

# EdTech Demonstrator Programme (Phase 2 – 2021 to 2022) Evaluation

**Research report** 

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Authors: ImpactEd Ltd.



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## **Executive summary**

The Department for Education (DfE) launched the EdTech Demonstrator Programme in April 2020. It went into its second phase in May 2021. The second phase was run in partnership with United Learning and focused on bridging the gap from crisis response (at the start of the COVID-19 pandemic) to support the sustained use of technology in schools and colleges.

The support provided in the second phase focused on five outcome areas: improving pupil/student outcomes, reducing teacher workload, supporting school and college improvement plans, helping schools and colleges manage their resources and securing an accessible and inclusive curriculum (see table on the following page for more details). This support was offered at three levels: short term (6 hours of training), medium term (15 hours of training) and long term (30 hours of training).

In order to assess the impact of the second phase of the programme, the DfE partnered with ImpactEd. ImpactEd designed an evaluation approach that combined a pre-test post-test design with qualitative research. The survey designed for the evaluation used validated questions from the DfE's EdTech Landscape survey (run nationally in March 2020) and was designed around the five outcome areas of the programme. We prioritised using measures from the EdTech Landscape survey where possible so that: 1) robust measures were in place and 2) we would be able to compare results from the EdTech Demonstrator participants at baseline to the national picture. The survey tool is referred to as a 'diagnostic tool' as supported schools and colleges were supposed to use the results with their Demonstrators to plan for support.

All schools and colleges receiving support on the EdTech Demonstrator Programme were asked to complete the survey at the start and at the end of receiving support (referred to as baseline and end line surveys in this report). Schools and colleges who started receiving support before the survey tool was released in July 2021 were only asked to complete end line surveys.

This report presents findings from 141 matched survey responses (responses from schools/colleges who have completed both baseline and final), 296 endline responses (this figure includes those who had completed a baseline), and findings from 25 interviewees based on data collected from July 2021 to June 2022. When reporting on findings per outcome area, survey responses were converted to numerical values based on weighting assigned to response items and question sets, providing an overall percentage score between 0% and 100% for each outcome area, with higher scores reflecting more positive findings (the scoring matrix can be found in Appendix B).

Outcome area	Description	Example survey questions (full set in Appendix A)		
Recovery	Ways in which technology can bolster pupil/student progress and support catch up activities; for example, through online and in- person teaching and tutoring, development of independent and adaptive education, and supporting high-quality assessment and feedback.	<ul> <li>On balance, to what extent is software meeting your school's/college's needs in: Planning lessons / curriculum content; Delivering lessons; Conducting formative assessment; Conducting summative assessment</li> <li>Which of the following statements best expresses your view on the relationship between technology and pupil/student attainment in your school/college?</li> </ul>		
Teacher workload	Ways in which technology can remove unnecessary workload burdens, support more flexible teaching practices, improve access to excellent curriculum resources and developing professional bonds and communities.	<ul> <li>Thinking first about the software used in your school/college. On balance, to what extent are they meeting your school's/college's needs in: timetabling, financial management, pupil/student data management, etc.</li> <li>Which of the following statements best expresses your view on the relationship between technology and staff workload in your school/college?</li> </ul>		
School and college improvement plans	Ensuring that adoption of technology has a clear plan and supports the wider aims of the school/college. This will include use of digital platforms and devices.	<ul> <li>Is there a digital technology strategy for your school/college?</li> <li>Is appropriate, tech-focused CPD built into the regular schedule of teacher training throughout the year?</li> </ul>		

School and college resource management	Ensuring that the adoption of technology provides the best value for money and capitalises on existing resources, for example through cloud-based education platforms and management information systems and securing informed procurement decisions.	<ul> <li>For each of the following storage and systems, does your school/college currently use on-premise or cloud systems? Finance, MIS, Human Resources, Library Management, Curriculum Storage, Admin storage</li> <li>What is your plan for moving to fully cloud-based storage and systems?</li> </ul>
Accessible and inclusive curriculum	Ensuring that the adoption of technology includes a strong focus on improving access for pupils with SEND and removing barriers to the effective use of assistive technology.	<ul> <li>To what extent is software meeting your school's/college's needs in terms of supporting pupils/students with SEND?</li> <li>Does your school/college provide support for pupils/students to enable them to use accessibility features built into mainstream devices and software (e.g. computers, laptops and browsers)?</li> </ul>

## Synthesis of findings

**Overall impact** - Our evaluation design planned to compare progress schools/colleges had made on a pre-post survey in the outcome area they had received support in versus outcome areas where they had not. In the absence of a control group this would have helped to simulate a counterfactual.

As our qualitative analysis shows however, in practice the support provided by Demonstrators often did not fall neatly into individual outcome areas, with fluidity around the type and amount of support provided. As a result, and due to challenges with collecting a sufficiently large, matched sample in each outcome area, we report on overall impact through analysis of change in pre/post matched survey results, but provide comparison of how results varied in the outcome area where support was not received to supplement this.

When reviewing changes on pre/post surveys, we observed statistically significant positive changes in each outcome area (when schools/colleges received support in the area), as follows:

- 11.9% change in recovery
- 19.2% change in teacher workload
- 21.7% change in the school and college improvement plan
- 22% change in resource management
- 21.6% change in accessible and inclusive curriculum.

However, when looking at the progress that those that did not receive support in the specific outcome area had made, we saw similar improvements here that were also statistically significant. This means that schools and colleges have made progress across the board, not just in the areas that they received support in. There are two potential interpretations:

1) Schools/colleges made progress in multiple areas during the programme even in those they did not explicitly receive support in (e.g., due to Demonstrators providing support in more than one area, the benefits of support spill over to other areas as they are not isolated).

2) Schools/colleges made progress regardless of taking part in the programme (e.g., schools nationally became more confident in using technology over the course of the 21/22 academic year)

We also looked at the different results for those that were recorded to receive support in a specific area versus those that did not. We observed that there was no statistical difference in endline scores between the two groups (except for in one area) which is in line with the above findings.

In general, the qualitative findings of the evaluation would support the interpretation that the benefits of the programme were spread across multiple outcome areas, but we should remain aware of the limitations to this analysis including a lack of a counterfactual and small sample sizes, which are presented in more detail throughout this report.

**Reasons for participating** – Many of the schools and colleges involved in the interviews wanted support in using technology more effectively or efficiently as a school/college. Often, they felt they were lacking the expertise or skills within their own setting to know how to best maximise the use of the technology; either due to not having staff with specialist technology knowledge (more common amongst primary schools), or because they were unsure how to best move forwards. Another key reason for schools and colleges to participate was a desire to further embed the use of the technology with the setting, including within teaching and learning, the curriculum and at a wider infrastructure level.

**Implementation of delivery** – As mentioned above, the interviews suggest that the support offered by the Demonstrators was fluid, multi-faceted, and did not easily fit into the DfE defined outcome areas. Demonstrators commonly offered support to schools and colleges across multiple areas, reflecting the differing needs and contexts of the schools and colleges they were supporting and the level of support they were receiving.

Delivery for most schools and colleges interviewed had been solely virtual. Whilst the flexibility and efficiency of virtual support was valued, there was a desire for some face-to-face support amongst the schools and colleges that had been involved in solely virtual delivery.

#### Success factors:

- 1) Acceleration of involvement Most schools and colleges interviewed thought the changes they had made to how they were using technology had been accelerated from their involvement in the programme.
- 2) Critical friend It was clear that schools and colleges saw the EdTech Demonstrator school/college that they had been paired with as being a 'critical friend' or mentor, who was able to steer and advise them in technology use in an accessible and supportive way.

**Main challenge** - There was concern amongst those interviewed about their ability to embed or further build on the support they had received through the programme at a school/college level, due to difficulties in prioritising involvement in the programme or maintaining momentum, lacking the internal infrastructure or capacity to fully implement or move forward with some of the support provided, and staff willingness to adapt to new practices or use of technology.

**Three key considerations for the DfE** – The qualitative analysis highlighted the following key considerations for the DfE to take forward when considering further investments and initiatives:

- 1) A focus on long-term programmes and greater alignment between DfE's EdTech strategy and wider initiatives to support financial efficiencies.
- 2) Recognition of the value of a peer-to-peer collaborative model that allows schools to support other schools around technology implementation.
- 3) Recognition that without the infrastructure or funding in place (for example, sufficient devices, Wi-Fi speed) then it will be challenging for schools and colleges to fully embed technology use within their setting.

## Key findings per outcome area

Outcome area	Key findings			
	<ul> <li>The scores of schools/colleges who received support in this area increased by 11.9% which was statistically significant (<i>p</i> = .051). Those that did not receive support in this outcome area saw their score increase by 14.5%, which was also statistically significant (<i>p</i> &lt; .001).</li> </ul>			
Recovery	<ul> <li>Interviews showed that for many schools and colleges involvement in the programme had led them to implement new technology or had strengthened their use of existing technology. Often this had a teaching and learning focus, with the Demonstrator support helping to change their use of technology within the curriculum (for example in specific subjects or across subjects). Some schools/colleges were able to give examples of where they had seen an observable impact from changes that they had made for both teaching staff and pupils.</li> </ul>			
	<ul> <li>The scores of schools/colleges who received support in this area increased by 19.2% which was statistically significant (<i>p</i> &lt; .001). Those that did not receive support in this outcome area saw their score increase by 23.8%, which was also statistically significant (<i>p</i> &lt; 0.001).</li> </ul>			
Teacher workload	<ul> <li>Many schools and colleges at the time of the interviews found it challenging to provide examples of the impact of Demonstrator support on teacher workload - although some were hopeful that reductions in teacher workload would come over time as they began to embed new approaches, practices or strategies.</li> </ul>			
	• The programme had helped staff in a few schools and colleges to improve their skills in using technology and to use it more effectively within their roles. Schools and colleges also reported positively on the impact on staff confidence around technology use.			
School and college improvement plans	<ul> <li>The scores of schools/colleges who received support in this area increased by 21.7% which was statistically significant (<i>p</i> &lt; .001). Those that did not receive support in this outcome area saw their score increase by 23.3%, which was also statistically significant (<i>p</i> = .023).</li> </ul>			

## Table 2: Key findings per outcome area

	<ul> <li>Most change was observed in primary schools. Colleges started out with a higher score, and while not going through as much change in scores as schools, still ended up with the highest score due to its higher starting point.</li> </ul>			
	<ul> <li>Involvement in the programme had helped schools and colleges to refine or consolidate their thinking about technology use within their settings. For some, involvement in the programme had supported them to refine their digital strategies or having a clearer vision for how they wanted to develop a digital strategy, or had widened their thinking about the benefits that technology could bring.</li> </ul>			
	<ul> <li>However, it was more difficult to conclude from the interviews whether there were any wider impacts on schools and colleges overall strategic approach to technology use. It is perhaps more likely to be expected that any systematic change to technology use within a school or college would be in timescales longer than within the parameters of the support provided through the programme.</li> </ul>			
School and college	<ul> <li>The scores of schools/colleges who received support in this area increased by 22% which was statistically significant (<i>p</i> &lt; .001). Those that did not receive support in this outcome area saw their score increase by 12.2%, which was also statistically significant (<i>p</i> &lt; .001).</li> </ul>			
management	<ul> <li>Schools and colleges were able to provide examples of system efficiencies gained through being involved in the programme.</li> </ul>			
	<ul> <li>The majority of schools and colleges were less able to provide examples of any cost savings that had been achieved through their involvement in the programme.</li> </ul>			
Accessible and inclusive curriculum	<ul> <li>The scores of schools/colleges who received support in this area increased by 21.6% which was statistically significant (<i>p</i> &lt; .001). Those that did not receive support in this outcome area saw their score increase by 22.7%, which was also statistically significant (<i>p</i> &lt; .001).</li> </ul>			
	<ul> <li>Qualitative evidence on the impact of involvement in the EdTech Demonstrator programme on schools and college's ability to provide an accessible and inclusive curriculum was minimal. For the majority of schools and colleges interviewed this had not been a focus for the support received from the Demonstrators.</li> </ul>			

## 1. Introduction

The DfE's 2019 EdTech Strategy identified a range of barriers to the effective use of technology in schools and put forward commitments to help address the issues. This included launching a network of Demonstrator schools and colleges to showcase good practice and leverage expertise across the sector through peer-to-peer support and training.

Following this commitment, the DfE launched the first phase of the EdTech Demonstrator Programme in April 2020, which pivoted to provide peer-to-peer support on making the best use of technology to support remote teaching specifically during the COVID-19 pandemic. The network was expanded in Autumn 2020 to meet the needs of the sector and ultimately provided support to 4,000 organisations during 2020/21 for remote education. The Government has invested up to £12 million in the programme over the last two years to increase effective use of technology by headteachers, teachers and support staff.

Phase 2 of the programme launched in May 2021 in partnership with United Learning to bridge the gap from crisis response to support the sustained use of technology. In this second phase, the Programme had the following objectives:

- Help improve students' outcomes
- Reduce unnecessary teacher workload burden
- Support school / college improvement plans
- Help schools / colleges manage their resources effectively
- Secure an accessible and inclusive curriculum, including for pupils with SEND.

Support during this phase was offered at three levels:

- 1. Short-term support (c.6 hours of training delivered over a term): This is likely to be targeted towards those schools/colleges requiring rapid support on remote education, catch-up and recovery provision.
- 2. Medium-term support (c.15 hours of training delivered over the academic year): During this support, Demonstrators and the schools or colleges they support identify one or two areas of support where technology can be adopted and have maximum impact for teachers and pupils.
- 3. Long-term support (c.30 hours of training delivered over the academic year): Through this support, Demonstrators work with the schools or colleges they support to develop a sustainable digital strategy, embedding technology – particularly digital platforms and devices – as part of a wider change programme, and recognising where technology will and will not make an impact.

The DfE partnered with ImpactEd in May 2021 just after the EdTech Demonstrator Programme had started in the Spring of 2020, meaning that data collection began in July 2021 once tools had been designed.

The research design developed for this evaluation of the EdTech Demonstrator Programme includes two strands:

• Pre-test post-test design: All schools and colleges receiving support on the Programme needed to fill in a 15-minute survey at the start and at the end of receiving support (referred to as baseline and end line surveys throughout this report). The survey was designed around the Programme's five outcome areas and included validated questions, e.g. from the EdTech Landscape Survey. It is referred to as the 'diagnostic tool' as supported schools and colleges could use the results to plan for the support they were going to receive. In December 2021, the decision was made to also run post-support only surveys with the schools and colleges who started receiving support before the diagnostic tool was released in July 2021.

• Qualitative research: Throughout the 21-22 academic year, ImpactEd conducted interviews with supported schools and colleges that have experience of the Programme to share information on their context and perspectives.

This report presents findings from 141 matched survey responses. Based on the total number of those who did a baseline and were eligible to do an endline, the response rate for matched responses was 57%. We also collected endline-only responses, creating a total endline data set of 296 responses. Qualitative findings were based on data from 25 interviewees collected from July '21 to June '22.

## 2. Evaluation methodology

## 2.1 Research questions

This evaluation of the DfE's EdTech Demonstrator Programme is focused on showing impact on five outcome areas: recovery, teacher workload, school/college improvement plans, resource management and an accessible and inclusive curriculum. This means that this project is aiming to answer the following research questions:

- Does the EdTech Demonstrator Programme help improve pupil/student outcomes?
- Does the EdTech Demonstrator Programme reduce teacher workload?
- Does the EdTech Demonstrator Programme help improve school/college improvement plans?
- Does the EdTech Demonstrator Programme help schools/colleges manage their resources more effectively?
- Does the EdTech Demonstrator Programme help to create a more accessible and inclusive curriculum, including for pupils with SEND?

Additionally, this evaluation is interested in understanding how impact has or has not occurred, focusing on what worked and what did not:

- How was the EdTech Demonstrator Programme implemented in schools and colleges?
- What were the strengths of the EdTech Demonstrator Programme model and what could be improved?

## 2.2 Evaluation principles and design

At the start of the evaluation design process, we identified the following evaluation principles as core to the evaluation:

- **Minimising burden on schools while delivering a robust evaluation**: As we recognise the pressures on schools and teacher workload, we wanted to ensure we minimise workload burden where possible. We involved United Learning and staff at the Demonstrators in the design process to ensure tools were user-friendly.
- **Making results easily accessible to school and colleges**: It was important for the DfE that supported schools and colleges had access to their evaluation results so that they could make timely and informed decisions based on the results. This

required both having access to the results and making sure they were easily interpretable. This is why access to live dashboards for supported schools and colleges as part of the digital diagnostic tool was a crucial part of the design process.

 Using validated measures for a robust research design: When designing the surveys in collaboration with the DfE, we aimed to use validated (either psychometrically or field-tested) measures where possible. Questions were primarily drawn from the EdTech Landscape Survey and results in this report are presented in line with these benchmarks too.

We originally designed the methodology as a quasi-experimental design comparing progress schools/colleges had made in areas they received support into those they did not receive support in to allow for some causal attribution of impact without some of the ethical and practical challenges associated with randomised designs. However, the comparison we were able to make to areas they did not receive support in was limited due to the fluid nature of support (e.g., often support was not limited to one specific outcome area, meaning impact would not be isolated). The design included:

- A pre-test post-test survey (Baseline-Endline design) with validated measures, where available, completed by supported schools and colleges participating in the Programme from July 2021. Results are broken down by outcome area and, where possible, tiers of support (the latter ended up not being feasible most of the time due to small sample sizes). We also looked at the difference in endline response between those who received support in an area versus those who did not.
- Triangulating results with qualitative data with supported schools and colleges both in terms of outcomes and implementation.

## 2.3 Diagnostic tool: design, sample and analysis

#### 2.3.1 Design of the diagnostic tool

ImpactEd and the DfE collaboratively designed the baseline and end line surveys that formed the basis of the diagnostic tool used in this evaluation and in the digital tool. Where possible, we decided to draw on existing validated question sets to ensure a rigorous approach. Most of the questions came from the EdTech Landscape survey or were custom questions with one question coming from the Teacher Technology Integration Survey.

In order for schools and colleges, Demonstrators and United Learning to easily access/administer the surveys and results, we developed a digital tool which allowed schools and colleges to easily complete the survey and view their results. The tool has

dashboards available on three levels: overall results, individual Demonstrator level and individual school/college level. While United Learning and ImpactEd were able to access all levels, the DfE did not have access to the individual school and college level as they did not want to use the tool for assessing progress of individual supported schools and colleges, nor did they want to bias the results by making supported schools/colleges feel as though they were being assessed by the DfE at an individual level.





#### 2.3.2 Sample

After removing duplicate and invalid results (e.g. removing schools/colleges not having received at least 6 hours of support), we had a sample of 141 schools and colleges who completed both baseline and endline surveys and 296 endline responses (this figure includes those who had completed a baseline). Based on the total number of those who completed the programme (n = 974), the response rate for the matched cohort is 14% and for the endline cohort 30%. It is important to note that more than half of those that did a baseline were not eligible for the endline (282) due to them not having received any or enough support (e.g. six hours or more) during the programme. Based on the total number of those values of those who did a baseline and were eligible to do an endline, the response rate was 57%.

#### Table 3: Breakdown of samples by setting compared to national numbers

	Matched sample (%)	Matched sample (n)	Endline sample (%)	Endline sample (n)	National numbers (%)	National numbers (n)
Primary schools	64%	82	68%	181	79%	16,791 <sup>1</sup>
Secondary schools	19%	24	15%	41	16%	3,458
Colleges	12%	16	12%	32	1%	234 <sup>2</sup>
Other/special	5%	7	5%	12	4%	753

Looking at Free School Meals (FSM) % as an indicator of disadvantage, we see that for the schools in the sample who we have this data for:

## Table 4: Breakdown of pre-post matched sample by number of percentage ofpupils on FSM

	Matched Sample (n / %)	Endline Sample (n / %)		
Below average (20% and below)	64 (58%)	129 (56%)		
Around average (21- 35%)	20 (18%)	58 (25%)		
Above average (36% and above)	26 (24%)	43 (19%)		

When asked if the school or college is currently participating in any other EdTech programmes, 86% indicated their school or college was not participating in any other programmes at the time.

<sup>&</sup>lt;sup>1</sup> Data from: <u>https://explore-education-statistics.service.gov.uk/find-statistics/school-pupils-and-their-characteristics</u>

<sup>&</sup>lt;sup>2</sup> Data from: <u>https://www.aoc.co.uk/about-colleges/research-and-stats/key-further-education-statistics</u>

### 2.3.3 Analysis

In order to analyse the survey responses, the following steps were taken:

a) **Cleaning the data:** For both matched and endline analyses, we removed cases where the same school or college had filled out the survey more than once or where we did not have the URN number meaning we could not match to school/college characteristics. This led to 32 responses being removed in total. Additionally, responses were excluded when there was missing data in a particular outcome area.

b) **Matching to school/college characteristics**: We created 0/1 binary variables based on relevant school characteristics to help with differentiation of the results. To look at the percentage of pupils on FSM, we created the following three categories: 20% and below, 20-35%, and over 35%, aligning with below, around and above national average of 20.8%. We also identified schools based on phase, amount of support (tier) received and if they received support in more than one area. We were not able to report on all of these breakdowns per outcome area due to small sample sizes (n < 10).

c) **Converting raw data to numerical scores**: Next, we converted the responses from the raw data to numerical values based on the scoring matrix that we developed (see Appendix B). The scoring matrix assigned a numerical value and weighting to each response on the survey, converting responses to an overall score and percentage between 0 and 100 per outcome area (with 100 being the highest score) as well as comparing scores between different sub-groups (aligned with data from point b).

d) Comparing change from baseline to endline for matched survey responses in areas they received support: For matched responses, we calculated the percentage change in the areas the school/colleges received support. For the overall change in each outcome area, we also looked at its statistical significance using paired mean comparison tests. We did not look at statical significance for any of the sub-categories due to small sample sizes and we only reported results where n > 10. This meant that in these instances we were unable to determine that any reported differences were not random.

e) Comparing those who received support to those that did not receive support in a specific outcome area by looking at endline-only responses: For the entire endline cohort, we calculated the difference between those who received support in an outcome area to those who did not<sup>3</sup>. We looked at how statistically significant the difference between the two was by using an unpaired mean comparison test. As with the matched analysis, we did not look at statical significance for any of the sub-categories due to small sample sizes and we only reported results where n > 10. This meant that, in these

<sup>&</sup>lt;sup>3</sup> If a school/college was supported in a specific area was determined by reporting of outcome areas supported by Demonstrators.

instances, we were unable to determine whether any reported differences were not random.

We were not able to do any further statistical testing (like regression analysis) as there was not enough data to do so, particularly when looking at the subgroups.

## 2.4 Qualitative approach: design, sample and analysis

## 2.4.1 Design

The qualitative approach in this evaluation was designed to include a mixed approach of in-depth interviews and focus groups to explore the key research questions and understand implementation factors. An opt-in method was adopted for recruiting supported schools and colleges to participate in qualitative data collection. Due to participant availability, we were not able to schedule in any focus groups and instead included interviews only.

Some benefits of an in-depth interview approach are outlined below:

- Scheduling of interviews can be flexible and accommodated for the requirements of each individual school, reducing the likelihood of non-engagement, or drop-out.
- They allow for the collection of qualitative data that is more tailored to the individual school's experience i.e., based on the type of support they've received, journey through the support and the impact it has had.
- The richness of the data collected through interviews is greater than can be collected through focus groups, ensuring the evaluation collects robust data on how schools' experience of the programme differs by phase, tier of support and other factors.
- Allows the collection of detailed and practice-focused examples of impact of involvement in the programme.
- It provides an environment that ensures schools feel comfortable providing their views on the programme honestly and openly.

## 2.4.2 Sample

The research adopted a purposive sampling strategy. Purposive sampling is choosing study participants based on the purpose of their involvement in the study. Operationally, this means establishing one or more eligibility criteria for inclusion into the evaluation. The eligibility criteria for the process evaluation were:

• Schools/Colleges that have agreed to participate in qualitative research and have completed consent forms

- Schools/Colleges that can commit to at least one 45-minute session; though this number was reduced to 30 minutes later on in the evaluation to attract more participants
- Schools/Colleges receiving Tier 1, Tier 2 or Tier 3 support
- Schools that range from primary and secondary provision, while ensuring it is representative of the overall cohort
- The selection of schools/colleges that represent sufficient geographic diversity
- Inclusion of schools/colleges with significant (over 30%) population of pupils eligible for Pupil Premium or Ever6FSM
- Inclusion of SEN schools/colleges or those with significant representation of pupils with SEN

As it became more difficult to recruit schools towards the end of the programme, the delivery partner supported recruitment by reaching out to Demonstrators to encourage them to ask schools to participate in the qualitative work. This means there could be a bias in the sample of participants as a result.

In-depth interviews were conducted between October '21 and June '22. Interviews were conducted with 25 representatives from schools and colleges. Of these interviews, 23 were undertaken individually, the remaining two interviews were conducted in a joint interview. The profile of the schools and colleges interviewed is detailed below.

School / college profile	Number of schools / colleges
Primary	7
Secondary	4
College	5
Special School	1
Other (Adult Education Service and Specialist College)	3
Multi-Academy Trust <sup>4</sup>	5

 Table 5: Sample of schools / colleges for qualitative data collection

The role of respondents participating in the successful implementation interviews is detailed in Table 2.

<sup>&</sup>lt;sup>4</sup> Five of the interviews were conducting with MAT leads/staff covering both primary and secondary schools.

#### Table 6: Role of respondents (successful implementation)

Respondent role	Number of respondents
Senior leader	12
EdTech leader/staff member	10
Middle leader	1
Teacher	2

#### 2.4.3 Analysis

The interviews conducted were recorded and transcribed with participant consent, and thematic analysis was conducted to extract emerging themes linked to impact and implementation. Thematic analysis was used as it is best suited for identifying, analysing, and reporting patterns within qualitative data and organising it to describe it in rich detail. In this evaluation, thematic analysis is applied to interpret various aspects of school/college experience (such as remote learning environments, staff relationships, and restrictions imposed by COVID-19) to identify factors linked to successful programme delivery and overall impact.

## 2.5 Limitations and risks

#### 2.5.1 Quantitative

Some limitations of the survey data include:

- There is lack of a counterfactual in the analysis which means that what we can meaningfully say about the impact of the programme on schools/colleges is limited. While we originally planned to either use outcome areas or tiers of support as counterfactuals, we soon learned that the programme implementation in practice was more complex with Demonstrators often providing more fluid support across outcome areas, schools/colleges moving on between tiers and recording of this not being consistent, meaning that using these areas as counterfactuals would not have been meaningful and in some instances it would be impossible too due to small sample sizes of sub-groups.
- **Small sample size** relative to the number of programme participants means that we are limited in terms of what we can conclude from the data. Low response rates were largely outside of our control and were primarily due to the evaluation activity starting several months into the programme starting, meaning collecting

baselines from the first participants and embedding the evaluation into the programme design were challenging.

- Baseline data was only collected from schools and colleges since July 2021 (when the diagnostic tool was introduced) and therefore misses out on any data captured from the earlier cohort. This includes approximately 860 schools/colleges. We do not know whether this initial cohort was more likely to be different in nature in terms of school characteristics than the post-July cohort, but we do know from the qualitative data is that it is more likely for these earlier schools/colleges to have also received support during Phase 1 of the EdTech Demonstrator Programme. In an attempt to include this cohort into the analysis, in December 2021 we decided to collect end line only surveys for those schools and colleges that started support before July 2021 and therefore have not had to do a baseline survey. Additionally, we have reached out to schools and colleges from the pre-July cohort to participate in qualitative research.
- More than half of the participants that filled out a baseline survey at the start were not eligible to do an endline survey as they had not received 6 hours or more of support<sup>5</sup>. This significantly reduced the pool for matched analysis.
- While schools and colleges were instructed to do the baseline survey before their kick-off meeting with the Demonstrators and their endline meeting after support had finished, this likely has not always happened, meaning the Demonstrator might have completed the survey with the school or college they were supporting during the meeting. This could have resulted in a degree of response bias. Similarly, there have been a few Multi-Academy Trusts (MATs) who filled out the surveys for their schools centrally, which could have resulted in slightly inaccurate results. Based on feedback from United Learning, we expect the risk of these two instances happening to be minimal.

In terms of the analysis, it is important to call out the following limitations:

- Due to small sample size, we only looked at the statistical significance of changes/differences at the outcome level and not for any further breakdowns below outcome level as we would have been unable to determine that any reported differences were not random.
- When looking at breakdowns within outcome areas, many sample sizes were below 10. We only reported on results in this report when sample sizes were above 10.

<sup>&</sup>lt;sup>5</sup> Schools/college may not have completed six hours of support for various reasons, e.g. they dropped out of the programme or they only needed support for a specific issue over a couple of hours.

## 2.5.2 Qualitative

There are a number of methodological considerations to note when considering the qualitative findings provided in this report:

- The schools and colleges were at different stages of receiving support from the programme at the time the interviews took place. For around a third of the sample, at the time the interviews took place they were still in the early stages of support. Therefore, although they were able to provide their views on engaging and accessing support it was more challenging for them to provide a view on the effectiveness and impact of the support they had received.
- It was challenging to engage schools and colleges in the interviews due to ongoing staff shortages and other COVID-related pressure, as such it was not possible to ensure that a mix of schools and colleges from different contexts were involved in the evaluation.
- Schools and colleges were often unaware as to what level of support they were receiving (short, medium, or long-term) and/or were moving between different tiers and outcomes areas therefore it was not always possible to look at differences in views and impact between the different levels and types of support.
- As we struggled recruiting participants towards the end of the study, we received support from the delivery partner who asked Demonstrators to approach schools and colleges to sign up for qualitative work. This resulted in a few more interviews but we have to keep in mind the potential for bias through this kind of targeted outreach.

## 3. Implementation

This section of the reports summarises how schools and colleges have engaged with the support and the type and structure of support that they have been involved with.

## 3.1 Engagement with the programme

Schools and colleges had become aware of the EdTech Demonstrator programme through various means. This had included through DfE directly, recommendations from educators (for example, through other MATs or schools/colleges), through existing networks (for example, existing relationships with Demonstrators) or from their own research.

I spend a lot of my time at home surfing the internet for projects out there with DfE funding that we might be able to access and that's how I came across the EdTech programme. – *Primary school* 

The opportunity to draw on the expertise of a Demonstrator school or college in a particular area of technology or learn more generally from their experiences of implementing technology was a key driving factor for involvement for many of the schools and colleges interviewed. Interviewees recognised that Demonstrator schools/colleges were well developed in their use of technology and being able to draw on their experiences of adopting new technology would be invaluable.

It was about learning from other schools, finding out how they have achieved things, and what they're doing. It's always very useful to speak to other people. – *Primary school* 

Many of the schools and colleges involved in the interviews wanted support in using technology more effectively or efficiently as a school/college. **Often, they felt they were lacking the expertise or skills within their own setting to know how to best maximise the use of the technology**; either due to not having staff with specialist technology knowledge (more common amongst primary schools), or because they were unsure how to best move forwards. Schools and colleges were looking for the Demonstrators to advise on the suitability of technology systems and applications and how they could most effectively be applied or on future procurement decisions (for example, advice and guidance on the purchase and use of one-to-one devices) or to provide support around technical issues (such as moving to a cloud-based IT system).

A desire to further embed the use of the technology with the setting, including within teaching and learning, the curriculum and at a wider infrastructure level was also key reason for schools and colleges becoming involved in the programme. Whilst some felt that they had made progress in using technology (for example, through the provision of remote education during the COVID-19 pandemic), there was a desire to further strengthen and build on this through involvement in the programme. For example, schools and colleges reported wanting to widen the use of online collaborative platforms to non-teaching staff, wanting support to become a Google school and to strengthen their digital strategy. At a teaching and learning level a few schools and colleges interviewed expressed a desire for staff to use technology more consistently within their teaching.

Other factors driving schools and colleges decision to seek support from the EdTech Demonstrator programme included to:

• Build the confidence of staff and upskill them in their use of technology as well as provide pupils with digital skills for the future.

I want every learner who leaves our school to have the ability to use a word processing package, a spreadsheet package, a presentation package, and, you know, some sort of digital media package. And almost rather than teaching those as a curriculum themselves, how do we take those skills and teach them within our current curriculum...but we need to give the staff the expertise to deliver that. – *Alternative Provider* 

- Widen the use of technology with pupils with SEND, for example using text to speech software.
- Opportunities for staff to access training and development to support them in their use of technology.

## 3.2 Delivery of support

Schools' and colleges' satisfaction with the process for agreeing support with the Demonstrators was high, with the majority reporting that it had been a straightforward and prompt process. Support had often been agreed through discussions between Demonstrators and the schools and colleges they were supporting about the nature of the support they may be looking for. The approach to this was flexible and appeared to depend on how the Demonstrators and schools and colleges had initially come into contact. For example, a primary school reported that they had seen a webinar on the EdTech Demonstrator programme and from that had identified one aspect of support that they felt they would value from. The school used the webinar chat function and a Demonstrator reached out to them to offer support. There were then discussions between the Demonstrator and the primary school to agree support.

The type of support that schools and colleges had received through the Demonstrator programme was wide ranging. The interviews suggest that the support offered by the Demonstrators was fluid, multi-faceted, and did not easily fit into the DfE defined

**outcome areas**. Demonstrators commonly offered support to schools and colleges across multiple areas, reflecting the differing needs and contexts of the schools and colleges they were supporting and the level of support they were receiving. Furthermore, in some schools and colleges the support provided evolved or developed as time progressed (for example, because additional support needs emerged).

Broadly, across the schools and colleges interviewed support had been received on:

Support theme	Types of activities
Strategy support	Guidance on developing an e-safety strategy
Remote and blended learning approaches	<ul> <li>Support with the design and development of a blended learning digital strategy</li> </ul>
	<ul> <li>The integration of existing online collaborative systems across settings include how to continue to use remote education platforms in a post-COVID environment</li> </ul>
Teaching and learning	<ul> <li>Introduction of new teaching and learning applications for teaching staff to use within the classroom (such as Class Dojo and SeeSaw)</li> </ul>
	<ul> <li>Implementing one-to-one device schemes for pupils and staff (including procurement, sourcing and how to best implement with the classroom)</li> </ul>
	<ul> <li>Guidance on the selection and procurement of teaching and learning hardware and software (for example, Smartboards)</li> </ul>
	<ul> <li>Advice on the use of assistive technology (including text to speech readers, software for ESOL learners)</li> </ul>
Streamlining approaches to the use of technology	<ul> <li>Developing a coherent structure for software use across a MAT</li> </ul>
Strengthening	Migration to a new management information system
infrastructure	<ul> <li>Supporting the transition to a cloud-based system</li> </ul>
Continuing professional development	<ul> <li>Modelling technology use to staff, including how specific technology can be integrated within their teaching</li> </ul>

 Table 7: Overview of type of activities by support theme

School and college resource management	<ul> <li>Improving efficiencies and cost-savings in the use of technology (for example, how to use technology to reduce printing)</li> </ul>

#### Practice example – secondary academy

This secondary academy had sought support from the programme as their technology infrastructure was over ten years old and they need to replace it. They wanted to understand a more cost-effective way to achieve this and what platforms and systems they should be using moving forward.

Their aims for the programme were to build on their digital safety and to seek advice and guidance on specific technology (including interactive whiteboards and one-to-one devices) that they could purchase and use.

At the time of the interview the academy had received advice from the Demonstrator about introducing a one-to-one device team, staff had received training on online platforms, and they had received advice about smartboards and how they could fund these. The academy was continuing to work with the Demonstrator to further discuss how best to introduce a one-to-one device scheme.

#### 3.2.1 Structure of support

The schools and colleges interviewed were satisfied with the structure of support offered through the programme. **Delivery for most schools and colleges interviewed had been solely virtual** (in most cases due to COVID-19 restrictions). Fewer schools and colleges interviewed had been involved in a hybrid model of support including both online and face-to-face contact with their Demonstrator school/college. Where face-to-face support had been provided this had involved schools and colleges being able to visit their Demonstrator to observe practice (for example, seeing how technology is being used in the classroom), or Demonstrators visiting their support school/college to discuss key issues or see the difficulties with the technology in reality (such as observing difficulties with Wi-Fi speed or connectivity issues). Whilst the flexibility and efficiency of virtual support was valued, there was a desire for some face-to-face support amongst the schools and colleges that had been involved in solely virtual delivery.

#### 3.2.2 Staff involvement with support

It was mainly senior level staff that were involved with the programme in the supported schools and colleges (including Headteachers, Deputy Heads and Trust leads). In other schools and colleges specialist technical or digital staff, or those with some digital responsibilities were involved in the programme (including Technology Managers, Digital transformation leads and digital teaching and learning specialists). Where MATs were involved with the programme, it was generally Trust level staff that were the key point of contact for the programme.

Generally, the staff from the schools and colleges involved in the support from the Demonstrators reflected the focus and nature of the support. Where schools and colleges were at the planning stage at the time of the interview, they reported on plans to involve wider staff (including at a middle leader or classroom teacher level) as support progressed or dependent on the focus. Schools and colleges who were at a later stage of involvement in the programme (or had finished their involvement) offered examples of bringing in other staff as necessary to the programme support. For example, involving staff who would be directly involved or influenced by the support provided or if it was expected that they would be using new approaches to technology within their practice (such as involving all staff in a training session on an online platform).

It's mainly based on either their strengths or their knowledge around the area, or their position in school. So, for example, he {the coding lead} will drive that recording aspect forward. But the key stage leads will be invited to the meetings and get that grounded understanding because they're the people that are going to have to implement that in their classrooms. – *Alternative Provider* 

#### 3.3 Success factors

Schools and colleges spoke positively about the support that they had received through the EdTech Demonstrator programme, and they were able to describe many changes that they had made because of their involvement in the programme (see Outcome sections for more detail). This ranged from significant changes to infrastructure (such as the introduction of a cloud-based server), to technology being more widely used within the classroom (for example, through the introduction of a one-to-one device scheme) to more discrete and smaller scale changes (for example, the introduction of subjectspecific applications, or introducing new functions within remote education software).

Most schools and colleges interviewed thought the changes they had made to how they were using technology had been accelerated from their involvement in the programme. Involvement had given them access to expertise, ideas and experience that would have been difficult for many to source independently. This had allowed them to introduce new technology or adapt their current approach to technology at a faster rate than they would have been able to achieve independently.

The changes would have happened, but it would have been slower. I got more confident [implementing changes] because of the EdTech Demonstrator. I had support in my mind so that if I got stuck, I knew I didn't have to scrap everything, I could just ask and get help with moving forward. – *Primary school* 

The willingness for the Demonstrator schools/colleges to share their expertise, knowledge and resources was highly valued by the schools and colleges interviewed and a number spoke positively about the openness and responsiveness of the Demonstrator schools/colleges in doing this, whilst recognising that it was also important for staff within the support school or college to be open and willing to accept support from the Demonstrators. It was clear that schools and colleges saw the EdTech Demonstrator school/college that they had been paired with as being a 'critical friend' or mentor, who was able to steer and advise them in technology use in an accessible and supportive way. For example, a primary school interviewed reported that their EdTech Demonstrator school was able to able to provide explanations and clarifications, but at different levels of technicality (for example, using simple terms if necessary), which helped put them at ease.

The support surpassed anything that was being offered to be elsewhere. Demonstrators not only trained and mentored but have also given us the impetus to move technology in the school forward. – *Primary School* 

Sharing expertise and resources and the way it was done was absolutely brilliant, without it I would have been struggling ... the willingness and openness of the EdTech Team to share and show what they had done and listening to what I was thinking was the real benefit. – *Primary School* 

The schools and colleges also found that the support they had received from their EdTech Demonstrator school or college had also worked well when:

- The Demonstrators were honest and willing to share their own journey and challenges with implementing and embedding technology use.
- The Demonstrators advised on introducing technology (hardware or software) that would fit and align with existing technology or infrastructure within the setting.

• Training and development opportunities provided by the Demonstrators were able to be flexible, tailored and delivered to staff at various levels (for example, middle leaders and classroom teachers).

They delivered some really excellent training with our middle leaders. They were incredibly flexible and had a real repertoire of training options so it meant we could make it very bespoke and they were very flexible about the timing. – *Secondary School* 

- The school or college could set their own pace for advice and implementation of any changes through their support journey.
- There were opportunities for Demonstrator school/college staff to work with the staff in the school/college being supported to share ideas, challenges and learn from each other.

Some of the most useful things have been actually talking to their network managers and being able to share and get our network managers meeting with theirs. And being able to ask those really technical, challenging questions that sit behind all of the stuff that is being used by the teachers and the pupils, to make sure that as we follow in their footsteps, we don't make any false steps. – *Secondary School* 

## 3.4 Challenges and suggested improvements

Supported schools and colleges generally reported minimal challenges in the delivery of the programme itself. The only challenges mentioned by a few schools and colleges included delays in Demonstrators responding to queries, the quality of training provided (mentioned by a secondary school) and the support supplied being too intensive in too short timescales (mentioned by a primary school).

There was greater concern amongst those interviewed about their ability to embed or further build on the support they had received through the programme at a school/college level, with schools and colleges identifying the following challenges:

- **Difficulties in prioritising involvement in the programme or maintaining momentum** around technology use alongside competing school or college priorities (such as finding the time to book in time with the Demonstrators).
- Lacking the internal infrastructure or capacity to fully implement or move forward with some of the support provided by the programme. For example, not having sufficient devices for some of the tools or approaches to be fully utilised or having sufficient broadband speed in the school or college to support technology use.

• Staff willingness to adapt to new practices or use of technology if less confident or 'tech savvy'. Although schools and colleges recognised that the COVID-19 pandemic has accelerated technology use, there was still a reluctance to engage amongst certain staff.

So, if I can get the staff on board and the staff feel that they've got the knowledge and understanding that they need to implement those lessons, it will go ahead, and it will have impact if they don't see the purpose, and the fact that they can deliver that that's where we'll see the barriers. – *Alternative provider* 

• Recognising that some staff needed time to see the relevance of what they were learning and allow for time to embed new practices or approaches in order for them to become fully engaged or supportive.

Supported schools and colleges suggested the following lessons and improvements based on their experience of the EdTech Demonstrator programme:

- Clarity of the potential scope of support or structure of support that can be offered through the programme.
- Supplying case-studies or good practice examples of what makes a good EdTech Demonstrator school or college to showcase the key features of approaches taken by the schools, and how to get there.
- Strengthening the consistency in support from the programme so that catch-ups between the Demonstrator and supported schools and colleges are regularly scheduled in.
- Improving the dashboard/portal for seeking support from the programme to allow schools and colleges to contact the programme more easily, ask questions about an area they require support in and to simplify access to support.
- Review of hardware infrastructure in supported schools as schools would find it useful for deciding where they could purchase appropriate hardware.
- Strengthening the marketing of the EdTech Demonstrator programme as there was some feedback that it was not well publicised enough, which led to a lack of awareness amongst schools and colleges.

## 4. Changes across outcome areas

This section presents an overview of change and difference across the five outcome areas: recovery, teacher workload, school and college improvement plans, resource management and accessible and inclusive curriculum. Survey responses were converted to numerical values and an average percentage score was calculated based on the questions asked within each of the five outcome areas. Higher scores reflect more positive findings across the areas with 100% being the maximum score.

Figure 2 below shows the change schools and colleges have seen in the area they have received support in. **We can see increases in each outcome area** with a matched percentage change of 11.9% in the recovery area, 19.2% in the teacher workload area, 21.7% in the school and college improvement plan area, 22% in the resource management area and 21.6% in the accessible and inclusive curriculum area. **All of these changes are statistically significant**, which means there has been a significant change for schools and colleges over the time period.



Figure 2: Pre-post change in outcome areas for matched responses

It is worth noting, however, that we also looked at the **progress that those that did not receive support in the specific area** had made and we saw similar improvements here that were **also all statistically significant**. There was a:

- 14.5% increase in the recovery area
- 23.8% increase in the teacher workload area
- 23.3% increase in the school and college improvement plan area
- 12.2% increase in the resource management area
- 22.7% increase in the accessible and inclusive curriculum area

This means that schools and colleges have increased scores across the board, not just in the areas that they received support in. This could be due to a "spill over effect" where receiving support in one area ends up benefitting schools and colleges in other areas too.

Looking at figure 3, we can see the difference in endline results between those that received support in a specific outcome area versus those that did not. Keeping in mind the results in figure 2, we would expect scores to be roughly similar between the two groups as schools/colleges should have received support in areas they scored lower in and then made progress on those while on the programme, levelling out differences between those receiving support and those that did not. This is largely what we see in figure 3 with the exception of recovery. There was a statistically significant difference between those that received support in the recovery area and those who did not - with those who received support ending with higher scores.




# 5. Recovery

The score in the recovery area is based on the supported school/college responses to four questions from the survey. These questions asked about:

- The extent to which software is meeting schools'/colleges' needs in:
  - Planning lessons/curriculum content
  - o Delivering lessons
  - o Conducting formative and summative assessment
  - o Tracking pupil/student progress
  - Offering independent/online learning (including in class)
  - Supporting remote and blended teaching and learning.
- The extent to which outcomes for vulnerable pupils/students are prioritised and supported by appropriate technology
- The relationship between technology and pupil/student attainment in schools/colleges.

A full list of questions and responses are included in Appendix A.

# **5.1 Changes in scores**

In figure 4, we can see that schools/colleges who received support in the pupil recovery area on average scored 64% before participating in the programme and 72% after having completed the support. **Percentage change of matched responses was 11.9% which was statistically significant** (p = .052). This means that schools/colleges' scores have seen significant increases during the programme.



Figure 4: Pre-post change in Recovery area for matched responses (n=16)

In figure 5, we can see that those who received support in the recovery area ended up with a higher score on average than those who did not receive support and this difference was statistically significant (p = .072).





### 5.2 Qualitative findings

A few schools and colleges interviewed had been involved in phase 1 (2020-21) of the programme and gave a number of examples of where they had been supported through the programme in their use of the technology to support remote teaching. For example, this included a Demonstrator school supplying a training guide for a college on interactive tools that could be used (including a link to them and how to use them). The college also received support in a similar toolkit for students on tools that assisted them with studying. In addition, a primary school mentioned receiving support in building up their skillset in working with remote learning tools.

Where schools and colleges had received support specifically around the delivery of remote education, they reported positively on the benefits of the support on increasing their knowledge of how to best use and utilise remote education platforms. For example, receiving training on how to use specific functions within these tools had been valuable for a number of schools and colleges interviewed.

We needed to get a deeper assessment and deep understanding of what pupils were learning while they were at home. And the use of the assessment function was able to provide that and offer some insight into actually what was happening. It's all very well, using these great apps that are engaging pupils, but they're not telling us always what we want to know. So that was why we picked the assessment function of {remote education platform] and that's what we got trained on, which was really useful. It's simplified the way we were working, which was really useful. – *Secondary school* 

### Improvements to teaching and learning

For many schools and colleges interviewed, involvement in the programme had led them to implement new technology or had strengthened their use of existing technology. **Often this had a teaching and learning focus, with the Demonstrator support helping to strengthen their use of technology within the curriculum (for example in specific subjects or across subjects).** Schools and colleges spoke positively about their involvement in the programme having given them the opportunity to reflect on their approaches to using technology within a teaching and learning context and were able to give examples of where they had seen observable impact from changes that they had made for both teaching staff and pupils. These included:

• Encouraging teaching staff to use technology more creatively within the curriculum. A primary school mentioned introducing the use of a device that enabled different pupil views to be shown on a screen, making assemblies more interactive and inclusive encouraging pupils to input.

• Encouraging pupils to work collaboratively together with peers in the classroom.

The ease with which teachers switch from teaching using slides to the children using [hardware devices] or jam boards and working together, producing slides to do a presentation, or they're working cooperatively in groups but all on their own Chromebooks. The way these things can seamlessly happen now is a result of the training, the confidence and the support this has given our staff. – *Primary school* 

- Giving pupils the opportunity to act with more autonomy and independence. A secondary school that had introduced a one-to-one device scheme mentioned that introducing the devices had given pupils ownership over bringing the device in and had given them more autonomy over their learning (for example, if watching a video on the device during lessons they could pause and go back over if needed).
- Pupils encouraging staff that are not using technology or a digitally enhanced lesson to use technology because they have valued it being used in another lesson.
- A SEND specialist school that had introduced more one-to-one devices found that increasing the use of these devices for a group of pupils with SEND had increased their engagement in learning considerably. Pupils were able to concentrate and engage with their learning for a longer time than they had previously.

# 6. Teacher workload

The score in the teacher workload area is based on the school/college responses to three questions from the survey. These questions asked about:

- The extent to which software is meeting schools'/colleges' needs:
  - o Timetabling
  - Financial management
  - o Pupil/student data management
  - o Parental/carer engagement /communication
  - Supporting flexible working practices (e.g. part-time working)
  - o Communication with and delivery of governance
  - Collaborating and sharing resources with other teachers
  - Planning lessons / curriculum content
  - Liaison with external support agencies.
- The impact of technology used in the school/college on the time taken to undertake the activities listed in the previous point.
- The relationship between technology and staff workload in schools/colleges.

A full list of questions and responses are included in Appendix A.

### 6.1 Changes in scores

In figure 6, we can see that schools/colleges who received support in the teacher workload area on average scored 58% before participating in the programme and 69% after having completed the support. **Percentage change of matched responses was 19.2% which was statistically significant** (p < .001). This means that schools/colleges' scores have seen significant change in this area during the programme.



Figure 6: Pre-post change in Teacher Workload area for matched responses

In figure 7, we can see that those who received support in the teacher workload area ended up with a slightly higher score on average than those who did not receive support but this difference was not statistically significant. This means that while post-support results are directionally higher, we are unable to make any generalisations about this change.

# Figure 7: Endline result in the Teacher Workload area comparing those that received support in the area to those that did not



## 6.2 Qualitative findings

Many schools and colleges at the time of the interviews found it challenging to provide examples of the impact of Demonstrator support on teacher workload, **although some were hopeful that reductions in teacher workload would come over time as they began to embed new approaches, practices or strategies.** Where reductions in teacher workload had been seen, this had mainly been where Demonstrator support had focused on the streamlining or embedding of online collaborative platforms, often that schools and colleges had introduced during the COVID-19 pandemic. This had led to schools and colleges changing their approaches to marking and assessment (for instance, using a collaborative online platform to make the processes for these more efficient). For example:

- A secondary school that had received training from a Demonstrator school on Teams and Sharepoint had led to them simplifying the way pupils submitted their work. They had also started using the integrated assessment function in Teams which had reduced teacher workload.
- A specialist post-16 college that had been supported through the programme with how they could use technology aimed at mainstream schools/colleges within their setting found that through introducing digital recordings of classroom sessions and being able to update pupil progress data via devices this had had a positive impact on teacher workload.

### Staff confidence and skills in technology use

The programme had helped staff in a few schools and colleges to improve their skills in using technology and to use it more effectively within their roles. There were examples of staff (teaching and non-teaching) becoming more confident and proficient in the use of online platforms or software (for example, thinking about how and where they store information, or using online tools more often), and becoming more aware of available technology (such as thinking about how they could use different types of technology in their practice).

Schools and colleges also reported positively on the impact on staff confidence around technology use. There were reports of teachers talking to each other more about technology, and a few schools and colleges interviewed mentioned that staff were more willing to experiment and try new technology or find new solutions (such as being more aware of the wider technology environment and available free software that could be used). There were wider examples of schools and colleges using specific strategies to maximise staff engagement to support confidence and skill building, for example through:

- Appointing staff digital champions and training them up has resulted in them now supporting other teachers and pupils to develop their technology skills.
- Encouraging staff to come up with their own solutions to make systems more efficient, creating ownership and buy-in.
- Using approaches such as the introduction of badges (from bronze to platinum) to encourage staff to increase their knowledge of and engagement with technology.

We've seen lots of progress in the confidence of tutors to use tech and to try something new. What has also come from {the EdTech Demonstrator college] is having that visibility and transparency of other staff using it [tech] ... we have other members of staff come in to CPD to show how they have used it ... those case studies are really going to make a difference. – *College* 

A focus on involving staff in continuing professional development within the EdTech Demonstrator programme also appeared to be a contributing factor to helping to engage and enthuse staff about technology.

> The staff CPD online was really impactful ... all staff loved it, everybody came away buzzing thinking 'right we're ready now to take our next steps for the future' ... [The lead from Demonstrator college] did this hour-long session not only about technology within your organisation, but future technology for industry ... why you're doing it for the future. That had a big impact on staff. – *College*

# 7. School and college improvement plans

The score in the school and college improvement plan area is based on the school/college responses to five questions from the survey. These questions asked about:

- School/colleges digital technology strategies
- Support present and available in schools/colleges, such as curriculum support for technology integration, technology support and staff support
- Staff approaches to implementation of new technology
- CPD related to EdTech
- Future investment plans for technologies.

A full list of questions and responses are included in Appendix A.

## 7.1 Changes in scores

In figure 8, we can see that schools/colleges who received support in the school and college improvement area on average scored 59% before participating in the programme and 72% after having completed the support. **Percentage change of matched responses was 21.7% which was statistically significant** (p < .001). This means that schools/colleges' scores have seen significant increases in this area during the programme.



Figure 8: Pre-post change in School and College Improvement Plans area for matched responses (n=83)

45





When we break down the scores by phase, as illustrated in figure 9, we see that **most** change has happened in primary schools. Colleges started out with a higher score, and while not making as much change as schools, still ended up with the highest score due to its higher starting point. We should keep in mind that the college sample is very small (n=12). Due to small sample sizes, we did not test these for statistical significance and therefore we are unable to determine whether the reported difference is due to chance.

Figure 10: Pre-post change in School and College Improvement Plans area for matched responses broken down by amount of support received



When breaking down the results in this outcome area by amount of support provided (represented by tier of support), we see that **there does not appear to be much of a difference in change schools/colleges have made in relation to the amount of support they have received**. Due to small sample sizes, we did not test these differences for statistical significance and therefore are unable to determine whether the reported difference is due to chance.

# Figure 11: Pre-post change in School and College Improvement Plans area for matched responses broken down by if participants received support in one (n= 21) or more areas (n=62)



Looking at figure 11, we broke down results by if schools/colleges received support in more than area. We can see that participants increased more in this area when they were receiving support in multiple areas. This supports the view that if schools/colleges receive support in one area there are positive "spill over effects" to other areas too, meaning the areas of support are not contained. Due to small sample sizes (between 21 and 62), we did not test these for statistical significance as this meant that we were unable to determine whether the reported difference is due to chance.



# Figure 12: Pre-post change in School and College Improvement Plans area for matched responses broken down by pupils in the school receiving FSM

Looking at figure 12, results are broken down by categories of number of pupils receiving FSM in their school. We can see that schools with average and high number of FSM changed directionally higher than those with low number of FSM-eligible pupils. Due to small sample sizes (between 11 and 41), we did not test these results for statistical significance and therefore are unable to conclusively determine that the reported difference was not random.

In figure 13 we can see that those who received support in the school and colleges improvement area ended up with the same score on average than those who did not receive support and this difference was not statistically significant and as such are unable to make generalisations about this finding.

Figure 13: Endline result in the School and College Improvement area comparing those that received support in the area to those that did not



### 7.2 Qualitative findings

Involvement in the programme had helped schools and colleges to refine or consolidate their thinking about technology use within their settings. For some, involvement in the programme had supported them to refine their digital strategies or have a clearer vision for how they wanted to develop a digital strategy, or had widened their thinking about the benefits that technology could bring. A number of interviewees spoke of being clearer about how to drive forward their technology strategy within their setting or being more confident in how to achieve this. In a few schools this had been achieved through involving other staff in this process. For example, one college was able to provide a practical example of involving staff in reviewing existing systems and how they are currently used with the aim of establishing whether their use of certain systems could be more efficient. Staff were encouraged to take ownership of this, and their suggestions were sought on improving current systems (such as administration systems for classroom set-up).

However, it was more difficult to conclude from the interviews whether there were any wider impacts on schools and colleges overall strategic approach to technology use. It is perhaps more likely to be expected that any systematic change to technology use within a school or college would be in timescales longer than within the parameters of the support provided through the programme.

It's been really useful [working with Demonstrator college] because ... the main takeaway from that is that we're further down the track than we thought we were - in terms of embedding edtech and [it's] really reassuring ... they had exactly the same issues as we had in terms of cultural change and the time taken to embed it. So that was pretty reassuring [that on the right track]. – *College* 

# 8. School and college resource management

The score in the school and college resource management area is based on the school/college responses to four questions from the baseline survey. These questions asked about:

- Barriers to increased uptake of education technology
- Current use of on-site or cloud-based storage and systems
- Plans for moving to fully cloud-based storage and systems
- Factors posing a challenge to fully implementing cloud-based storage and systems in schools/colleges.

A full list of questions and responses are included in Appendix A.

### 8.1 Changes in scores

# Figure 14: Pre-post change in the School and College Resource Management area for matched responses (n=45)



In figure 14, we can see that schools/colleges who received support in the resource management area on average scored 53% before participating in the programme and 64% after having completed the support. **Percentage change of matched responses was 22% which was statistically significant** (p < .001). This means that schools/colleges' scores increased significantly in this area during the programme.

In figure 15 we can see that those who received support in the resource management area ended up with the same score on average than those who did not receive support and this difference was not statistically significant, which means we are unable to make any generalisations about these results.



Figure 15: Endline result in the School and College Resource Management area comparing those that received support in the area to those that did not

In figure 16, we can see the breakdown of endline responses between those that received support in the resource management area and those that did not. The biggest difference seems to be among secondary schools, while there is not much of a difference for primaries and colleges. However, there is only a sample of 13 secondaries here so we should treat this finding carefully. Due to small sample sizes (between 10 and 69), we did not test these for statistical significance meaning that we are unable to determine that any reported difference was not random.

# Figure 16: Endline result in the School and College Resource Management area comparing those that received support in the area to those that did not, broken down by phase



## 8.2 Qualitative findings

Schools and colleges were able to provide examples of system efficiencies gained through being involved in the programme including:

- Improved consistency and streamlining of systems for recording pupil progress and activities through using Microsoft Teams.
- A MAT had introduced a consistent email communication across their schools which they felt had led to more effective and efficient communication amongst staff across the Trust.

However, the majority of schools and colleges were less able to provide examples of any cost savings that had been achieved through their involvement in the programme. Schools and colleges clearly valued that they did not have to finance the support provided through the EdTech Demonstrator programme. Budget constraints and competing demands would have meant most schools and colleges would not have been able to finance the support themselves. A reduction in printing costs (from moving systems and processes online) and more awareness of suitable free software/apps that could be utilised by schools/colleges which reduced the need to purchase software/apps were reported as cost savings. Furthermore, a primary trust lead interviewed reported that they were now more likely to pilot and trial new technology before fully investing in technology which they felt had associated cost savings, as it avoided purchases being made that were unsuccessful.

### Practice example – primary school

The primary school had used the support from an EdTech Demonstrator school to extend their use of Google Workspace amongst staff including introducing specific apps within Google classroom that teachers could use in teaching and learning. Through the support received from the programme they had introduced systems to streamline their governance process and administration function (for example, setting up shared drives and automated forms).

As a result of the support the primary school felt that collaborative working was now more widespread across the school.

The daily briefing is now on Google Workspace. It's not like we are talking, or just emailing, it's all there, and you can see everything at the same time. – *IT Network Manager, Primary School* 

The school have also moved to an online homework approach which was felt to have improved parents' awareness of homework expectations.

This is a big step. Parents can see what is happening. Parents can go onto Google Workspace and see 'Oh, yeah, this is the assignment, this is the comment that the teacher has written'. The changes would have happened, but it would have been slower. I got more confident [implementing changes] because of the EdTech Demonstrator. I had support in my mind so that if I got stuck, I knew I didn't have to scrap everything, I could just ask and get help with moving forward. – *IT Network Manager, Primary School* 

# 9. Accessible and inclusive curriculum

The score in the accessible and inclusive curriculum area is based on the school/college responses to three questions from the survey. These questions asked about:

- The extent to which software is meeting schools'/colleges' needs in supporting pupils/students with SEND
- Schools'/colleges' provision of support for pupils/students to enable them to use accessibility features built into mainstream devices and software
- The frequency of actions taken with regard to pupils/students with SEND, such as consulting specialist staff on available applications, technology, and services, exploring assistive technologies related to pupils'/students' needs during the SEND review process, and referring to external agencies for additional information and support.

A full list of questions and responses are included in Appendix A.

## 9.1 Changes in scores



# Figure 17: Pre-post change in the Accessible and Inclusive Curriculum area for matched responses (n=41)

In figure 17, we can see that schools/colleges who received support in the accessible and inclusive curriculum area on average scored 59% before participating in the programme and 72% after having completed the support. Percentage change of matched responses was 21.6% which was statistically significant (p < .001). This means that schools/colleges' scores increased significantly in this area during the programme.

In figure 18, we can see that those who received support in the accessible and inclusive curriculum area ended up with a very similar score on average than those who did not receive support. This difference was not statistically significant which means we are unable to make any generalisations about this result.



# Figure 18: Endline result in the Accessible and Inclusive Curriculum area comparing those that received support in the area to those that did not

# Figure 19: Endline result in the Accessible and Inclusive Curriculum area comparing those that received support in the area to those that did not broken down by amount of support received



In figure 19, endline results are broken down for those who did and did not receive support in the accessible and inclusive curriculum area by amount of support they received. Scores are relatively in line across the different tiers of support. An exception here is the higher average score for those that received short-term support, though this is based on the smallest sample size (n=10) so should be interpreted carefully and generalisations cannot be made. Due to small sample sizes, we did not test these for statistical significance and therefore are unable to determine that any reported difference was not random.

### 9.2 Qualitative findings

Qualitative evidence on the impact of involvement in the EdTech Demonstrator programme on schools and college's ability to provide an accessible and inclusive curriculum was minimal. For the majority of schools and colleges interviewed this had not been a focus for the support received from the Demonstrators. A few schools and colleges were able to offer examples of where their involvement had made them more aware of assistive technology and how they could use within teaching and learning to engage pupils. Demonstrators being able to introduce schools and colleges to free assistive technology that was already available to use within existing software or platforms was particularly useful. They mentioned how they had introduced new assistive technology (for example, text to speech software or other accessibility features to change colours and font size) which had supported both pupils with SEND and other pupils (for example pupil premium pupils) to engage more effectively within their learning.

It has massively helped, we've moved to {text to speech software} and all our pupil premium and SEND pupils have a device. This had helped the teachers as they do not have to prep as much for those pupils. The pupils can change colour, font size etc on all their work themselves. – *Secondary school* 

### Practice example – specialist post-16 college

A specialist post-16 college were looking for support from the programme on the suitability of technology systems and applications and how that could be applied in a specialist college setting. They wanted to upskill their staff in technology that was not solely designed for specialist settings.

A key focus of the support provided by a Demonstrator college was CPD sessions for staff on specific types of technology (for example text to speech free software and online collaborative blackboards), in addition to discussions with the Demonstrator about different student needs and what it might be possible to achieve with technology.

The college reported a number of impacts from their involvement in the programme:

- The introduction of QR software that had helped with access to the curriculum for their lower ability (entry and level one) pupils.
- Increased engagement levels for pupils who have autistic spectrum conditions through introducing technology to record engagement levels and finding that engagement increased through making learning more interesting.
- Advice from the Demonstrator on different technology applications and systems (including virtual headsets and interactive panels) had supported the college's business for cases for funding through being able to explain the benefits that these would bring to pupils and staff.

# **10.Summary and considerations**

### **10.1 Summary of impact**

Our evaluation design planned to compare progress schools/colleges had made on a pre-post survey in the outcome area they had received support in versus outcome areas where they had not. In the absence of a control group this would have helped to simulate a counterfactual.

As our qualitative analysis shows however, in practice the support provided by Demonstrators often did not fall neatly into individual outcome areas, with fluidity around the type and amount of support provided. As a result, and due to challenges with collecting a sufficiently large, matched sample in each outcome area, we report on overall impact through analysis of change in pre/post matched survey results and provide comparison of how results varied in the outcome area where support was not received to supplement this.

When reviewing changes on pre/post surveys, we observed statistically significant positive changes in each outcome area (when schools/colleges received support in the area), as follows:

- 11.9% change in recovery
- 19.2% change in teacher workload
- 21.7% change in the school and college improvement plan
- 22% change in resource management
- 21.6% change in accessible and inclusive curriculum.

However, when looking at the progress that those that did not receive support in the specific outcome area had made, we saw similar improvements here that were also statistically significant. This means that schools and colleges have made progress across the board, not just in the areas that they received support in. There are two potential interpretations:

1) Schools/colleges made progress in multiple areas during the programme even for those they did not explicitly receive support (e.g., due to Demonstrators providing support in more than one area, the benefits of support spill over to other areas as they are not isolated).

2) Schools/colleges made progress regardless of taking part in the programme (e.g., if schools nationally became more confident in using technology over the course of the 21/22 academic year).

We also looked at the different results for those that were recorded to receive support in a specific area versus those that did not. We observed that there was no statistical difference in endline scores between the two groups (except for in one area) which is in line with the above finding that progress was made across outcome areas whether they were recorded to receive support in that area or not.

In general, the qualitative findings of the evaluation would support the interpretation that the benefits of the programme were spread across multiple outcome areas, but we

should remain aware of the limitations to this analysis including a lack of a counterfactual and small sample sizes, which are presented in more detail throughout this report.

## **10.2 Considerations for DfE**

There was some feedback from the schools and colleges about further support that could be provided through the Demonstrator programme that should be considered in the context of wider policy or programme developments around the use of technology in schools and colleges. These include:

- A focus on long-term programmes and greater alignment between DfE's EdTech strategy and wider initiatives to support financial efficiencies. For example, the provision of free Wi-Fi being rolled out when some schools on EdTech programme had already invested in this and if they had known it was coming could have saved a significant financial outlay.
- Recognition of the value of a peer-to-peer collaborative model that allows schools to support other schools around technology implementation.

Because it is such a fast-paced area we need a network, or hub, of schools that can talk to each other all the time about things that they're finding out and build on this. This reciprocal peer to peer support is absolutely the most valuable [factor] I feel ... not top down, now the next thing is for Edtech to roll all of this out to schools, it's much more of a collaborative, reciprocal relationship that can be developed that will benefit all schools as we go forward. – *Secondary school* 

Most schools and colleges interviewed thought the changes they had made to how they were using technology had been accelerated from their involvement in the programme. It was clear that schools and colleges saw the EdTech Demonstrator school/college that they had been paired with as being a 'critical friend' or mentor, who was able to steer and advise them in technology use in an accessible and supportive way.

• Recognition that without the infrastructure or funding in place (for example, sufficient devices, wifi speed) then it will be challenging for schools and colleges to fully embed technology use within their setting. There was concern amongst those interviewed about their ability to embed or further build on the support they had received through the programme at a school/college level, due to difficulties in prioritising involvement in the programme or maintaining momentum, lacking the internal infrastructure or capacity to fully implement or move forward with some of the support provided, staff willingness to adapt to new practices or use of technology.

# Appendix 1: Question set for the diagnostic tool

Section 1: General Information

- 1. What is your name?
- 2. What is the name of your school/college?
- 3. What is your school's/college's postcode? (auto populated)
- 4. What is your role within the school/college?
  - Headteacher
  - Head of school/college
  - Head of year/phase
  - Head of department /subject
  - Deputy or assistant Head
  - Head of IT
  - SENCO
  - Other

5. Who is your assigned Demonstrator school / college? [dropdown of Demonstrators]

- 6. What other EdTech programmes is your school/college currently participating in?
  - Connect the Classroom
  - Platform programmes
  - None
  - Other

7. How many teaching staff has your school/college supplied devices to?

- All staff
- Most staff
- Some staff
- No staff

8. How many pupils/students in your school/college have access to laptops and/or tablets during the school day?

- All pupils/students
- Most pupils/students
- Some pupils/students
- No pupils/students

9. Would you be open to participating in some follow-up interviews and/or focus groups over the next few months? We would provide you with more information on what this would involve nearer the time, after which we will confirm your participation?

- Yes
- No

#### Section 2: Recovery

This section will cover questions around using technology to bolster pupil/student progress and outcomes.

10. On balance, to what extent is software meeting your school's/college's needs in each of the following areas? Select one for each row: "Not used", "Don't know", "Rarely", "Sometimes, "Mostly", "Always"

- Planning lessons / curriculum content
- Delivering lessons
- Conducting formative assessment
- Conducting summative assessment
- Tracking pupil/student progress

11. On balance, to what extent is software meeting your school's/college's needs in each of the following areas? Select one for each row: "Not used", "Don't know", "Rarely", "Sometimes, "Mostly", "Always"

- Offering independent / online learning (including in class)
- Supporting remote teaching and learning
- Supporting blended learning and innovative teaching (i.e. combining face-to-face and digital teaching)

12. To what extent, are outcomes for vulnerable pupils/students prioritised and supported by appropriate technology?

- School/college is yet to establish which pupils/students are vulnerable technologically
- School/college knows the needs of all pupils / students
- School/college audits resources and knows the needs of all pupils/students and matches them accordingly

13. Which of the following statements best expresses your view on the relationship between technology and pupil/student attainment in your school/college? Select one only

- Technology has contributed negatively to attainment
- Technology has not contributed to improved attainment, and it is not expected to do so in the future
- Technology has not contributed to improved attainment, but it is expected to do so in the future
- Technology has already contributed to improved attainment

#### Section 3: Teacher Workload

This section will cover questions pertaining to technology and teacher workload.

14. Thinking first about the software used in your school/college. On balance, to what extent are they meeting your school's/college's needs in each of the following areas? Select one for each row: "Not used", "Don't know", "Rarely", "Sometimes, "Mostly", "Always"

- Timetabling
- Financial management
- Pupil/student data management
- Parental/carer engagement /communication
- Supporting flexible working practices (e.g. part-time working)
- Communication with and delivery of governance

- Collaborating and sharing resources with other teachers
- Planning lessons / curriculum content
- Liaison with external support agencies

15. On balance, what impact does the technology used in your school/college have on the time it takes to complete the following tasks?

Select one option for each row: Saves a lot of time, Save a little time, Makes no difference, Increases the time spent, Not used, Don't know

- Timetabling
- Financial management
- Pupil/student data management
- Parental/carer engagement /communication
- Supporting flexible working practices (e.g. part-time working)
- Communication with and delivery of governance
- Collaborating and sharing resources with other teachers
- Planning lessons / curriculum content
- Liaison with external support agencies

16. Which of the following statements best expresses your view on the relationship between technology and staff workload in your school/college? Select one only

- Technology has increased staff workload
- Technology has not reduced staff workload, and it is not expected to do so in the future
- Technology has not reduced staff workload, but it is expected to do so in the future
- Technology has already reduced staff workload

#### Section 4: Improvement Plans

This section will focus on questions around school and college technology improvement plans.

- 17. Is there a digital technology strategy for your school/college? Select one only
  - Yes we have a school/college-specific strategy
  - Yes we have a Trust/Group-wide strategy
  - Yes we have a local authority strategy
  - Not yet in development / planning
  - No
  - Don't know

18. Which of the following are present and available in your school/college? Select one option for each row: Not available/present; Available but not accessible; Available but have limited access; Available and have easy access.

- Curriculum support to assist with technology integration ideas.
- Technology support to assist with troubleshooting.
- Colleagues' support and commitment to integrating technology in the classroom.
- Senior leaders who encourage staff to integrate technology in the classroom.

19. How do staff in your school/college typically approach the implementation of new technology?

- A member of staff implements tech in their classroom, possibly sharing with colleagues
- Several members of staff work together to embed the use of tech in their classroom/team
- School/college leaders implement a Change management approach, supporting a team of members from all areas of school/college life to implement tech.
- Don't know

20. Is appropriate, tech-focused CPD built into the regular schedule of teacher training throughout the year?

- Little or no CPD on EdTEch;
- Some in-house CPD;
- External and inhouse accredited courses specifically designed to support identified areas of weakness

21. Do you currently have plans to invest in technologies for any of the following activities in the next 3 years? Select all that apply

- Planning lessons / curriculum content
- Delivering lessons
- Conducting formative assessment
- Conducting summative assessment
- Tracking pupil/student progress
- Communicating and engaging with parents
- Offering Independent / online learning (including in-class)
- Supporting remote teaching and learning
- Supporting blended learning (i.e. combining face-to-face and digital teaching)
- Supporting pupils/students with SEND (e.g. assistive technology)
- Collaborating and sharing resources with other teachers
- Delivering teacher training / CPD
- Liaison with external support agencies
- Tracking pastoral support
- Safeguarding
- Broadband
- Networking
- Cyber security
- None of the above
- Don't know

Section 5: Resource Management

The questions in this section will cover areas around school and college resource management.

22. To what extent do any of the following represent a barrier to increased uptake of education technology?

Select one for each row with options: Big barrier, small barrier, not a barrier, don't know

- Staff willingness to use technology
- Staff skills and confidence with technology
- Safeguarding and data concerns

- The benefits of technology are unclear
- Limited procurement guidance
- Broadband connectivity in school/college
- Wireless connectivity in school/college
- Availability of technology in school/college
- Cost of technology
- Budgetary constraints
- Lack of effective technical support
- Lack of accessible objective advice

23. For each of the following storage and systems, does your school/college currently use on-premise or cloud systems? Select one for each type with options being: On-premise only, Cloud-based only, Mixture of on-premise & cloud-based, Don't know

- Finance
- Management Information Systems
- Human Resources
- Library Management
- Curriculum Storage
- Admin storage
- 24. What is your plan for moving to fully cloud-based storage and systems?
  - We are already fully cloud-based;
  - We plan to become fully cloud-based in the next 12 months;
  - We plan to become fully cloud-based at some point;
  - We do not have any plans to become fully cloud-based

25. To what extent do any of the following factors pose a challenge to FULLY

implementing cloud-based storage and systems in your school/college? Select one option for each row: Big challenge, small challenge, not a challenge, N/A (fully cloud based)

- Benefits are not clear
- Procurement guidance and frameworks
- Implementation guidance
- Concerns over security
- Affordability of migrating to the cloud
- Time required to migrate to the cloud
- Technical skills of IT team

Section 6: Accessible and Inclusive Curriculum

The following questions will focus on how technology can cater towards an accessible and inclusive curriculum.

26. To what extent is software meeting your school's/college's needs in terms of supporting pupils/students with SEND (assistive technology that supports pupils/students to learn / improve independence / wellbeing)?

- Always
- Mostly
- Sometimes

- Rarely
- Don't know

27. Does your school/college provide support for pupils/students to enable them to use accessibility features built into mainstream devices and software (e.g. computers, laptops and browsers)? Select one only

- Yes
- Not yet, but we plan to
- No
- Don't know

28. How often are the following actions taken with regard to SEND pupils or students? Select one option for each statement: Always, Sometimes, Rarely, Never

- Specialist staff are consulted on available applications, technology, and services
- Pupil's/student's needs are assessed thoroughly during the process of SEND reviews and opportunities related to assistive technologies are explored
- External agencies are referred to if additional information and support is needed

# **Appendix 2: Scoring matrix**

The scoring matrix for relevant questions is set out below.

### Section 2: Recovery

1. On balance, to what extent is software meeting your school's/college's needs in each of the following areas? Select one for each row:

- Always: 4
- Mostly: 3
- Sometimes: 2
- Rarely: 1
- Don't know / Not used: 0

Weighting of question within the outcome area: 0.25

2. On balance, to what extent is software meeting your school's/college's needs in each of the following areas? Select one for each row:

- Always: 4
- Mostly: 3
- Sometimes: 2
- Rarely: 1
- Don't know / Not used: 0

Weighting of question within the outcome area: 0.25

3. To what extent, are outcomes for vulnerable pupils/students prioritised and supported by appropriate technology?

- School/college is yet to establish which pupils/students are vulnerable technologically: 0
- School/college knows the needs of all pupils / students: 1
- School/college audits resources and knows the needs of all pupils/students and matches them accordingly: 2

Weighting of question within the outcome area: 0.25

4. Which of the following statements best expresses your view on the relationship between technology and pupil/student attainment in your school/college? Select one only

- Technology has contributed negatively to attainment: 0
- Technology has not contributed to improved attainment, and it is not expected to do so in the future: 0
- Technology has not contributed to improved attainment, but it is expected to do so in the future: 1
- Technology has already contributed to improved attainment: 2
  Weighting of question within the outcome area: 0.25

### Section 3: Teacher Workload

5. Thinking first about the software used in your school/college. On balance, to what extent are they meeting your school's/college's needs in each of the following areas? Select one for each row:

- Always: 4
- Mostly: 3
- Sometimes: 2
- Rarely: 1
- Don't know / Not used: 0

Weighting of question within the outcome area: 0.30

6. On balance, what impact does the technology used in your school/college have on the time it takes to complete the following tasks? Select one option for each row:

- Saves a lot of time: 4
- Saves a little time: 2
- Makes no difference / Increases the time spent / Not used / Don't know: 0

Weighting of question within the outcome area: 0.50

7. Which of the following statements best expresses your view on the relationship between technology and staff workload in your school/college? Select one only

- Technology has increased staff workload: 0
- Technology has not reduced staff workload, and it is not expected to do so in the future:0
- Technology has not reduced staff workload, but it is expected to do so in the future: 1
- Technology has already reduced staff workload: 2

Weighting of question within the outcome area: 0.20

### **Section 4: Improvement Plans**

8. Is there a digital technology strategy for your school/college? Select one only

- Yes we have a school/college-specific strategy: 2
- Yes we have a Trust/Group-wide strategy: 2
- Yes we have a local authority strategy: 2
- Not yet in development / planning: 1
- No / Don't know: 0

Weighting of question within the outcome area: 0.30

9. Which of the following are present and available in your school/college? Select one option for each row: Not available/present; Available but not accessible; Available but have limited access; Available and have easy access.

- Available and have easy access: 3
- Available but have limited access: 2
- Available but not accessible: 1
- Not available/present: 0

Weighting of question within the outcome area: 0.30

10. How do staff in your school/college typically approach the implementation of new technology?

- A member of staff implements tech in their classroom, possibly sharing with colleagues: 1
- Several members of staff work together to embed the use of tech in their classroom/team: 2
- School/college leaders implement a Change management approach, supporting a team of members from all areas of school/college life to implement tech: 3
- Don't know: 0

Weighting of question within the outcome area: 0.20

11. Is appropriate, tech-focused CPD built into the regular schedule of teacher training throughout the year?

- Little or no CPD on EdTech: 0
- Some in-house CPD: 1
- External and inhouse accredited courses specifically designed to support identified areas of weakness: 2

Weighting of question within the outcome area: 0.20

#### Section 5: Resource Management

12. To what extent do any of the following represent a barrier to increased uptake of education technology? Select one for each row.

- Big barrier: 1
- Small barrier: 2
- Not a barrier: 3
- Don't know: 0

Weighting of question within the outcome area: 0.50

13. For each of the following storage and systems, does your school/college currently use on-premise or cloud systems? Select one for each type,

- On-premise only / Don't know: 0
- Cloud-based only: 2
- Mixture of on-premise & cloud-based: 1

Weighting of question within the outcome area: 0.50

14. [Follow-up from 23] What is your plan for moving to fully cloud-based storage and systems?

- We are already fully cloud-based: 3
- We plan to become fully cloud-based in the next 12 months: 2
- We plan to become fully cloud-based at some point: 1
- We do not have any plans to become fully cloud-based: 0

15. [Follow-up from 24] To what extent do any of the following factors pose a challenge to FULLY implementing cloud-based storage and systems in your school/college? Select one option for each row:

- Big challenge: 0
- Small challenge: 1
- Not a challenge: 2
- N/A (fully cloud based): 3

### Section 6: Accessible and Inclusive Curriculum

16. To what extent is software meeting your school's/college's needs in terms of supporting pupils/students with SEND (assistive technology that supports pupils/students to learn / improve independence / wellbeing)?

- Always: 4
- Mostly: 3
- Sometimes: 2
- Rarely: 1
- Don't know / Not used 0

Weighting of question within the outcome area: 0.30

17. Does your school/college provide support for pupils/students to enable them to use accessibility features built into mainstream devices and software (e.g. computers, laptops and browsers)? Select one only

- Yes: 2
- Not yet, but we plan to: 1
- No / Don't know: 0

Weighting of question within the outcome area: 0.20

18. How often are the following actions taken with regard to SEND pupils or students? Select one option for each statement:

Always: 3

- Sometimes: 2
- Rarely: 1
- Never: 0

Weighting of question within the outcome area: 0.50

### Scoring Matrix Applied

To illustrate how individual question scores contribute to the overall percentage score, we have included a worked example of a school/college response below.

This example has the following overall scores:

- Recovery: 71.7%
- Teacher workload: 56.1%
- School and college improvement plans: 58.3%
- Resource management: 57.5%
- Accessible and inclusive curriculum: 65.8%

Scores per outcome area are calculated as follows:

- Calculate the average score per question
  - For question 1: (3+2+3+4+2) / 5 = 2.8
- Divide this by the maximum score for the question
  - For question 1: 2.8 / 4 = 0.7
- Multiply this by the weighting of the question
  - For question 1: 0.7 \* 0.25 = 0.175
- Add up these scores for all questions in the outcome area and multiply by 100 to get to the percentage score
  - For the Recovery area: (0.175 + 0.167 + 0.25 + 0.125) \* 100 = 71.7%

### Section 2: Recovery

1. On balance, to what extent is software meeting your school's/college's needs in each of the following areas? Select one for each row:

Area	Answer	Score
Planning lessons /	Mostly	3
curriculum content		
Delivering lessons	Sometimes	2
Conducting formative	Mostly	3
assessment		
Conducting summative	Always	4
assessment		
Tracking pupil/student	Sometimes	2
progress		

Weighting of question within the outcome area: 0.25
2. On balance, to what extent is software meeting your school's/college's needs in each of the following areas? Select one for each row:

Area	Answer	Score
Offering independent /	Sometimes	2
online learning		
Supporting remote	Mostly	3
teaching and learning		
Supporting blended	Mostly	3
learning and innovative		
teaching		

Weighting of question within the outcome area: 0.25

3. To what extent, are outcomes for vulnerable pupils/students prioritised and supported by appropriate technology?

Answer	Score
School/college audits resources and knows the needs	2
of all pupils/students and matches them accordingly:	

Weighting of question within the outcome area: 0.25

4. Which of the following statements best expresses your view on the relationship between technology and pupil/student attainment in your school/college? Select one only

Answer	Score
Technology has not contributed to improved	1
attainment, but it is expected to do so in the future	
	•

Weighting of question within the outcome area: 0.25

#### Calculation: Average (3+2+3+4+2) \* w

#### Recovery total score: 71.7%

#### Section 3: Teacher Workload

5. Thinking first about the software used in your school/college. On balance, to what extent are they meeting your school's/college's needs in each of the following areas? Select one for each row:

Area	Answer	Score
Timetabling	Mostly	3
Financial management	Mostly	3
Pupil/student data	Mostly	3
management		
Parental/carer	Rarely	1
engagement /		
communication		

Supporting flexible	Sometimes	2
working practices		
Communication with and	Sometimes	2
delivery of governance		
Collaborating and sharing	Mostly	3
resources with other		
teachers		
Planning lessons /	Always	4
curriculum content		
Liaison with external	Rarely	1
support agencies		

6. On balance, what impact does the technology used in your school/college have on the time it takes to complete the following tasks?

Select one option for each row:

Area	Answer	Score
Timetabling	Saves a lot of time	4
Financial management	Don't know	0
Pupil/student data	Saves a little time	2
management		
Parental/carer	Saves a little time	2
engagement /		
communication		
Supporting flexible	Saves a little time	2
working practices		
Communication with and	Saves a little time	2
delivery of governance		
Collaborating and sharing	Saves a lot of time	4
resources with other		
teachers		
Planning lessons /	Saves a lot of time	4
curriculum content		
Liaison with external	Don't know	0
support agencies		

Weighting of question within the outcome area: 0.50

7. Which of the following statements best expresses your view on the relationship between technology and staff workload in your school/college? Select one only

Answer

Score

Technology has not reduced staff workload, but it is	1
expected to do so in the future	

#### **Teacher Workload total score: 56.1%**

#### **Section 4: Improvement Plans**

8. Is there a digital technology strategy for your school/college? Select one only

Answer	Score
Not yet - in development / planning	1
Weighting of guardian within the outcome areas 0.20	

Weighting of question within the outcome area: 0.30

9. Which of the following are present and available in your school/college? Select one option for each row: Not available/present; Available but not accessible; Available but have limited access; Available and have easy access.

Area	Answer	Score
Curriculum support to	Available but have limited	2
assist with technology	access	
integration ideas.		
Technology support to	Available but have limited	2
assist with	access	
troubleshooting.		
Colleagues' support and	Available but have limited	2
commitment to integrating	access	
technology in the		
classroom.		
Senior leaders who	Available but have limited	2
encourage staff to	access	
integrate technology in		
the classroom.		

Weighting of question within the outcome area: 0.30

10. How do staff in your school/college typically approach the implementation of new technology?

Answer	Score
Several members of staff work together to embed the	2
use of tech in their classroom/team	

Weighting of question within the outcome area: 0.20

11. Is appropriate, tech-focused CPD built into the regular schedule of teacher training throughout the year?

Answer	Score
Some in-house CPD	1

Weighting of question within the outcome area: 0.20

#### School and college improvement plans total score: 58.3%

#### Section 5: Resource Management

12. To what extent do any of the following represent a barrier to increased uptake of education technology? Select one for each row.

Area	Answer	Score
Staff willingness to use	Big barrier	1
technology		
Staff skills and confidence	Small barrier	2
with technology		
Safeguarding and data	Small barrier	2
concerns		
The benefits of	Small barrier	2
technology are unclear		
Limited procurement	Small barrier	2
guidance		
Broadband connectivity in	Not a barrier	1
school		
Wireless connectivity in	Not a barrier	1
school		
Availability of technology	Small barrier	2
in school		
Cost of technology	Small barrier	2
Budgetary constraints	Small barrier	2
Lack of effective technical	Not a barrier	1
support		
Lack of accessible	Small barrier	2
objective advice		

Weighting of question within the outcome area: 0.50

13. For each of the following storage and systems, does your school/college currently use on-premise or cloud systems? Select one for each type

Area	Answer	Score
Finance	Cloud-based only	2
Management Information	On-premise only	0
Systems		
Human Resources	Mixture of on-premise &	1
	cloud-based	
Library Management	Cloud-based only	2
Curriculum Storage	Mixture of on-premise &	1
	cloud-based	
Admin Storage	Cloud-based only	2

14. [Follow-up from 13] What is your plan for moving to fully cloud-based storage and systems?

Answer	Score
We plan to become fully cloud-based at some point	1

15. [Follow-up from 14] To what extent do any of the following factors pose a challenge to FULLY implementing cloud-based storage and systems in your school/college? Select one option for each row:

Area	Answer	Score
Benefits are not clear	Not a challenge	2
Procurement guidance	Small challenge	1
and frameworks		
Implementation guidance	Big challenge	0
Concerns over security	Small challenge	1
Affordability of migrating	Small challenge	1
to the cloud		
Time required to migrate	Big challenge	0
to the cloud		
Technical skills of IT team	Small challenge	1
(custom)		

#### **Resource Management total score: 57.5%**

#### Section 6: Accessible and Inclusive Curriculum

16. To what extent is software meeting your school's/college's needs in terms of supporting pupils/students with SEND (assistive technology that supports pupils/students to learn / improve independence / wellbeing)?

Answer	Score
Mostly	3

17. Does your school/college provide support for pupils/students to enable them to use accessibility features built into mainstream devices and software (e.g. computers, laptops and browsers)? Select one only

Answer	Score
Not yet, but we plan to	1

Weighting of question within the outcome area: 0.20

18. How often are the following actions taken with regard to SEND pupils or students? Select one option for each statement:

Area	Answer	Score
Specialist staff are	Sometimes	2
consulted on available		
applications, technology,		
and services		
Pupil's/student's needs	Always	3
are assessed thoroughly		
during the process of		
SEND reviews		
External agencies are	Rarely	1
referred to if additional		
information and support is		
needed		

Weighting of question within the outcome area: 0.50

#### Accessible and Inclusive Curriculum total score: 65.8%

#### **Appendix 3: Comparing to EdTech Landscape Survey**

This section presents the results for the individual questions that are originally from the EdTech Landscape Survey, and therefore serving as a benchmark. It presents the average results from all baselines (n=521) and endlines (n=296) from the EdTech Demonstrator Survey.

#### Table 8: Results for 1) EdTech Landscape Survey, 2) EdTech Demonstrator baseline and 3) EdTech Demonstrator endline for the question "On balance, to what extent is software meeting your school's/college's needs in each of the following areas?"

Area	Survey	Always	Mostly	Some- times	Rarely	Not used	Don't know
Planning lessons / curriculum content	EdTech Landscape Survey	38%	48%	10%	2%	2%	0%
Planning lessons/ curriculum content	EdTech Demonstrator Baseline	10%	44%	35%	6%	2%	4%
Planning lessons / curriculum content	EdTech Demonstrator Endline	21%	55%	21%	1%	1%	1%
Delivering Lessons	EdTech Landscape Survey	29%	53%	15%	2%	2%	0%
Delivering Lessons	EdTech Demonstrator Baseline	9%	45%	39%	5%	1%	2%
Delivering Lessons	EdTech Demonstrator Endline	17%	60%	21%	0%	1%	1%
Conducting Formative Assessment	EdTech Landscape Survey	22%	38%	29%	6%	5%	0%
Conducting Formative Assessment	EdTech Demonstrator Baseline	5%	19%	48%	20%	5%	3%
Conducting Formative Assessment	EdTech Demonstrator Endline	9%	36%	43%	10%	1%	1%

Area	Survey	Always	Mostly	Some- times	Rarely	Not used	Don't know
Conducting	EdTech						
Summative	Landscape Survey	26%	40%	23%	7%	4%	0%
Assessment							
Conductive	EdTech						
Summative	Demonstrator	6%	23%	41%	21%	6%	3%
Assessment	Baseline						
Conducting	EdTech						
Summative	Demonstrator	10%	34%	40%	12%	3%	1%
Assessment	Endline						
Tracking Pupil	EdTech	15%	110/	0%	1%	1%	0%
Progress	Landscape Survey	4370	44 /0	970	170	1 70	0 70
Tracking Pupil	EdTech						
Progress	Demonstrator	20%	42%	25%	8%	2%	2%
	Baseline						
Tracking Pupil	EdTech						
Progress	Demonstrator	26%	48%	20%	4%	2%	0%
	Endline						

# Table 9: Results for 1) EdTech Landscape Survey, 2) EdTech Demonstratorbaseline and 3) EdTech Demonstrator endline for the question "Which of thefollowing statements best expresses your view on the relationship betweentechnology and pupil/student attainment?"

	EdTech	EdTech	EdTech
Statement	Landscape	Demonstrator	Demonstrator
	Survey	Baseline Survey	Endline Survey
Technology has contributed negatively	0%	20%	26%
to attainment	070	2070	2070
Technology has not contributed to			
improved attainment, and it is not	7%	43%	48%
expected to do so in the future			
Technology has not contributed to			
improved attainment, but it is expected	33%	25%	20%
to do so in the future			
Technology has already contributed to	55%	8%	1%
improved attainment	5570	0 /0	4 /0
Don't know	5%	2%	2%

Table 10: Results for 1) EdTech Landscape Survey, 2) EdTech Demonstrator baseline and 3) EdTech Demonstrator endline for the question "Thinking first about the software used in your school/college. On balance, to what extent are they meeting your school's/college's needs in each of the following"

Area	Survey	Always	Mostly	Sometimes	Rarely	Not used	Don't know
Timetabling	EdTech					4004	
Timetability	Landscape	30%	27%	9%	6%	26%	3%
	Survey	0070	2170	370	070	2070	070
Timetabling	EdTech						
Thriotabiling	Demonstrator	15%	25%	16%	11%	8%	24%
	Baseline	1070	2070			0,10	
Timetabling	EdTech						
5	Demonstrator	21%	25%	16%	9%	6%	23%
	Endline						
Financial	EdTech						
Management	Landscape	53%	33%	4%	0%	1%	9%
	Survey						
Financial	EdTech						
Management	Demonstrator	29%	34%	10%	2%	22%	3%
	Baseline						
Financial	EdTech						
Management	Demonstrator	36%	31%	5%	3%	21%	4%
	Endline						
Pupil/student	EdTech						
Data	Landscape	56%	39%	4%	0%	1%	0%
Management	Survey						
Pupil/student	EdTech						
Data	Demonstrator	32%	46%	15%	2%	4%	1%
Management	Baseline						
Pupil/student	EdTech						
Data	Demonstrator	40%	44%	10%	1%	3%	2%
Management	Endline						

Area	Survey	Always	Mostly	Sometimes	Rarely	Not	Don't
						used	know
Parental	EdTech						
Engagement/	Landscape	37%	54%	8%	1%	0%	0%
Communication	Survey						
Parental	EdTech						
Engagement/	Demonstrator	13%	44%	33%	5%	2%	2%
Communication	Baseline						
Parental	EdTech						
Engagement/	Demonstrator	23%	49%	20%	3%	3%	2%
Communication	Endline						
Supporting	EdTech						
flexible Working	Landscape	26%	40%	16%	4%	10%	4%
Practices	Survey						
Supporting	EdTech						
flexible Working	Demonstrator	7%	30%	27%	11%	15%	10%
Practices	Baseline						
Supporting	EdTech						
flexible Working	Demonstrator	19%	36%	24%	6%	9%	7%
Practices	Endline						
Communication	EdTech						
/ Delivery of	Landscape	43%	43%	7%	1%	3%	4%
Governance	Survey						
Communication/	EdTech						
Delivery of	Demonstrator	13%	35%	28%	4%	17%	2%
Governance	Baseline						
Communication	EdTech						
Delivery of	Demonstrator	22%	45%	15%	3%	11%	4%
Governance	Endline						
Collaborating	EdTech						
with Other	Landscape	38%	47%	15%	1%	0%	0%
Teachers	Survey						
Collaborating	EdTech						
with Other	Demonstrator	18%	46%	29%	5%	1%	0%
Teachers	Baseline						
Collaborating	EdTech						
with Other	Demonstrator	37%	47%	15%	1%	0%	1%
Teachers	Endline						

Area	Survey	Always	Mostly	Sometimes	Rarely	Not	Don't
						used	know
Liaison with	EdTech						
External	Landscape	220/	110/	220/	10/	10/	20/
Support	Survey	2370	44 70	2370	4 70	4 70	∠ 70
Agencies							
Liaison with	EdTech						
External	Demonstrator	00/	400/	220/	60/	100/	20/
Support	Baseline	9%	40%	33%	070	10%	3%
Agencies							
Liaison with	EdTech						
External	Demonstrator	100/	470/	220/	20/	70/	20/
Support	Endline	19%	4170	23%	3%	1 70	∠%
Agencies							

Table 11: Results for 1) EdTech Landscape Survey, 2) EdTech Demonstratorbaseline and 3) EdTech Demonstrator endline for the question "On balance, whatimpact does the technology used in your school/college have on the time it takesto complete the following tasks"

Area	Survey	Saves a lot of	Saves a little time	Makes no difference	Increases the time	Not used	Don't know
		time			spent		
Timetabling	EdTech						
	Landscape	24%	21%	16%	2%	4%	34%
	Survey						
Timetabling	EdTech						
	Demonstrat	20%	26%	13%	2%	23%	15%
	or Baseline						
Timetabling	EdTech						
	Demonstrat	26%	28%	11%	1%	24%	10%
	or Endline						
Financial	EdTech						
Management	Landscape	53%	23%	6%	1%	16%	1%
	Survey						
Financial	EdTech						
Management	Demonstrat	35%	24%	4%	2%	3%	32%
	or Baseline						
Financial	EdTech						
Management	Demonstrat	44%	22%	3%	1%	3%	27%
	or Endline						

Area	Survey	Saves a	Saves a	Makes no	Increases	Not	Don't
		lot of time	little time	difference	the time spent	used	know
Pupil/Student	EdTech				•		
Data	Landscape	60%	31%	5%	3%	1%	1%
Management	Survey						
Pupil/Student	EdTech						
Data	Demonstrat	44%	35%	6%	4%	1%	11%
Management	or Baseline						
Pupil/Student	EdTech						
Data	Demonstrat	50%	33%	5%	2%	1%	8%
Management	or Endline						
Parental	EdTech						
Engagement/	Landscape	58%	33%	4%	4%	0%	1%
Communicatio	Survey	0070	0070	170	170	0 /0	170
n							
Parental	EdTech						
Engagement/	Demonstrat	38%	38%	9%	4%	2%	8%
Communicatio	or Baseline						
n							
Parental	EdTech						
Engagement/	Demonstrat	51%	31%	8%	3%	2%	5%
Communicatio	or Endline						
n O ii							
Supporting	Edlech						
Flexible	Landscape	25%	36%	17%	2%	9%	12%
VVORKING	Survey						
Practices							
Supporting	Ealech						
Flexible	Demonstrat or Popolino	16%	34%	11%	2%	11%	26%
Practices	U Daseille						
Supporting	EdTech						
Flevible	Demonstrat						
Working	or Endline	33%	32%	12%	1%	9%	23%
Practices							

Area	Survey	Saves a lot of time	Saves a little time	Makes no difference	Increases the time spent	Not used	Don't know
Communicatio	EdTech						
n/ Delivery of	Landscape	41%	38%	9%	2%	8%	2%
Governance	Survey						
Communicatio	EdTech						
n/ Delivery of	Demonstrat	24%	39%	8%	2%	3%	25%
Governance	or Baseline						
Communicatio	EdTech						
n/ Delivery of	Demonstrat	35%	36%	8%	1%	4%	17%
Governance	or Endline						

## Table 12: Results for 1) EdTech Landscape Survey, 2) EdTech Demonstratorbaseline and 3) EdTech Demonstrator endline for the question "Is there a digitaltechnology strategy for you school/college?"

Response	EdTech Landscape	EdTech Demonstrator	EdTech Demonstrator	
	Survey	Baseline Survey	Endline Survey	
Yes - we have a	24%	10%	20%	
school/college-specific strategy	2470	1970	2970	
Yes - we have a Trust/Group-	130/	15%	20%	
wide strategy	1370	1370	2070	
Yes - we have a local authority	5%	0%	20/	
strategy	J 70	070	570	
Not yet - in development /	30%	40%	30%	
planning	52 /0	40 /0	3970	
No	17%	17%	5%	
Don't know	10%	9%	5%	

#### Table 13: Results for 1) EdTech Landscape Survey, 2) EdTech Demonstrator baseline and 3) EdTech Demonstrator endline for the question "To what extent do any of the following represent a barrier to increased uptake of education technology?"

Barrier	Survey	Big	Small	Not a	Don't
		barrier	barrier	barrier	know
Staff willingness to	EdTech				
use technology	Landscape	7%	55%	38%	0%
	Survey				
Staff willingness to	EdTech				
use technology	Demonstrator	14%	65%	20%	1%
	Baseline				
Staff willingness to	EdTech				
use technology	Demonstrator	14%	62%	23%	0%
	Endline				
Staff skills and	EdTech				
confidence with	Landscape	24% 63%	63%	12%	0%
technology	Survey				
Financial	EdTech				
Management	Demonstrator	41%	55%	3%	1%
	Baseline				
Financial	EdTech				
Management	Demonstrator	3%	31%	64%	2%
	Endline				
Safeguarding and	EdTech				
data concerns	Landscape	6%	47%	47%	1%
	Survey				
Safeguarding and	EdTech				
data concerns	Demonstrator	3%	33%	61%	3%
	Baseline				
Safeguarding and	EdTech				
data concerns	Demonstrator	3%	31%	64%	2%
	Endline				

Barrier	Survey	Big	Small	Not a	Don't
		barrier	barrier	barrier	know

The benefits of	EdTech				
technology are	Landscape	6%	30%	61%	3%
unclear	Survey				
The benefits of	EdTech				
technology are	Demonstrator	9%	41%	47%	2%
unclear	Baseline				
The benefits of	EdTech				
technology are	Demonstrator	4%	37%	58%	2%
unclear	Endline				
Limited procurement	EdTech				
guidance	Landscape	13%	40%	35%	13%
	Survey				
Limited procurement	EdTech				
guidance	Demonstrator	11%	35%	35%	20%
	Baseline				
Limited procurement	EdTech				
guidance	Demonstrator	6%	32%	49%	13%
	Endline				
Broadband	EdTech				
connectivity in	Landscape	25%	35%	40%	1%
school/college	Survey				
Broadband	EdTech				
connectivity in	Demonstrator	14%	33%	51%	2%
school/college	Baseline				
Broadband	EdTech				
connectivity in	Demonstrator	17%	29%	52%	2%
school/college	Endline				
Wireless connectivity	EdTech				
in school/college	Landscape	28%	40%	32%	0%
	Survey				
Wireless connectivity	EdTech				
in school/college	Demonstrator	17%	38%	43%	2%
	Baseline				
Wireless connectivity	EdTech				
in school/college	Demonstrator	17%	39%	43%	1%
	Endline				

Barrier	Survey	Big	Small	Not a	Don't
		barrier	barrier	barrier	know

Availability of	FdTech				
technology in	Landscape	54%	34%	12%	1%
school/college	Survey				
Availability of	EdTech				
technology in	Demonstrator	28%	43%	28%	1%
school/college	Baseline				
Availability of	EdTech				
technology in	Demonstrator	20%	42%	38%	0%
school/college	Endline				
Cost of technology	EdTech				
	Landscape	86%	13%	1%	0%
	Survey				
Cost of technology	EdTech				
	Demonstrator	55%	31%	11%	3%
	Baseline				
Cost of technology	EdTech				
	Demonstrator	48%	38%	14%	1%
	Endline				
Budgetary	EdTech				
constraints	Landscape	85%	12%	2%	1%
	Survey				
Budgetary	EdTech				
constraints	Demonstrator	54%	33%	11%	3%
	Baseline				
Budgetary	EdTech				
constraints	Demonstrator	51%	32%	15%	2%
	Endline				

 Table 14: Results for 1) EdTech Landscape Survey, 2) EdTech Demonstrator

 baseline and 3) EdTech Demonstrator endline for the question "For each of the

### following storage and systems, does your school/college currently use on-premise or cloud systems?"

Storage/System	Survey	On-premise only	Cloud- based only	Mixture of on- premise and cloud-based	Don't know
Finance	EdTech	0.40/	220/	0.404	100/
	Landscape Survev	34%	23%	31%	13%
Finance	EdTech				
	Demonstrat	15%	17%	26%	41%
	or Baseline				
Finance	EdTech				
	Demonstrat	10%	28%	32%	39%
	or Endline				
Management	EdTech				
Information	Landscape	41%	24%	24%	10%
Systems	Survey				
Management	EdTech				
Information	Demonstrat	21%	23%	29%	26%
Systems	or Baseline				
Management	EdTech				
Information	Demonstrat	13%	36%	33%	18%
Systems	or Endline				
Human	EdTech				
Resources	Landscape	29%	17%	34%	20%
	Survey				
Human	EdTech				
Resources	Demonstrat	16%	15%	29%	41%
	or Baseline				
Human	EdTech				
Resources	Demonstrat	12%	24%	35%	29%
	or Endline				

Storage/System	Survey	On-premise	Cloud-	Mixture of on-	Don't
		only	based only	premise and	know
				cloud-based	

Library	EdTech	27%	26%	15%	32%
Management	Landscape				
	Survey				
Library	EdTech	23%	13%	18%	46%
Management	Demonstrat				
	or Baseline				
Library	EdTech	22%	22%	23%	33%
Management	Demonstrat				
	or Endline				

Table 15: Results for 1) EdTech Landscape Survey, 2) EdTech Demonstrator baseline and 3) EdTech Demonstrator endline for the question "To what extent do any of the following factors pose a challenge to FULLY implementing cloud-based storage and systems in your school?"

Factor	Survey	Big challenge	Small challenge	Not a challenge	N/A (fully cloud- based)
Benefits are not	EdTech	70/	0.4%	500/	4.4.07
clear	Landscape Survey	7%	24%	58%	11%
Benefits are not	EdTech				/
clear	Demonstrat or Baseline	12%	41%	46%	0%
Benefits are not	EdTech				
clear	Demonstrat	6%	36%	58%	0%
	or Endline				
Procurement	EdTech				
guidance and	Landscape	12%	34%	38%	16%
frameworks	Survey				
Procurement	EdTech				
guidance and	Demonstrat	16%	45%	39%	0%
frameworks	or Baseline				
Procurement	EdTech				
guidance and	Demonstrat	10%	44%	46%	0%
frameworks	or Endline				

Factor	Survey	Big	Small	Not a	Don't
		challenge	challenge	challenge	know

Implementation	EdTech	14%	41%	34%	11%
guidance	Landscape				
	Survey				
Implementation	EdTech	22%	51%	27%	0%
guidance	Demonstrator				
	Baseline				
Implementation	EdTech	14%	47%	39%	0%
guidance	Demonstrator				
	Endline				
Concerns over	EdTech	17%	35%	40%	8%
security	Landscape				
	Survey				
Concerns over	EdTech	18%	43%	39%	0%
security	Demonstrator				
	Baseline				
Concerns over	EdTech	14%	41%	45%	0%
security	Demonstrator				
_	Endline				
Affordability of	EdTech	41%	26%	22%	11%
migrating to the	Landscape				
cloud	Survey				
Affordability of	EdTech	27%	39%	34%	0%
migrating to the	Demonstrator				
cloud	Baseline				
Affordability of	EdTech	24%	33%	43%	0%
migrating to the	Demonstrator				
cloud	Endline				
Time required to	EdTech				
migrate to the	Landscape	39%	35%	17%	10%
cloud	Survey				
Time required to	EdTech				
migrate to the	Demonstrator	38%	40%	22%	0%
cloud	Baseline				
Time required to	EdTech				
migrate to the	Demonstrator	29%	39%	32%	0%
cloud	Endline				

Table 16: Results for 1) EdTech Landscape Survey, 2) EdTech Demonstrator baseline and 3) EdTech Demonstrator endline for the question "To what extent is software meeting your school's/college's needs in terms of supporting pupils with SEND?"

Extent that software is meeting needs	EdTech Landscape Survey	EdTech Demonstrator Baseline Survey	EdTech Demonstrator Endline Survey
Always	10.40%	2%	4%
Mostly	39.70%	17%	35%
Sometimes	41.90%	59%	50%
Rarely	5.80%	16%	7%
Never	1.90%	0%	0%
Don't know	0%	7%	4%

Table 17: Results for 1) EdTech Landscape Survey, 2) EdTech Demonstrator baseline and 3) EdTech Demonstrator endline for the question "Does your school/college provide support for pupils/students to enable them to use accessibility features built into mainstream devices and software?"

Response	EdTech Landscape Survey	EdTech Demonstrator Baseline Survey	EdTech Demonstrator Endline Survey
Yes	35.10%	44%	59%
Not yet, but we plan to	17.40%	29%	28%
No	28.60%	13%	5%
Don't know	18.90%	15%	7%



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For any enquiries regarding this publication, contact us at: <u>EdTech.TEAM@education.gov.uk</u> or <u>www.education.gov.uk/contactus</u>

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