 16 April.		No	2 Documents: 4934, 467	A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April.		
1/7/2020	Wed	Guidance for full opening: schools	What all schools will need to do during the coronavirus (Covid-19) outbreak from the start of the autumn term.	Concerns that measures in place are not sufficient to protect staff and students. Concerns that the measures are not logistically feasible.	Yes, dates of updates not specified	25,173	What all schools will need to do during the coronavirus (Covid-19) outbreak from the start of the autumn term.	Concerns that measures in place are not sufficient to protect staff and students. Concerns that the measures are not logistically feasible.	Coronavirus: medically vulnerable and higher risk groups - joint unions advice (NEU); Schools must have safety measures in place prior to return of pupils to school; The government's plan for a full return to schools in September.
1/7/2020	Wed	Protective measures for holiday or after-school clubs and other out-of-school settings for children during the coronavirus (COVID-19) outbreak	Protective measures for providers of community activities, holiday or after-school clubs, tuition and other out-of-school settings offering provision to children during the coronavirus (Covid-19) outbreak.		Yes, see link		Protective measures for providers of community activities, holiday or after-school clubs, tuition and other out-of-school settings offering provision to children during the coronavirus (Covid-19) outbreak.		
1/7/2020	Wed	Guidance for parents and carers of children attending out-of-school settings during the coronavirus (COVID-19) outbreak	Guidance for parents and carers of children attending community activities, holiday or after-school clubs, tuition and other out-of-school settings.		Yes, see link		Guidance for parents and carers of children attending community activities, holiday or after-school clubs, tuition and other out-of-school settings.		

2/7/2020	Thu	Arrangements for examinations and assessments in 2020/21	Letter from the Secretary of State for Education to Sally Collier, Chief Regulator, Ofqual on policy objectives related to exams and assessments in 2020/21.	Concerns that not enough is being done to plan for exams in 2021.	No	1277	Letter from the Secretary of State for Education to Sally Collier, Chief Regulator, Ofqual on policy objectives related to exams and assessments in 2020/21.	Concerns that not enough is being done to plan for exams in 2021.	Ministers can't muddle their way through to summer 2021 exams.
2/7/2020	Thu	Schools and colleges to reopen in full in September	Detailed plans have been unveiled for all children and young people to return to full-time education from September.		No		Detailed plans have been unveiled for all children and young people to return to full-time education from September.		
2/7/2020	Thu	Guidance for full opening: special schools and other specialist settings	What all special schools and other specialist settings will need to do during the coronavirus (Covid-19) outbreak from the start of the autumn term to support the return of children and young people with special education needs and disability (SEND).	Concerns that there is not enough specialised guidance for the safe reopening of special schools.	Yes, see link	28,879	What all special schools and other specialist settings will need to do during the coronavirus (Covid-19) outbreak from the start of the autumn term to support the return of children and young people with special education needs and disability (SEND).	Concerns that there is not enough specialised guidance for the safe reopening of special schools.	Has anyone thought about Covid and special schools?
2/7/2020	Thu	Actions for schools during the coronavirus outbreak	What all schools will need to do during the coronavirus (Covid-19) outbreak from the start of the autumn term.		Yes, see link		What all schools will need to do during the coronavirus (Covid-19) outbreak from the start of the autumn term.	Concerns that it will be 'enormously challenging' to enforce bubbles.	ASCL responds to guidance on full reopening of schools

3/7/2020	Fri	Thousands of children offered nutritious breakfasts during summer	Children from more than 1800 schools in England who are currently part of our Breakfast Clubs programme will now be offered healthy breakfasts over the summer.		No		Children from more than 1800 schools in England who are currently part of our Breakfast Clubs programme will now be offered healthy breakfasts over the summer.		
3/7/2020	Fri	Education Secretary's statement on coronavirus (COVID-19)	Education Secretary on the government's plans for all pupils to return to schools, colleges, nurseries and other education settings in September.		No		Education Secretary on the government's plans for all pupils to return to schools, colleges, nurseries and other education settings in September.		
5/7/2020	Sun	PE and Sport Premium for schools confirmed	Education Secretary confirms £320 million for PE & Sport Premium for the next academic year.		No		Education Secretary confirms £320 million for PE & Sport Premium for the next academic year.		
7/7/2020	Tues	Attendance in education and early years settings during the coronavirus (COVID-19) outbreak: 23 March to 2 July 2020	A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April.		No		A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April.		
14/7/2020	Tues	Attendance in education and early years settings during the coronavirus (COVID-19) outbreak: 23 March to 9 July 2020	A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April.		No		A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April.		

16/7/2020	Thu	10 top tips for parents to support children to read	Short tips for parents of primary-aged children to make reading enjoyable during the coronavirus (Covid-19) outbreak.		No		Short tips for parents of primary-aged children to make reading enjoyable during the coronavirus (Covid-19) outbreak.		
17/7/2020	Fri	Opportunity Areas programme to support young people hit hardest by pandemic	Place-based approach will help level up outcomes in employment and education to support recovery from the pandemic.		No		Place-based approach will help level up outcomes in employment and education to support recovery from the pandemic.		
21/7/2020	Tues	Attendance in education and early years settings during the coronavirus (COVID-19) outbreak: 23 March to 17 July 2020	A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April.		No		A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April.		
24/7/2020	Fri	Coronavirus (COVID-19): assessment processes for selective school admissions	Guidance on entry testing for admission to state-funded selective schools during the coronavirus (Covid-19) outbreak.		No		Guidance on entry testing for admission to state-funded selective schools during the coronavirus (Covid-19) outbreak.		
24/7/2020	Fri	Coronavirus (COVID-19): changes to faith school admission arrangements	Guidance on changes to faith oversubscription criteria in faith school admission arrangements which have been affected by the coronavirus (Covid-19) outbreak.		No		Guidance on changes to faith oversubscription criteria in faith school admission arrangements which have been affected by the coronavirus (Covid-19) outbreak.		

31/7/2020	Fri	Buying for schools during the coronavirus (COVID-19) outbreak (Updated from February 2)	Information for buyers in schools and those who manage supplier contracts, including procurement policy notes (PPN), free school meals, personal protective equipment (PPE) and temporary staff.		Updated 20 Feb, before update on 31 July		Information for buyers in schools and those who manage supplier contracts, including procurement policy notes (PPN), free school meals, personal protective equipment (PPE) and temporary staff.		
31/7/2020	Fri	Reopening schools in September a 'priority' – but other things may have to close for it to happen. hints Chris Whitty		Concerns that there is no comment about a 'Plan B' in the case of increasing infection rates/ lockdown.	No			Concerns that there is no comment about a 'Plan B' in the case of increasing infection rates/ lockdown.	ASCL responds to Prime Minister's comment on school reopening.
4/8/2020	Tues	Attendance in education and early years settings during the coronavirus (COVID-19) outbreak: 23 March to 30 July 2020	A summary of attendance in education settings from Monday, 23 March to Friday, 17 July and early years settings from Thursday, 16 April to Thursday, 30 July.		No		A summary of attendance in education settings from Monday, 23 March to Friday, 17 July and early years settings from Thursday, 16 April to Thursday, 30 July.		
5/8/2020	Wed	Support for working families affected by coronavirus (COVID-19) given an extra boost	Families that benefit from government-funded childcare support given a boost from a government announcement that they would not lose out due to coronavirus (Covid-19).		No		Families that benefit from government-funded childcare support given a boost from a government announcement that they would not lose out due to coronavirus (Covid-19).		

7/8/2020	Fri	<u>Laptops, tablets and 4G wireless routers provided during coronavirus (COVID-19) (Updated from August Z)</u>	Guidance for local authorities, academy trusts and schools on managing Department for Education (DfE) devices provided for children, families and young adults most in need.		Yes, 1 October, 20 November		Guidance for local authorities, academy trusts and schools on managing Department for Education (DfE) devices provided for children, families and young adults most in need.		
7/8/2020	Fri	<u>Get laptops and tablets for children who cannot attend school due to coronavirus (COVID-19)</u>	How schools, colleges, academy trusts and local authorities can access digital devices for children who are learning remotely.		Yes, 4 September, 1 October	1346	How schools, colleges, academy trusts and local authorities can access digital devices for children who are learning remotely.		
11/8/2020	Tues	<u>Government urges universities to hold places</u>	The Universities Minister has written to all Vice-Chancellors asking them to hold places for students appealing their A-level results.		No		The Universities Minister has written to all Vice-Chancellors asking them to hold places for students appealing their A-level results.		
13/8/2020	Thu	<u>On A-level results day teachers have almost 40% of their A-level assessments downgraded due to an algorithm that used schools' past performances to help determine their students' grades</u>							

18/8/2020	Tues	<u>Attendance in education and early years settings during the coronavirus (COVID-19) outbreak: 23 March to 13 August 2020</u>	A summary of attendance in education settings from Monday, 23 March to Friday, 17 July and early years settings from Thursday, 16 April to Thursday, 12 August.		No		A summary of attendance in education settings from Monday, 23 March to Friday, 17 July and early years settings from Thursday, 16 April to Thursday, 12 August.		
24/8/2020	Mon	<u>Early years support package to help close Covid language gap</u>	Targeted funding for Reception pupils to help schools boost early language skills.		No		Targeted funding for Reception pupils to help schools boost early language skills.		
25/8/2020	Tues	Johnson makes a last-minute U-turn on the wearing of masks in secondary schools, saying the government will no longer advise against their use. Instead, it will be left at the head-teacher's discretion. For staff and pupils in local lock-down areas, they will be mandatory in corridors.							
25/8/2020	Tues	<u>£8m programme to boost pupil and teacher wellbeing.</u>	Ahead of the full return to education in September, a new training scheme was launched to improve wellbeing and mental health support in schools and colleges.		No		Ahead of the full return to education in September, a new training scheme was launched to improve wellbeing and mental health support in schools and colleges.		

25/8/2020	Tues	Update on face coverings in schools	A Department for Education update on advice on face coverings in schools. Also, on August 26. https://www.gov.uk/government/publications/face-coverings-in-education	Concerns that the government is not following scientific advice in relation to the use of face masks in schools. Concerns that leaving the decision on the use of coverings to school leaders is inappropriate. Criticisms that this is not full guidance.	No	N/A	A Department for Education update on advice on face coverings in schools. Also, on August 26. https://www.gov.uk/government/publications/face-coverings-in-education	Concerns that the government is not following scientific advice in relation to the use of face masks in schools. Concerns that leaving the decision on the use of coverings to school leaders is inappropriate. Criticisms that this is not full guidance.	NASUWT union responds to advice on face masks: Changes to face coverings guidance: ASCL response to updated advice on face coverings.
26/8/2020	Wed	Education, health and care needs assessments and plans: guidance on temporary legislative changes relating to coronavirus (COVID-19)	Explanation on temporary legislative changes relating to Education, Health and Care needs assessments.		Yes, original date not specified		Explanation on temporary legislative changes relating to Education, Health and Care needs assessments.		
26/8/2020	Wed	Vulnerable children and young people survey	Summary of local authority survey in England to help understand the impact of the coronavirus (Covid-19) outbreak on children's social care.		Yes, 16 September, 14 October, 11 November		Summary of local authority survey in England to help understand the impact of the coronavirus (Covid-19) outbreak on children's social care.		
26/8/2020	Wed	Coronavirus (COVID-19): test kits for schools and FE providers	Guidance for schools and further education (FE) providers on the initial supply of coronavirus (Covid-19) home testing kits for pupils, teachers and staff.	Reports that teaching professionals are finding it very difficult to access Covid-19 tests, and that this is resulting in school closures in some cases.	Yes, see link		Guidance for schools and further education (FE) providers on the initial supply of coronavirus (Covid-19) home testing kits for pupils, teachers and staff.	Reports that teaching professionals are finding it very difficult to access coronavirus (Covid-19) tests, and that this is resulting in school closures in some cases.	Near breaking point: headteachers worn down by 'non-stop Covid crisis': NEU member survey shows lack of trust in government to keep schools safe; PM failure to address school safety (NEU); ASCL comment on drop in fully open secondaries.

28/8/2020	Fri	Attendance in education and early years settings during the coronavirus (COVID-19) outbreak – 23 March to 8 October 2020	A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April.		No		A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April.		
28/8/2020	Fri	How schools can plan for tier 2 local restrictions	Guidance for decision-makers at mainstream schools with secondary year groups, to help them plan a tier 2 rota model if required.	Criticisms that measures taken in the case of local lockdowns will elicit costs that the government must provide support for.	No	4487	Guidance for decision-makers at mainstream schools with secondary year groups, to help them plan a tier 2 rota model if required.	Criticisms that measures taken in the case of local lockdowns will elicit costs that the government must provide support for.	Govt must provide resources to maintain education in event of future lockdowns.
28/8/2020	Fri	All possible measures to be taken before schools and colleges close	New contingency planning guidance published for education settings in local lockdown areas.	Criticisms of timing of announcement on a Friday night, giving leaders insufficient time to incorporate guidance.	Yes, 28 August		New contingency planning guidance published for education settings in local lockdown areas.	Criticisms of timing of announcement on a Friday night, giving leaders insufficient time to incorporate guidance.	ASCL comment on lockdown contingency planning
1/9/2020	Tues	Pupils start returning to schools in England	Schools and colleges across England start to welcome back pupils with protective measures in place to help keep young people and staff safe.		No		Schools and colleges across England start to welcome back pupils with protective measures in place to help keep young people and staff safe.		
1/9/2020	Tues	Attendance in education and early years settings during the coronavirus (COVID-19) outbreak: 23 March to 27 August 2020	A summary of attendance in education settings from Monday, 23 March to Friday, 17 July and early years settings from Thursday, 16 April to Thursday, 27 August.		No		A summary of attendance in education settings from Monday, 23 March to Friday, 17 July and early years settings from Thursday, 16 April to Thursday, 27 August.		

2/9/2020	Wed	Ofsted Visits to Schools and Colleges to Begin this Month	Press release indicating that Ofsted will be undertaking 'visits' to schools during the autumn term.	Union criticisms that visits are in fact inspections, and should be voluntary given the pressures caused by Covid-19.	N/A	N/A	Press release indicating that Ofsted will be undertaking 'visits' to schools during the autumn term.	Union criticisms that visits are in fact inspections, and should be voluntary given the pressures caused by Covid-19.	NAHT Legal Challenge: Ofsted Forced to confirm 'visits' are actually inspections: NAHT, NGA and ASCL call on Amanda Spielman to reconsider Ofsted's proposals for autumn term visits
2/9/2020	Wed	Coronavirus (COVID-19): guidance for boarding schools with international students	Guidance for residential educational settings with international students under the age of 18 entering and travelling to the UK.		Yes, 6 November		Guidance for residential educational settings with international students under the age of 18 entering and travelling to the UK.		
4/9/2020	Fri	Coronavirus transmission in schools: your questions answered	DfE blog post responding to FAQs concerning coronavirus (Covid-19) transmission when students return, includes assertion that schools will need to provide immediate remote learning in the case of a local outbreak - this point was expanded upon on 1 October.	Complaints that the blog's assertion that schools will need to provide immediate remote learning in the case of an outbreak is unrealistic.	No		DfE blog post responding to FAQs concerning coronavirus (Covid-19) transmission when students return, includes assertion that schools will need to provide immediate remote learning in the case of a local outbreak - this point was expanded upon on 1 October.	Complaints that the blogs assertion that schools will need to provide immediate remote learning in the case of an outbreak is unrealistic.	Tweet commenting on DfE remote learning expectations
9/9/2020	Wed	Educational psychologists: support for coronavirus (COVID-19) recovery (Updated from September 9)	The Department for Education wants to build temporary educational psychologist capacity in England to support schools and colleges returning in September.		Yes, 14 September		The Department for Education wants to build temporary educational psychologist capacity in England to support schools and colleges returning in September.		

15/9/2020	Tues	Attendance in education and early years settings during the coronavirus (COVID-19) outbreak: 23 March to 10 September 2020	A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April 2020.		No		A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April 2020.		
15/9/2020	Tues	99.9 per cent of schools open for start of autumn term	New official figures show almost every school in England has opened for the start of the autumn term, following months of hard work and dedication from staff.		No		New official figures show almost every school in England has opened for the start of the autumn term, following months of hard work and dedication from staff.		
18/9/2020	Fri	School Governance Update	Important news and communications from the Department for Education (DfE) relating to governance in maintained schools and academy trusts in England.		Yes, see link		Important news and communications from the Department for Education (DfE) relating to governance in maintained schools and academy trusts in England.		
22/9/2020	Tues	Attendance in education and early years settings during the coronavirus (COVID-19) outbreak: 23 March to 17 September 2020	A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April 2020.		No	2 Documents: 4299, 553	A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April 2020.		
22/9/2020	Tues	Use of the NHS coronavirus (COVID-19) app in schools and further education colleges	Actions for schools and further education colleges when using the NHS coronavirus (Covid-19) app in education settings.		Yes, 22 September	3502	Actions for schools and further education colleges when using the NHS coronavirus (Covid-19) app in education settings.		

22/9/2020	Tues	Coronavirus (COVID-19) catch-up premium (Updated from July 20)	What school leaders need to know about the catch-up premium and the National Tutoring Programme, including funding amounts and how funding should be spent.	Concerns that funding for catch-up support will be wiped out by the cost of coronavirus (Covid-19) ovid safety measures.	No updates specified		What school leaders need to know about the catch-up premium and the National Tutoring Programme, including funding amounts and how funding should be spent.	Concerns that funding for catch-up support will be wiped out by the cost of coronavirus (Covid-19) safety measures	School catch-up funding will be wiped out by coronavirus (COVID-19) safety measures
23/9/2020	Wed	Gavin Williamson on why getting pupils back to school is more important than ever	Gavin Williamson comments on A-level/ GCSE results in 2020 and the importance of children physically returning to school.	Criticism of lack of commentary on how examinations would work in 2021.			Gavin Williamson comments on A-level/ GCSE results in 2020 and the importance of children physically returning to school.	Criticism of lack of commentary on how examinations would work in 2021.	ASCL comment on Education Secretary's statement
24/9/2020	Thu	Parental responsibility measures attendance census	How local authorities should collect and submit data for the annual attendance measures census.		Yes, 24 September		How local authorities should collect and submit data for the annual attendance measures census.		
25/9/2020	Fri	Remote education webinars	How to access school-led webinars on remote education to help share good practice.		Yes, see link		How to access school-led webinars on remote education to help share good practice.		
29/9/2020	Tues	Attendance in education and early years settings during the coronavirus (COVID-19) outbreak: 23 March to 24 September 2020	A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April 2020.				A summary of attendance in education settings since Monday, 23 March and early years settings since Thursday, 16 April 2020.		
29/9/2020	Tues	Return of students to universities statement	Secretary of State Gavin Williamson addresses the House.		N/A	N/A	Secretary of State Gavin Williamson addresses the House.		

29/9/2020	Tues	Department for Education officials announcing that England will not participate in the mini Teaching And Learning International Survey (TALIS) 2022, core survey of ISCED 2 or the optional surveys, in 2024.		Complaints that key stakeholders were not considered in this decision, and that TALIS provides a unique opportunity to compare England to other jurisdictions.				Complaints that key stakeholders were not considered in this decision, and that TALIS provides a unique opportunity to compare England to other jurisdictions.	NAHT writes to Nick Gibb urging him not to withdraw from TALIS
1/10/2020	Thu	Remote Education Temporary Continuity Direction: explanatory note	Remote Education Temporary Continuity Direction: explanatory note	Various complaints that the requirement for the provision of remote education alongside f2f lessons are unrealistic.	No		Remote Education Temporary Continuity Direction: explanatory note	Various complaints that the requirement for the provision of remote education alongside f2f lessons are unrealistic.	Tweet on The Coronavirus Act 2020 Provision of Remote Education (England) Temporary Continuity Direction Explanatory Note: Remote education measures are confusing and a burden on schools: Tweet on DfE Workload Management Toolkit: Near breaking point: head-teachers worn down by 'non-stop Covid crisis'.
1/10/2020	Thu	Remote education good practice	Good practice to support school leaders in developing their remote education contingency plans.		Yes, 27 October		Good practice to support school leaders in developing their remote education contingency plans.		

1/10/2020	Thu	New remote education support for schools, colleges and teachers	Extra resources announced to support delivery of remote education, including 100,000 additional devices and increased peer to peer support for teachers.				Extra resources announced to support delivery of remote education, including 100,000 additional devices and increased peer to peer support for teachers.		
5/10/2020	Mon	Changes to the school exclusion process during the coronavirus (COVID-19) outbreak	Description of temporary changes made to the school exclusion process.		Yes, original publication date not specified		Description of temporary changes made to the school exclusion process.		
23/10/2020	Fri	Help with accessing and buying resources for remote education	Information for schools and school buying professionals on sourcing educational resources during the coronavirus (Covid-19) outbreak.		No		Information for schools and school buying professionals on sourcing educational resources during the coronavirus (Covid-19) outbreak.		
26/10/2020	Mon	Further education (FE) operational guidance			Yes - original publication date not specified.				



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