Alpha Academies Trust
Digital Strategy Development

Stage 1: Outline Digital Strategy

Alan Hodgin
The EdTech Consultancy

Ash Earl
RM Education

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Dear Simon and Ann Marie,

This outline digital strategy follows the two-part Executive team workshop and our separate discussions.

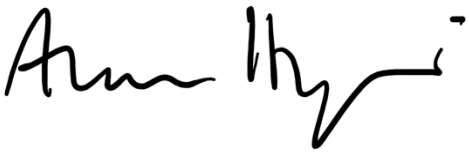
The unifying theme, which could act as a bridge for through-curriculum development from 4-16, is one of developing **reading**. This is in terms of gaining the mechanics of reading quickly to ensure reading at chronological age, so lack of reading skill doesn't inhibit progress in subjects (including comprehension of exam questions), in creating and sustaining reading at home with parents, but also in encouraging reading for pleasure for every child and all the vocabulary, writing, speaking, personal confidence and curiosity that follows from this. This could be further developed into a structured approach to becoming more widely read, as other multi-academy trusts have trialled.

The aiming points and digital strategy cover three areas: **Reading**, **Independent Learning** and **Community Engagement**. It is reiterated that digital is an enabler, a tool help address those three areas; not the plan. There will need to be a wider non-digital set of work to each workstream for overall progress to be made.

The outline digital strategy acts a framework for the digital element necessary to support progress in those three areas. It is now for the trust and its academies' educators to 'flesh-out' the detail of the outline plan to make it specific, credible and successful. From a change management point of view, this also creates buy-in and desire for that change within your staff and stakeholders.

I hope this structured approach feels logical and straightforward and look forward to discussing further.

Yours sincerely,



Alan Hodgin
Director, The EdTech Consultancy

Workshop attendees

Trust

Simon French
CEO

Ann Marie Lucy
COO

Academies

Darren Bishop
Principal, The Excel Academy

Rob Kelsall
Principal, The Discovery Academy

Alison Ellis
Assistant Principal, The Discovery Academy

Paula Rippingham-Smith
Principal, Reach Academy
& Ofsted responsibility for Safeguarding across the Trust

Rosina Lee
Principal, Sneyd Academy

Louise Brammer
Exec Principal, Eaton & Maple Academies

Jess Bell
Head, Eaton Park Academy

Lucy Bourne
Head, Maple Court Academy

Tom Bourne
IT Teacher Lead

External facilitators

Alan Hodgin
Director, The EdTech Consultancy

Ash Earl
Technical Architect, RM Education

A model for delivering change

Change across a school or organisation can be represented in three states:

1. CURRENT STATE

How things are done today

2. FUTURE STATE

How you want things to be done in the future

3. TRANSITION STATE

How to move from current to future state

Defining and communicating the **future state**

How you want things to be done in the future

Developing a digital strategy to support your overall strategy

To ensure a digital strategy supports the overall trust and academies' education strategy, the process described in figure 1 was followed.

A working definition of an academy-level shared **Purpose**, the overall education vision that all academies could buy into, was established.

Major workstreams necessary to realise that Purpose were identified, labelled as **Priorities**.

From those Priorities, the most important and urgent chunks of activity for the next 12-18 months were identified and referred to as **Big Moves**.

Where digital was deemed to be key to delivering those big moves, an **Aiming Point** was identified.

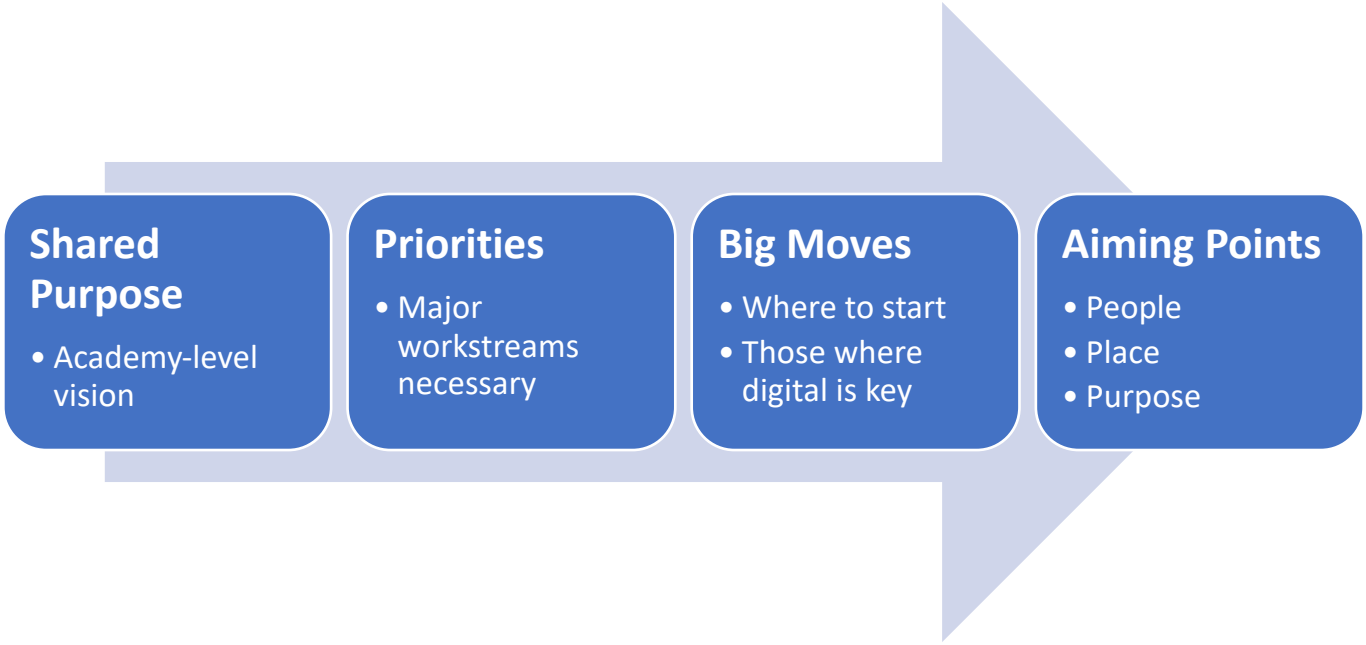


Figure 1: From wider Purpose/Vision to Aiming Points for the digital strategy

A shared purpose and vision: Levelling Up

In this post-COVID world, there is a desire to revisit the shared purpose and vision for Alpha Academies Trust.

Ahead of that work, to frame the development of a digital strategy, it was helpful to establish whether the Executive team could agree a definition of shared purpose that they could all buy into. This was as a **starter-for-ten** for the digital strategy development, acknowledging that this may well be updated as part of the wider piece of work on purpose.

During the first Exec workshop, a vision and common purpose that all academies could buy into identified, figure 2.

"Our vision is to Level Up for our young people. Each individual will realise their academic potential, we will provide opportunities and experiences to broaden horizons and discover each person's talents, and together we will build personal confidence so every young person feels they can compete on a level playing field with others that come from the most affluent areas and backgrounds."

Figure 2: Shard Purpose: A working definition from the Executive group.

Priorities necessary to realise that vision

Six **academy-level** priorities, major workstreams of activity, were identified as necessary to realise this vision.

Figure 3: Academy-level Priorities identified as necessary to realise the Shared Purpose.

Big Moves

To make the Priorities manageable in parallel to the day-job, these six were further prioritised down to just the most important and urgent chunks of activity to begin within the next 12-18 months, referred to as 'big moves'.

Each academy identified a couple of 'big moves', specific to them, and began describing the scope of each 'big move'.

For each academy's 'big move', a view was taken on whether digital was:

- an **enabler**: key, makes it possible, would be exceptionally difficult to achieve without,
- a **supporter:** a genuinely useful tool to help that saves time/effort, or,
- **not essential** or peripheral.

Aiming Points

Aiming Points are short but sufficiently detailed description of how digital will be used within this future state, such that staff are clear on what change is expected of them.

Along with Purpose and Priorities, the Aiming Points content would be suitable for initial briefings and stakeholder communications work to describe what AAT's digital strategy sets out to achieve.

For those big moves where digital was a key enabler, an aiming point was drafted. The aiming point attempted to bring clarity on the change that digital would enable, covering 'who', 'where', 'what' and 'why'. The 'how' will be returned to later during the digital plan

In groups, staff were asked to discuss and define aiming points that described PEOPLE, PLACE and PURPOSE.

PEOPLE	Who is the change aimed at?
PLACE	Where will their experience be impacted the most?
PURPOSE	Why does this change need to happen? What is the context for the change?

Aiming Points

Aiming Point 1: **Reading**

*"All pupils utilise appropriate digital technology, engaging content and tools, in school and at home, to **improve their own reading** level (to at least chronological age), and to develop a love of reading such that they proactively read for pleasure, to facilitate their success across the curriculum. Pupils take ownership for their reading progress and are able to use digital reading tools and content in a convenient format.*

*"Pupils use a wide range of digital tools to aid their **writing and oracy**, inspired by their reading."*

*"All parents/carers utilise digital technology, content (eBooks and audiobooks) and tools to **confidently read with their child at home**, promoting pupils' reading understanding and pleasure."*

*"Teachers develop a **consistent and efficient approach to the teaching of reading**, using a blend of traditional and digital resources and assessment tools, to support effective reading in school and at home. Teachers provide **support for EAL and lower literacy skill level parents/carers**, so they are also able to confidently read with their children."*

*"Teachers of all subjects from Early Years to Key Stage 4 work together to develop a **through digital curriculum** which is carefully and deliberately sequenced, supported by engaging fiction, non-fiction, poetry, biography and classic wider reading to **aid pupils' understanding**, to form links between subjects, to drive pupil curiosity and to ultimately ensure pupils are 'well read'. This digital curriculum and digital reading material is made available at home and at school and supports transition between Primary to Secondary phases."*

Meaning we will start:

- Ensuring a wide range of engaging digital content is available via a simple (eBook) delivery system, forming/strengthening relationship with council libraries as required.
- Providing pupils access to an appropriate one-to-one device they can use in class and at home for reading eBooks and audiobooks and for taking their own reading assessment quizzes.
- Ensuring pupils, teachers and parents utilise a single, trust-wide, proven reading assessment tool to track and monitor reading progress.
- Making lesson resources and teaching materials accessible in targeted online spaces.
- Developing inter and intra academy digital collaboration spaces for teachers to sequence their digital curriculum.
- Developing digital 'book group' collaboration spaces for pupils to discuss books and reading.
- Teachers facilitating in virtual classrooms.

Meaning we will stop:

- Reliance on paper-based books and resources.
- Storing lesson resources in generic shared areas.
- Communicating only when face-to-face or through written feedback.
- Thinking only about our own subject or phase when curriculum planning.

Aiming Point 2 – Independent Learning

*"All teachers participate in trust-wide research projects to trial and develop the **best approaches to successfully develop independent learners**. Some of those approaches will involve digital tools. Teachers will use digital collaboration tools to recruit peers to participate, to collaborate on their projects together as teams, and to share summarised good practice across the Trust community in an easy-to-apply format for other teachers' CPD and adoption within their own practice. Over time, this will systematically improve pupils' independence and curiosity in their studies."*

*"During class lessons and in homework, teachers deliberately and purposefully **create opportunities to encourage pupils' independent learning**, through the framing of the tasks they set and the choices given to the pupils on how to accomplish those tasks. Teachers are digitally resilient and can confidently accommodate and encourage pupils to use a wide range of digital tools to create their work. Teachers utilise digital tools to **efficiently provide timely and specific feedback** to pupils on their work."*

Meaning we will start:

- Making lesson resources and teaching materials accessible in targeted online spaces.
- Setting and managing homework (and flipped homework) workflow electronically.
- Proactively developing pupils' digital skills, initially focused on those skills necessary to intelligently evaluate information sources, (safely) collaborate with peers as appropriate, and to creatively and confidently use a range of digital tools to author work that meets the learning objectives[1].
- Teachers using digital tools to efficiently provide pupils timely and specific feedback.
- Teachers facilitating in virtual classrooms.
- Building teachers' own digital resilience to cope with less a restrictive approach to how pupils complete work.
- Developing digital collaboration spaces for teachers to work together on evidence-based improvement in pupil learning outcomes, to share successes, CPD and resources.
- Embedding latest best practices into teaching across the trust.
- Developing how we plan group learning and independent study.
- Providing access to an appropriate device that pupils can use in class and at home to develop their independent learning and academic curiosity.

Meaning we will stop:

- Being unnecessarily prescriptive in *how* each task we set pupils is done.
- Reliance on face-to-face communication and collaboration.
- Continuing to teach in ways that don't reflect latest and proven best practice.

[1] "Guidance: Essential digital skills framework", 23 April 2019, DfE

Aiming Point 3 – **Engaged Community**

*"Outside the classroom, teachers and support staff thoughtfully use a **variety of digital communication channels**, as most appropriate in order to communicate and collaborate with one another, pupils and parents/carers."*

*"Outside of school, online and in their first language, parents/carers are easily able to access a rich level of detail on their child's academic progress, **can join the school in celebrating their child's rewards/successes and support teachers and support staff to address difficulties** and/or attendance. Parents have an electronic two-way channel to teachers and tutors, including but not limited to parents' evenings. Parents have a window into the cocurricular life of the school and are encouraged to actively support drama, dance, music, sport fixtures and school trips."*

"Parents are encouraged to help celebrate success of other pupils, achievement, high standards and aspiration across the Trust."

"Parent/carers are encouraged to utilise school electronic systems to create or take part in parent-driven charitable community social events and fundraisers."

*"Staff make a range of digital content and resources available to help EAL and low-literacy level **parents/carers improve their English literacy**, such that they can better support their child's learning at home.'*

Meaning we will start:

- Staff making choices in how they communicate and the tools and channels they use to make it most effective.
- Providing more transparency in pupil tracking data we collect to parents.
- Providing a best-in-class set of digital tools for parent two-way communication on the full life of the school and the progress of their child.
- Providing engaging digital content, news, examples and successes, all coherent with the theme of aspiration and ambition.
- Developing and/or sourcing resources and tools to help improve parents' literacy, treating a cohort of parents as learners, looking for partnerships with further education providers to help.

Meaning we will stop:

- Default modes of communication with parents and reliance on paper-based communications.
- Communicating only when face-to-face or through written feedback.
- One-way communication with parents.

Understanding the **current state**

How things are done today

Change management

In the context of technology, change should be considered from two perspectives:

1. PEOPLE CHANGE: How do our people need to change in order for them to deliver this future state?

2. TECHNOLOGY CHANGE: How does our technology provision need to change to deliver this future state?

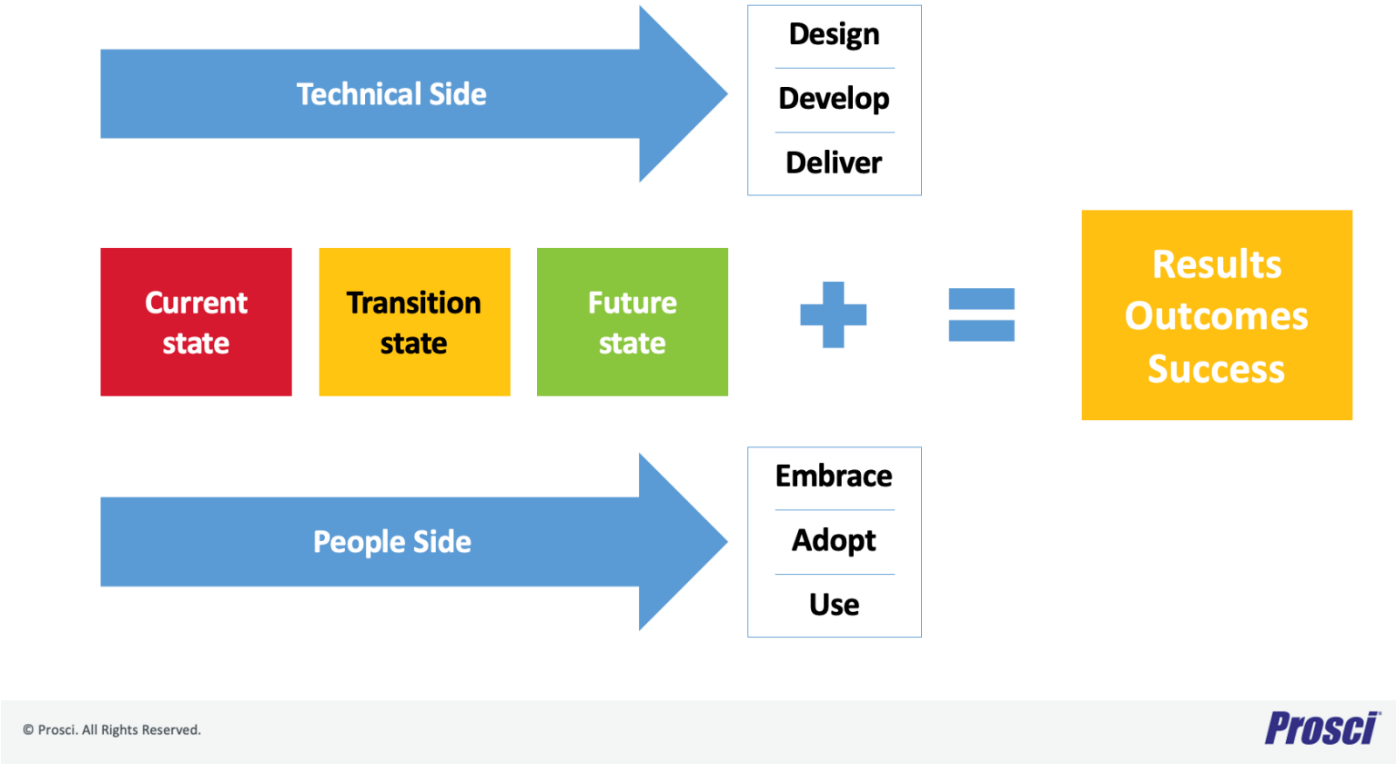


Figure 4: Successful change requires proactive management of both the people and technical change

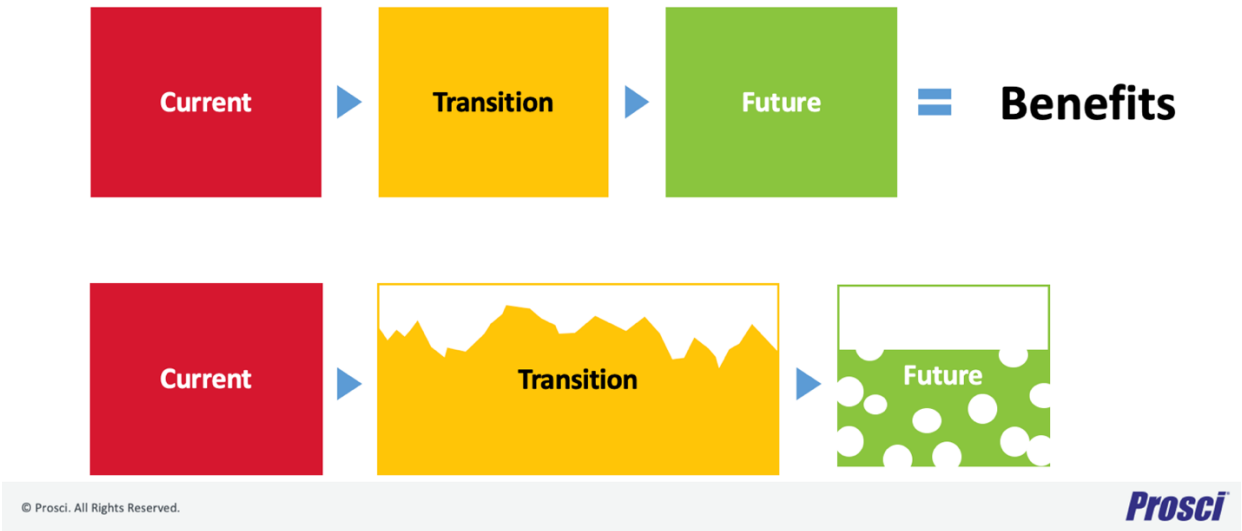


Figure 5: Unless people change there will be patchy utilisation and the desired benefits won't be realised

1. PEOPLE CHANGE

Success will be achieved only if the trust and its academies are successful in supporting each individual's transition from current to future state.

Understanding people's current skills and abilities in the relevant contexts is essential in order to accurately assess the magnitude of this change for individuals, as well as the academies and trust as a whole.

Developing a plan that reflects the wide-ranging needs and addresses the **diversity of current competencies** is vital. It should outline small steps for individuals as well as key milestones for all. The technical change needs to work in parallel so that people can be successful at each step and stage of the transition.

1.1 Understanding people's current skills and abilities

The Impact Survey is a methodology for assessing staff ICT maturity in two dimensions; their technical skill and their confidence in applying those skills to their teaching (or support role). It provides a snap-shot of where your staff are at now.

The staff Impact Survey had previously been conducted in 2017. Four years on, the Impact Survey[2] was re-run to establish staff's maturity profile regarding their current use of technology. This time, pupils were also asked a set of questions. Staff questions allow comparison versus 2017 as a longitudinal study and versus national average[3].

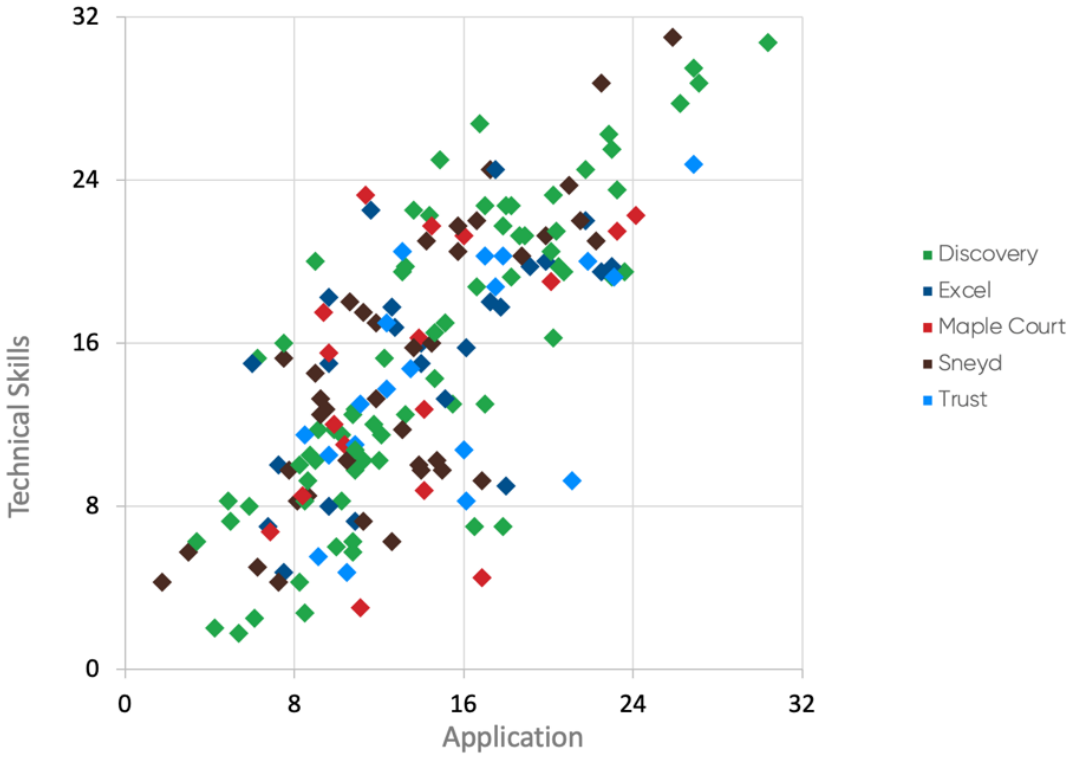


Figure 6: 2021 Impact Survey results by academy, 172 respondents

[2] Full analysis tables of the Impact Survey results are available separately. 214 pupil responses. 173 staff responses. Insufficient responses from Eaton Park to feature.

[3] National Average figures are from thousands of staff responses, but it should be noted that the vast majority are pre-COVID.

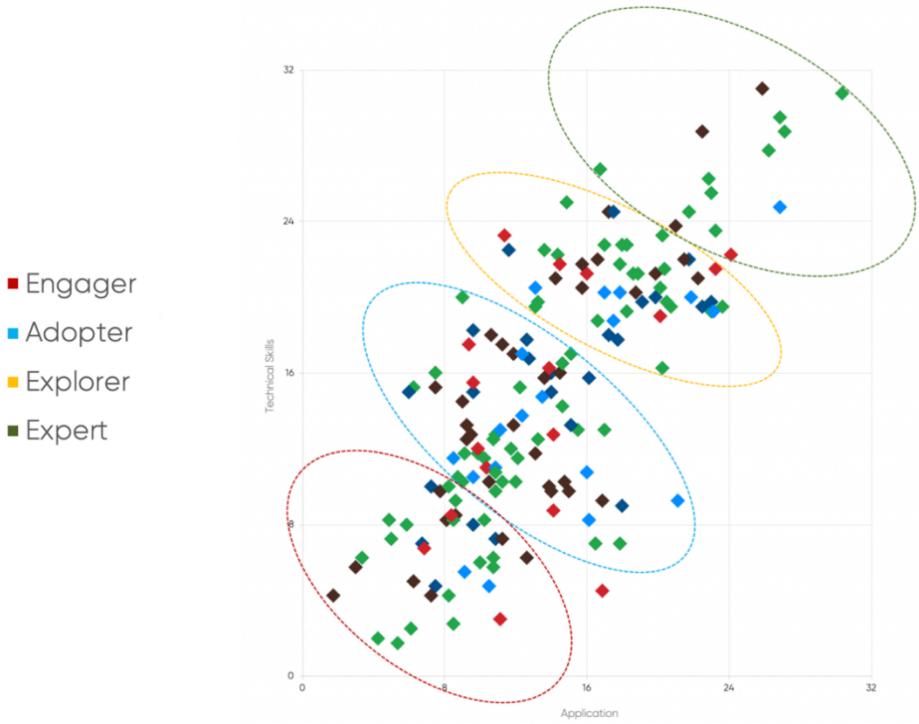


Figure 7: 2021 Impact Survey results, categorised into four cohorts

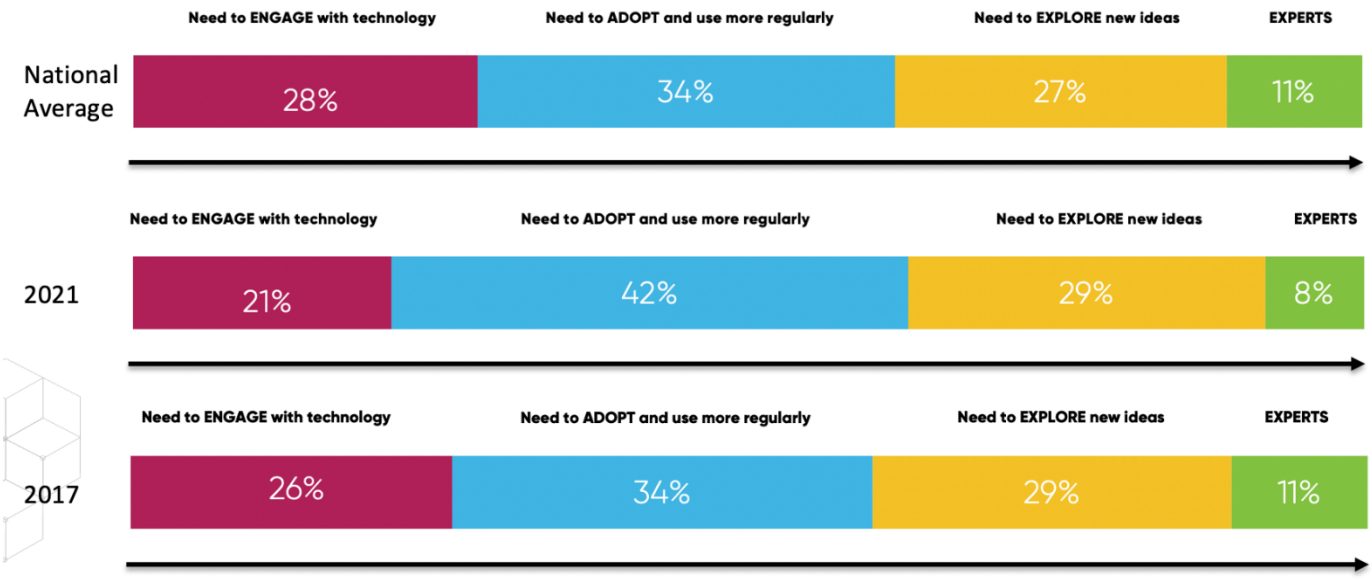


Figure 8: Impact Survey Results relative to 2017 and National Average, showing a reduction in proportion of staff in lowest cohort

Full analysis can be found in the associated RM report but the particular relevance here is that staff are **distributed across the upper and lower quartiles** for both technical skills and learning application. This range must be reflected in any plans that are developed. Successful change will only be achieved if every individual can make the transition from current to future state, whatever their starting point.

Steps, milestones and expectations need to be matched to the magnitude of this change for each peer group. A good plan needs to define goals that are achievable for the individual but have everyone heading in the same direction

and working towards a common future state. Typically, that would include differentiating any staff CPD, based on starting point.

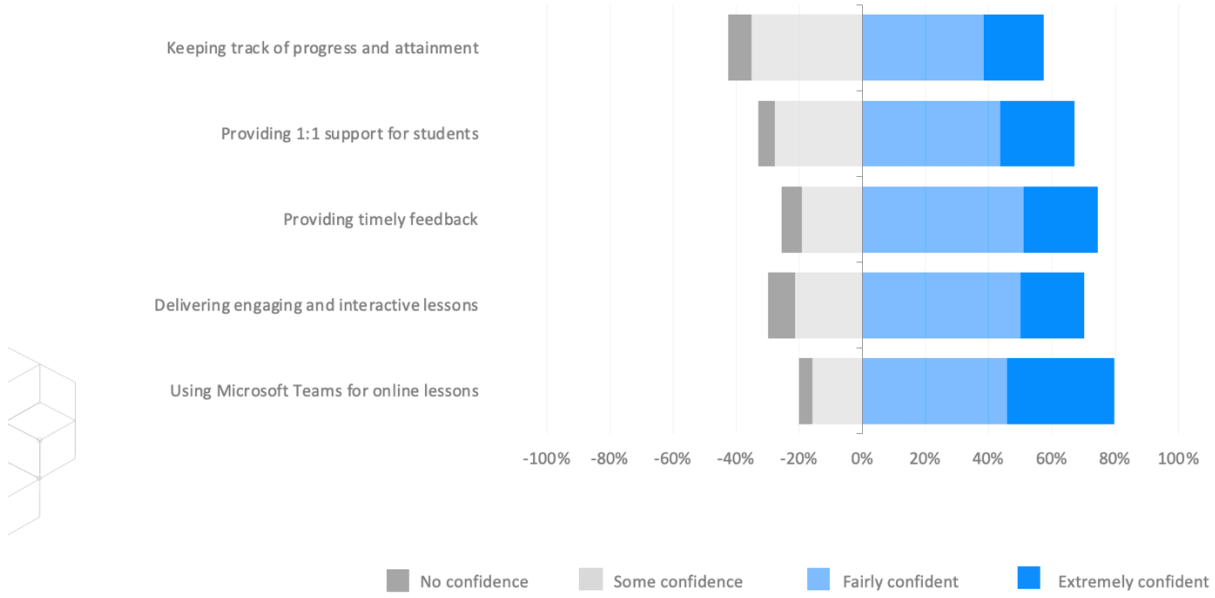


Figure 9: Teachers: Indicate how confident you are in each of the following areas in the context of remote learning.

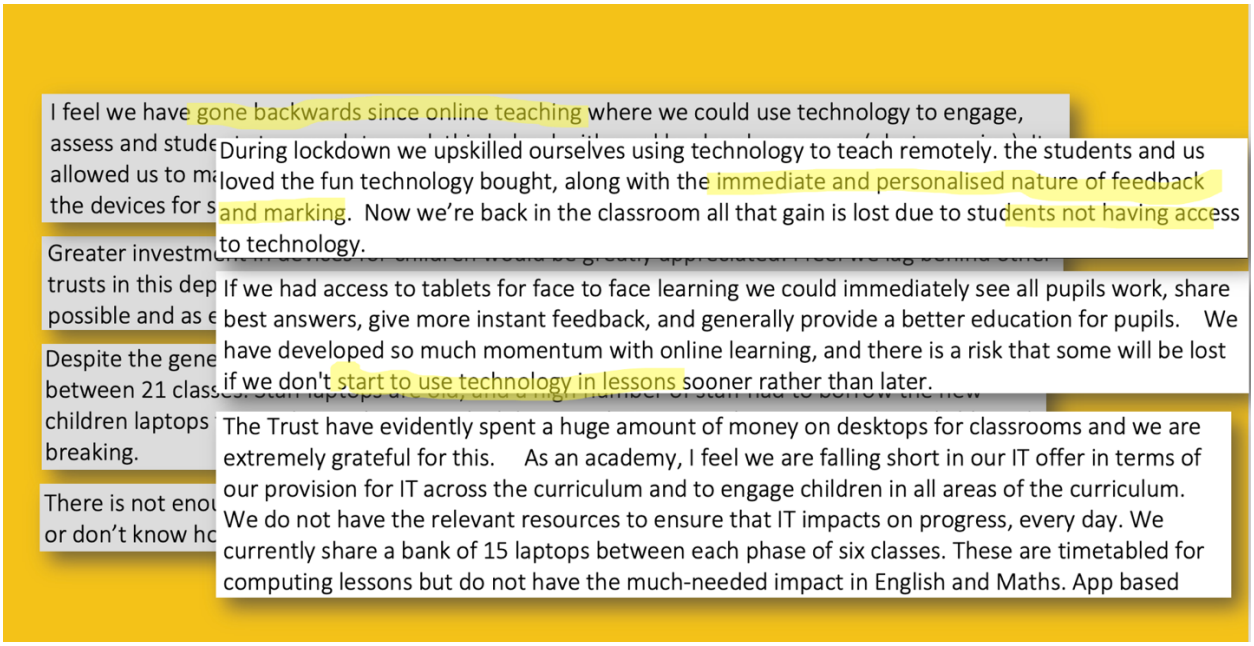


Figure 10: 2021 ImpaCT Survey's free-text responses: teachers' frustration at lack of pupil access to IT in school, post-COVID

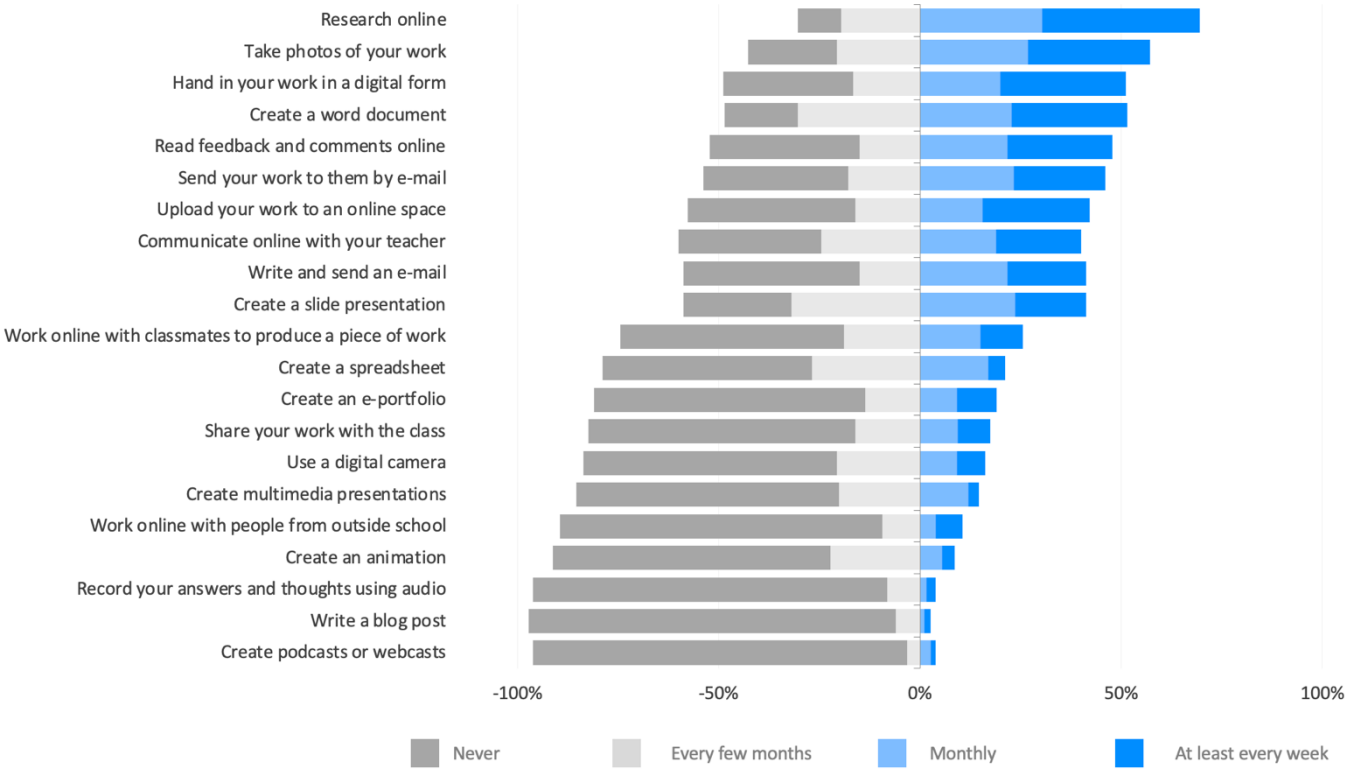


Figure 11: 2021 Impact Survey - pupil responses to "how often do the majority of teachers ask you to….?", noting the high proportion of "never" for some very basic activities

Figure 12: 2021 Impact Survey, staff:
"List the 3 common tasks that you would like technology to help you with much more than it does at the moment"

Key takeaways from the 2021 Impact Survey findings, relevant to bridging the gap between our current state and desired future state, are:

Positive:

- There has been a small reduction in the proportion of staff at the beginning of their ICT maturity, with fewer Engagers now since 2017 and relative to the national average.
- Remote teaching and learning necessitated by the COVID lockdown has yielded high teacher confidence[4] in the use of remote learning digital tools. Teachers' eyes have been opened to the potential of technology, especially for timely and specific feedback on pupils' work.

Negative:

- Significant teacher frustration that they've not been able to apply their new distance learning IT skills since pupils have now returned to school, due to a lack of pupil access to IT in class.
- Pupils report unadventurous and basic use of IT for tasks that teachers set pupils. Most pupils believe that teachers don't encourage use of technology for learning.
- Staff perceive there to be a lack of clarity in the Trust's vision for ICT.

1.2 Developing a plan for transition

How will you support one person successfully changing and making the transition from their current state to the desired future state?

Organisations don't change, people change

The Prosci® ADKAR model for successful change at the level of an individual is shown in figure 13. The aim is to achieve each step sequentially, only moving to the next stage once you are confident the current step has been grasped.

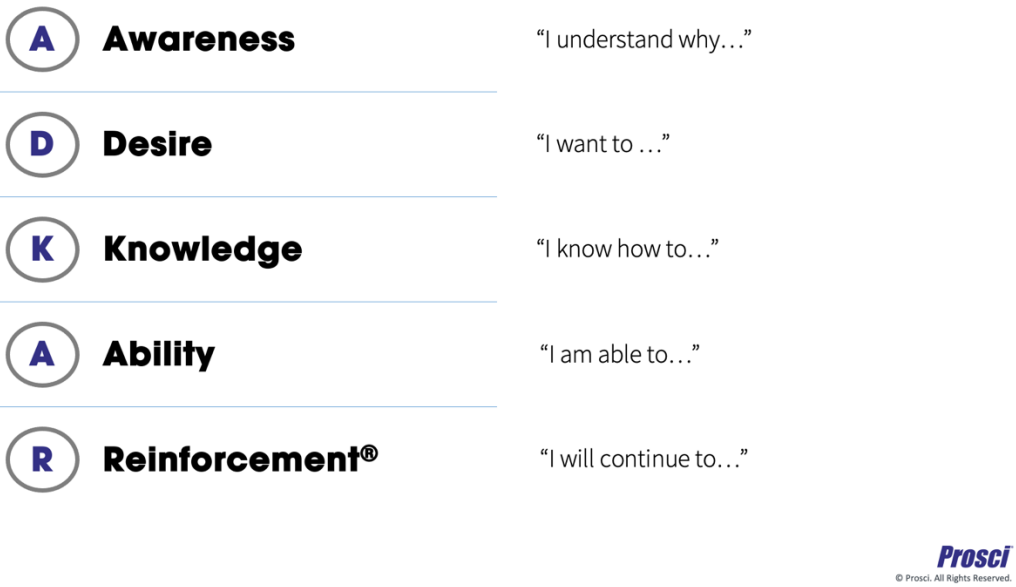


Figure 13: Prosci® ADKAR Building blocks for successful change

[4] It should be noted that Discovery Academy's teachers' confidence is far ahead of the other academies within the Trust.

Crucially, as described in figure 14, unless individuals reach the **Ability** step successful change will not have occurred.

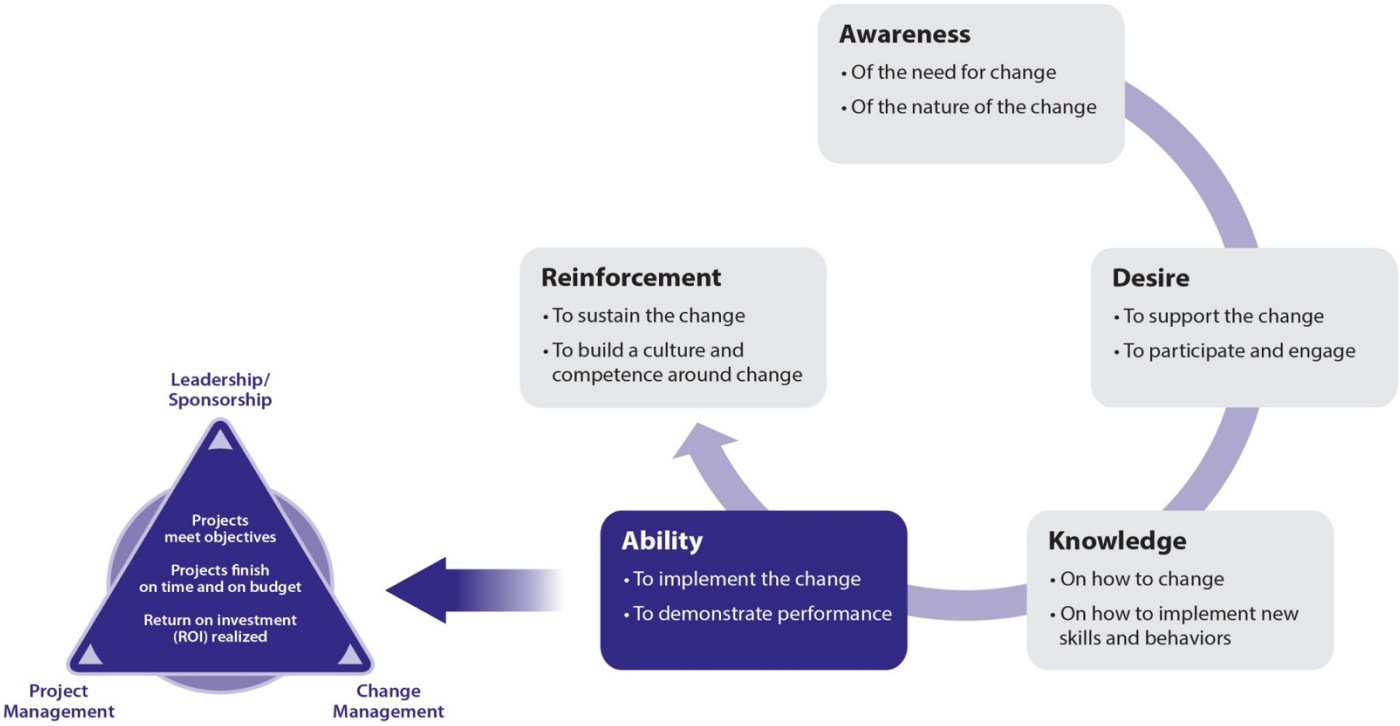


Figure 14: Prosci® ADKAR Model: Change only occurs when individuals reach the Ability step

For example, there's little point providing teacher training (addressing Knowledge) without having first established a strong desire within the teaching body to change their practice; knowledge without desire means a teacher would simply know what they *could* do, should they ever be so inclined.

Similarly, unless that knowledge is quickly applied in practice, followed by a chance to reflect, review and then apply again to improve, then change will stall at the knowledge step without the crucial **ability** step having been reached.

When developing your plan for People Change, start by thinking about one individual from the peer groups identified in the previous section – Engagers, Adopters, Explorers & Experts – and shape a plan that would work for them.

When you have this core outline, then consider how this needs to be adapted for all staff across each of the peer groups.

A phased approach detailed in figure 19 and later in the document may help.

Strategic preparatory steps for successful change

Before leaping into getting started, there are some strategic choices to make in preparing the organisation for change. Figure 15 describes three categories of activity recommended within the Prosci® change management methodology.

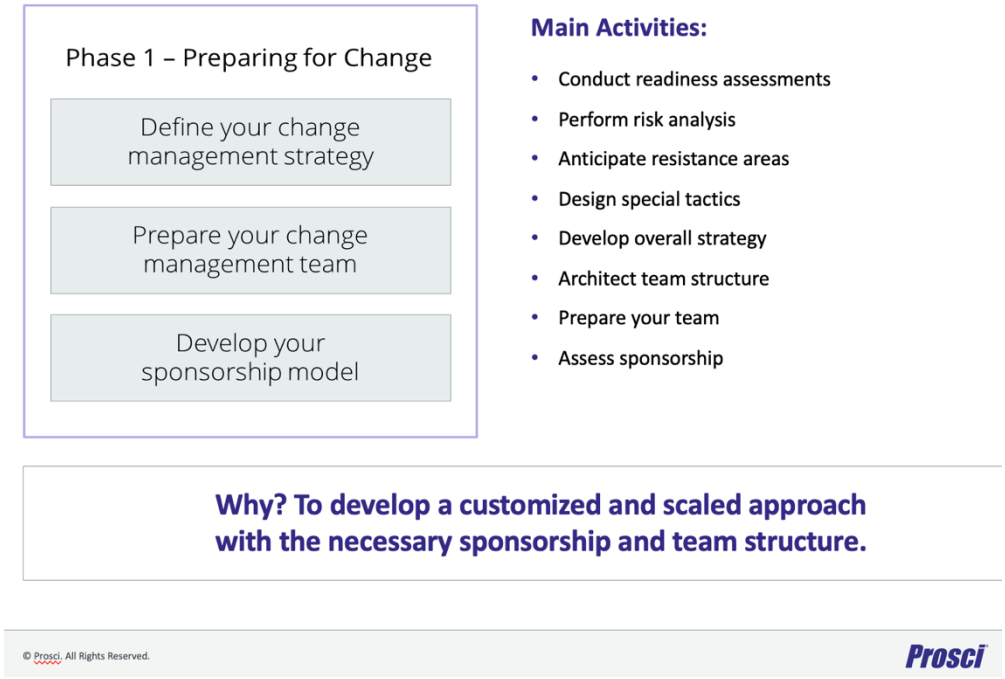


Figure 15: Prosci ® Preparing for Change

Readiness assessment

The readiness assessment tools, figure 16, are particularly useful and I recommend these are conducted in the near future:

- **Prosci Risk Assessment**: A two-by-two matrix that assesses the scale of change vs the organisation's readiness for the change. This helps inform your resourcing, based on degree of risk.
- **Prosci PCT™ Assessment**: A snapshot of the current health of your project, considering the three strategic elements necessary for successful change (Leadership/Sponsorship, Project Management, Change Management), to help ensure there's appropriate focus on each area. This can easily be rerun throughout the project as a tracker.
- **10 Aspects of Change Impact**: Understanding how different groups are impacted by the change, so you can prioritise and customise support.
- **Primary Sponsor Assessment & Evaluation**: Assess and then build a coalition of leaders across the trust to ensure the change is successful. A strong coalition of sponsors is one of the key indicators for project success.
- **ADKAR analyser**: A snapshot of progress of impacted groups on their change journey, allowing you to help remove barriers to their successful change. This should be rerun throughout.

Most are tracking metrics that can be updated throughout the project, acting as a 'change dashboard', e.g. figure 16.

Figure 16: Prosci® Impact Index: Your change management dashboard. Populated with dummy data in this case, by way of example.

Team structure

We naturally always default to project management – delivering the technical elements of the project to time and to budget – but tend to gloss-over the change management elements – ensuring that our people embrace, adopt and utilise the new tools and processes.

To try to avoid that, figure 17 shows an example of a team structure that may work well for you.

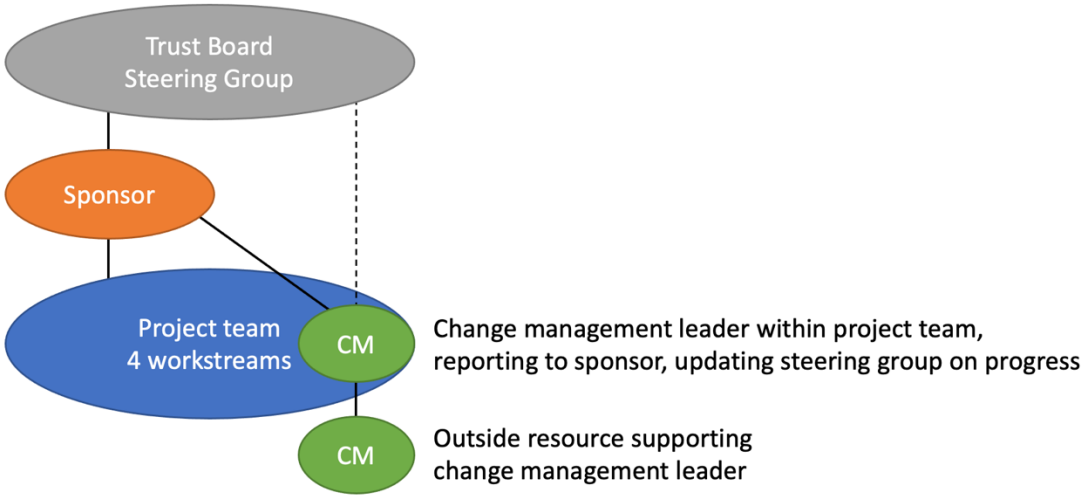


Figure 17: Recommended team structure

Strengths of this structure are:

- direct connection between the primary sponsor and the people side of the change;

- challenge the sponsor's role to provide active and visible sponsorship of the change;
- change manager feels accountability to the steering group for utilisation.

Optionally, the Sponsor could be either an individual (e.g. CEO) or a small group of key Sponsors (e.g. CEO, COO and academy principals).

Whether you adopt this or another structure, it is worth appointing a specific individual with responsibility for change management. You should consider how they will work with the project team, what are the reporting lines to the primary sponsor and steering group, and if they're not a qualified change management practitioner, how they will be supported in their role.

Anticipate resistance areas

Time spent **anticipating likely points of resistance** with mitigation tactics for each, will enable proactive rather than entirely reactive resistance management.

For example, teachers are a key group impacted by the change that this digital strategy represents, most of whom have a low level of confidence in using technology today according to the Impact Survey. Many have continued to be respected and successful teachers whilst historically 'opting out' of using technology (much) in their roles to-date. They are also coping with a large amount of other more urgent change (e.g. COVID response and exam changes).

So, you may anticipate teachers, especially those in the Impact Survey Engager and Explorer cohorts, will provide passive resistance and quietly continue to teach without using technology.

Anticipating this in advance allows mitigation tactics to be put in place from the outset.

The role of leaders to support individuals to change

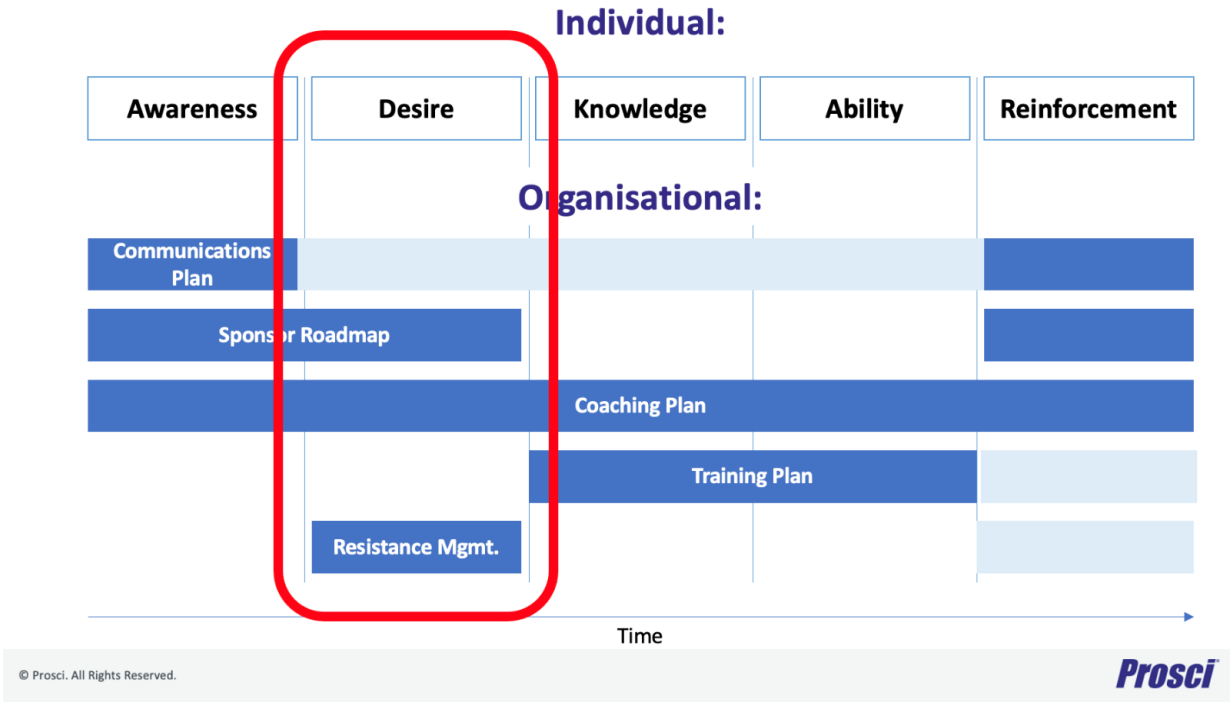


Figure 18: Planning for Results: change management at the organisational level

At an organisational level, all levels of leadership have an important role to play in creating a desire for the change, especially as for many the change may initially represent an unpleasant shock.

Looking at the Prosci® organisational activity necessary to support individuals' change, figure 18, it becomes clear that this needs to be much more than a principal's kick-off video briefing followed by some INSET training!

Trust and academies' leadership teams need to **communicate** the change and why it is necessary. But they also need to sustain **active and visible sponsorship** of this desired 'future state', through a planned and deliberate set of activities; called a 'sponsor roadmap'. That should include steps to build their **change coalition** across the organisation.

Heads of department, as individuals' line managers, are key to coaching their direct reports, contextualising and detailing the change required for each of their staff, taking feedback, sharing resources to keep workload down, addressing issues and managing resistance. Note that they will need time to first progress through the ADKAR stages themselves before we can expect them to advocate the change to their own staff. Although much of this may be obvious to emotionally intelligent staff, it is always a good idea to provide specific training to people managers on what a good coaching plan for change management should include.

Your change manager should create the five organisational-level change management plans to support your staff:

- **Communications Plan**
- **Sponsor Roadmap**
- **Coaching Plan**
- **Training Plan**
- **Resistance Management Plan**

External outside resource may be required to help the change manager do this.

CREATING A PLAN – PHASES

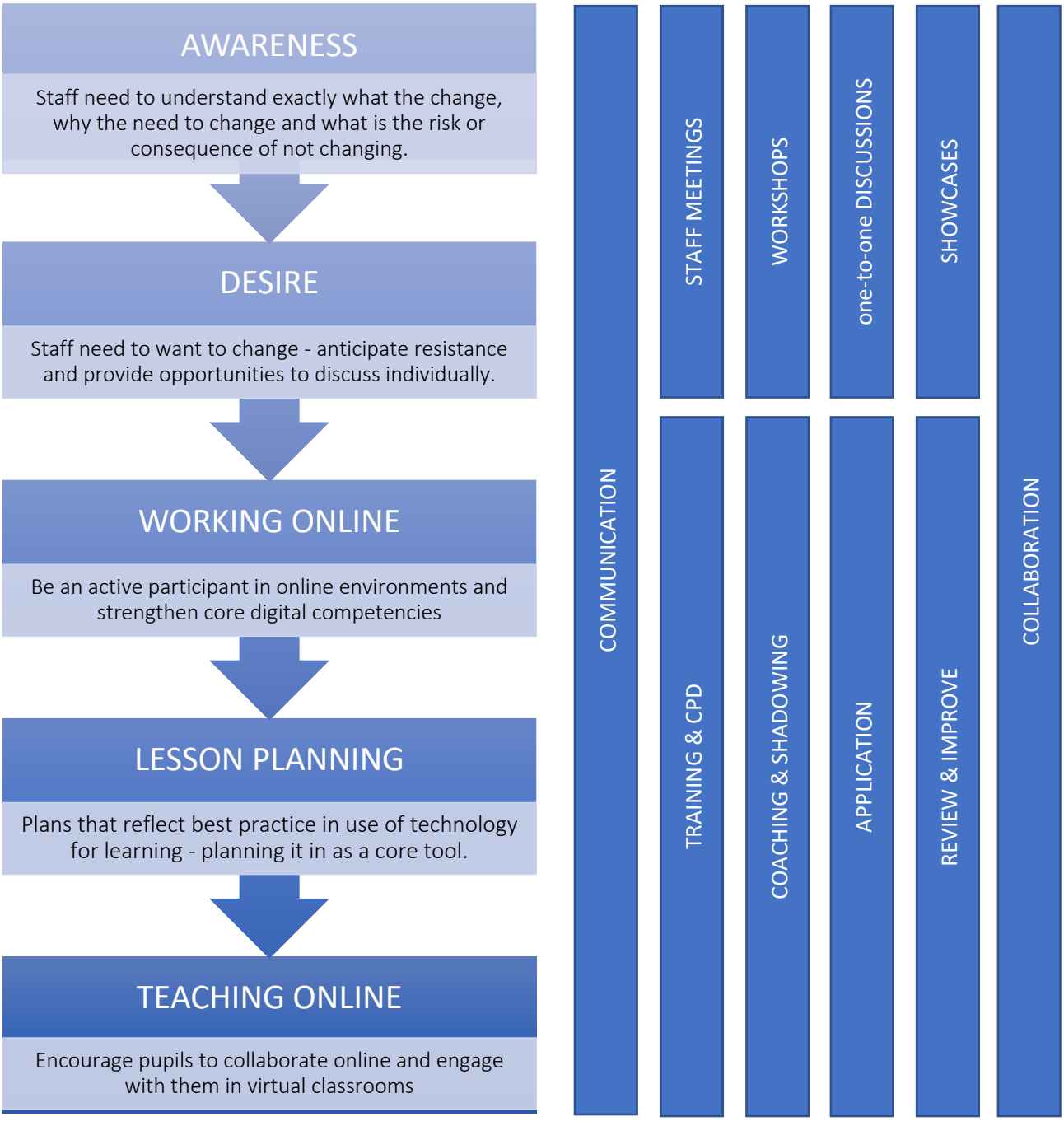


Figure 19: A phased plan to move an individual through this change

2. TECHNOLOGY CHANGE

Success will be achieved only if the technology delivers what each phase requires.

2.1 Understanding technology drivers

We know from RM's recent managed service tender exercise that reducing the cost of IT provision and improving reliability using a **'Cloud First'** approach is important to you.

RM's response within that tender exercise remains relevant:

Underlying technology principles

Digital Transformation & Cloud first – Adopt a "Cloud First" mindset when reviewing, renewing, and procuring technology. This will enable you to simplify and standardise the core IT provision to one that is designed based on the value it provides to the Trust, its staff, and the pupils it supports.

Challenge everything – Questioning the value your IT systems deliver and defining the value you want to achieve will move your decisions away from a solution-led approach towards a requirement-led approach. Continuing and accelerating the transformation already underway at the Trust, we advise you to use each IT refresh project as an opportunity to further transform towards a flexible cloud delivery model, where new methods and ideas can be tested, and valuable innovations can be rolled out more quickly.

Why a server? – You currently still have systems that depend on local server applications. Removing Windows devices and onsite servers can be a barrier to some achieving a serverless goal and needs careful consideration and planning. Discussing all remaining onsite hosted systems and options to replace with cloud first type services allows academy stakeholders to understand what is left and build the plan to move to the cloud first model.

Platform neutral – Whilst Google does not match your current choice of ecosystem, as you are currently utilising Microsoft Office 365, the concepts remain completely relevant to you and your academies: asking "Why is this not in the cloud yet?" is key with your individual academy stakeholders.

Legacy systems return on investment – It is recommended that you maximise your existing IT investments by initially continuing to utilise your currently solutions where possible. RM will recommend and deliver technologies that will underpin and enable a hybrid cloud IT services delivery in the future.

Capex to revenue-based procurement – Your current operating model relies on a capital investment on hardware over three to five years, which locks you into digital solutions for these periods. To achieve real meaningful digital transformation, progress needs to be decoupled from your capital spend to alternative options, such as revenue-based, lease-based, and parental-contribution-based.

Best practice – Delivering your IT services from both your onsite servers and additional cloud services, RM will deliver a best practice, co-managed IT infrastructure, that will give you the freedom to utilise cloud services within the Microsoft Office 365 ecosystem, as your default go to place to work and study.

Beginning the journey to a cloud-first strategy

Figure 20 illustrates a potential hybrid IT services design which would form the first step of your future digital transformation:

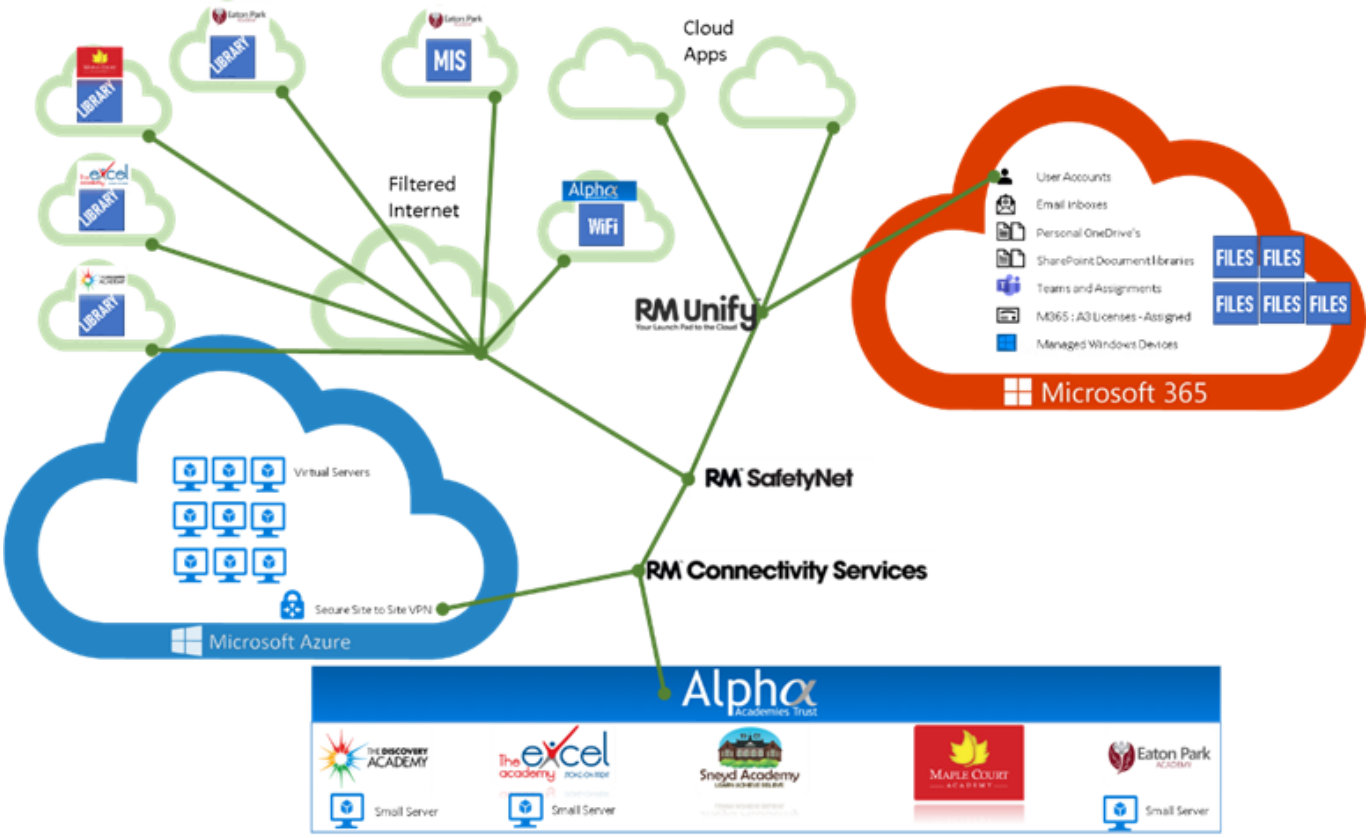


Figure 20: High level overview - Stage 1 of a Cloud First strategy

- **Data in the cloud** - Personal, and shared files would be migrated from onsite file servers into Microsoft Office 365.
- **Smaller sunk costs footprint** – Retiring expensive servers at Excel and Discovery should be replaced by a much smaller onsite server presence, reducing capital expenditure, and preventing large sunk costs until you are fully cloud in the future.
- **Primary Serverless** - There should be no future requirement for physical servers located at the Primary sites. Your server workloads would be migrated to virtual servers running with Microsoft Azure.
- **Efficient Connectivity** - Your fast RM Connectivity gives you the opportunity to connect your academies directly, quickly, and securely to your new Microsoft Azure network. As Microsoft Azure is a pay-as-you-use platform, you then have the freedom to choose alternatives to your services running here, and if necessary, power off your existing virtual servers as they are replaced to make immediate cost savings.
- **Wireless replacements** - Finally, your end-of-life Wi-Fi that is currently managed from both Excel and Discovery would be replaced by a cloud managed Wi-Fi product. This means you only pay for the wireless devices you provision and not have to make investments in capacity at year 1 which includes the expected growth up to year 5, which has previously been the case.

Change Management – Whilst utilising Microsoft Office 365 as your default IT services location will help realise your vision for digital transformation more quickly, changes will have to be made to existing working practices, processes, and the systems you use. This will be a substantial change for your staff and pupils. Such a level of change may challenge staff, who may well be 'change-weary' having gone through such a large disruption during the Covid-19 pandemic.

Staff will certainly want to understand and see the benefits in advance of any user-facing changes.

All change management journeys should include technical proof-of-concept work and pilots to show users the advantages of new ways of working. As discussed in the People section, you will also need to provide the appropriate professional development to ensure users make the best of changes and feel cared for.

You should utilise Microsoft Azure Infrastructure as a Service (IaaS) to migrate your existing IT infrastructure to a location where it is secure and supportable. As Microsoft Azure IaaS is consumption-based, you have the flexibility to use as much or as little as you want. This approach will allow time for future planning and avoid costly rushed mistakes.

Harnessing the power of your MIS in Office 365 – Microsoft Office 365 and Teams have been used extensively and successfully for teaching and learning in the last 12 months. You can see from the Impact Survey there is staff appetite to do more with data and files stored online.

You should continue to harness the power of the data within your MIS utilising your recent investment in Locker Connect to provision teaching groups in Microsoft Teams, creating structure and order in your online learning environment, and freeing up time for your teachers to teach and focus on what is important to them.

Also, by having a defined area for each class, created with a standardised naming convention and policies, your use of Microsoft Office 365 will be simplified. All of this by bringing order, structure, and predictability to your cloud environment. This will enhance the usability of the systems and further aid your drive towards the cloud.

2.2 Developing a plan fit for the future state

There are 10 core choices you would need to make to build a technology platform to support the digital strategy, figure 18.

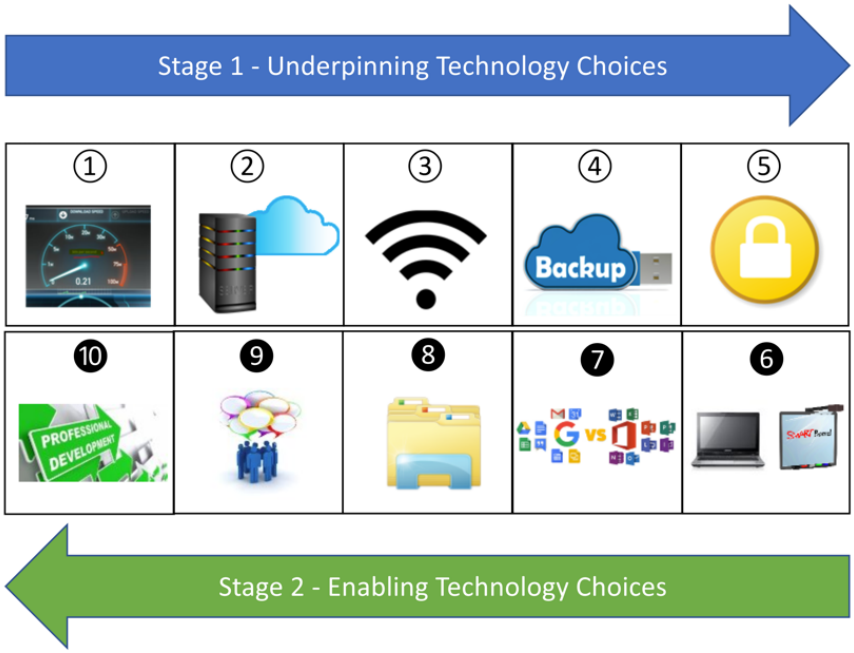


Figure 21: Five underpinning and five enabling technology choices

From RM's ongoing relationship with you and your academies, you will recognise all these choices:

1. **A fast, stable, and resilient broadband connection** capable of delivering teaching and learning from cloud-based resources for all connected users.

   Your broadband provision from RM delivers what you would expect from a specialist supplier of educationally-focussed broadband provision: Fast, reliable, and resilient internet connections, the potential to turn-on secure remote access solutions that do not depend on your onsite hardware, and protection against online threats such as DDoS (Distributed Denial of Service) which can cause massive disruption to teaching and learning.

2. **A suitable supporting IT service infrastructure** that is delivered from either an onsite or cloud location. It is important to recognise that both onsite and cloud services have a cost, but the cloud services have benefits, such as scalability and availability, which are not as easy to achieve on-site. You have begun this journey as you are utilising cloud backup storage to securely backup your onsite servers at Discovery and Excel Academies. As you can see from figure 20, there are further Azure cloud infrastructure steps to take.

   Whilst the monthly costs may be more expensive than similar technologies onsite, by having little capital upfront expenditure and choosing a pay-as-you-go model, you could choose to back up what is important to you and only pay for that provision. Unlike the traditional onsite capital purchase of IT infrastructure, where there is a drive to maximise the use of your investment, cloud backup rewards you for reducing your utilisation of onsite storage. As local quantities of data reduce, so does the quantity of data in the cloud and therefore you will pay less. Moving files to OneDrive, Teams and SharePoint Online will result in a real-time reduction in expenditure in your backups.

3. **Wired and wireless connectivity** should be available wherever they are needed and work seamlessly with minimal interaction from your users.

   RM are already working with you to develop a proposal to reconfigure your network infrastructure in 2021/22. You are aware that your current Meru Wi-Fi is end-of-life. A replacement should be budgeted for to move AAT to a technology that has a longer operational life and offers a lower total cost of ownership. RM works with HP Aruba to provide schools with excellent value wired and wireless network infrastructure, all of which is covered by Aruba's limited lifetime warranty.

4. **A backup solution** capable of delivering the levels of data protection you expect.

   Recognising that your requirements evolve with your transformation strategy and to meet your individual backup and disaster recovery requirements. RM will adhere to the following process to re-design your solution with you to make sure your provision is the right fit:

   - **Engage** with you during detailed solution design to understand what services need to be backed up to meet with your Business Continuity plans. Ash Earl, Technical Architect, will discuss your requirements to deeply understand your specific needs. By discussing what is and is not important to keep the organisation running in the event of a disaster, RM will tailor a solution to make sure that it is effective, cost sensitive and will perform to your expectations if IT system failures occur.

   - **Assess** your IT systems, backup, and recovery setups to establish the capacity of these systems to meet the expected Business Continuity objectives.

   - **Create** and agree a costed plan to implement a Backup and Disaster Recovery solution that meets your needs. Once RM have a detailed understanding of your requirements, they will design a solution that will meet your unique requirements by:

     - Defining **Recovery Point Objectives** (RPOs). RPOs are a definition of the points in time to which backups are recoverable to. This may be as simple as midnight each night, which may mean a disaster at 4pm will mean it would be possible to recover a system to the previous night's backup. The loss of data would be between midnight the previous night to 4pm. From engagement with AAT, these may be configured to be more frequent for critical systems to reduce potential data loss.

     - Defining **Recovery Time Objectives** (RTOs). RTOs are a definition of the amount of time it would take to recover a backup to a working infrastructure. Different backup technologies offer different recovery speeds and as such different RTOs. By engaging with the school openly regarding IT systems capacity and capability, RM will be able to provide a backup and recovery system that will be able to meet expectations.

     - Ensuring **Data Security**. To provide AAT with an appropriate level of data security for their backup systems, RM design solutions in the following way:

       Protecting data in transit. Where backup data traverses' insecure networks, RM will configure the network traffic to be encrypted in transit. This means that only the backup client and the backup server can read the traffic that passes between them.

Protecting data at rest. Anywhere backups are stored, data encryption will be used which means that only authorised backup agents will be able to access the data. Recovery keys for this encryption would be shared with the Trust and stored securely by RM upon request.

Protecting backup data from cyber-attack threats. RM will always recommend a layer of offline storage for backups to make sure the school have a recovery option should IT systems fall victim to a cyber-attack like ransomware. Ransomware should not be able to attack offline storage as it will be inaccessible. So long as the offline backups were from a point before the attack, data will be recoverable.

For example, figure 22 (below) is a high-level overview of a disk-to-disk-to-cloud solution in use at Discovery and Excel Academies. The disk-to-disk element of the backup solution supplies rapid local backups. This minimises possible negative speed and performance effects on live systems related to the backup process. The local backups are kept for an agreed period. This reduces the storage requirements on-site and reduces the costs of implementing the solution. This local backup uses online storage so is quick to recover from, providing excellent RTOs.

5. **Providing offline protection against cyber threats** – to provide longer retention for backups, we utilise the backup system to automate copying local backups to a cloud repository. Recovery from the cloud storage repository is much slower than from the local backup storage but provides cost-effective long-term retention and resilience to threats such as ransomware attacks. This method becomes more cost effective with larger amounts of data which make the costs of managing, supporting, and storing a more traditional tape library more expensive. Cloud hosted backups can also be recovered to Infrastructure-as-a-Service servers hosted in remote data centres. This option may be required if the Trust wishes to have cloud recovery services for mission critical systems.

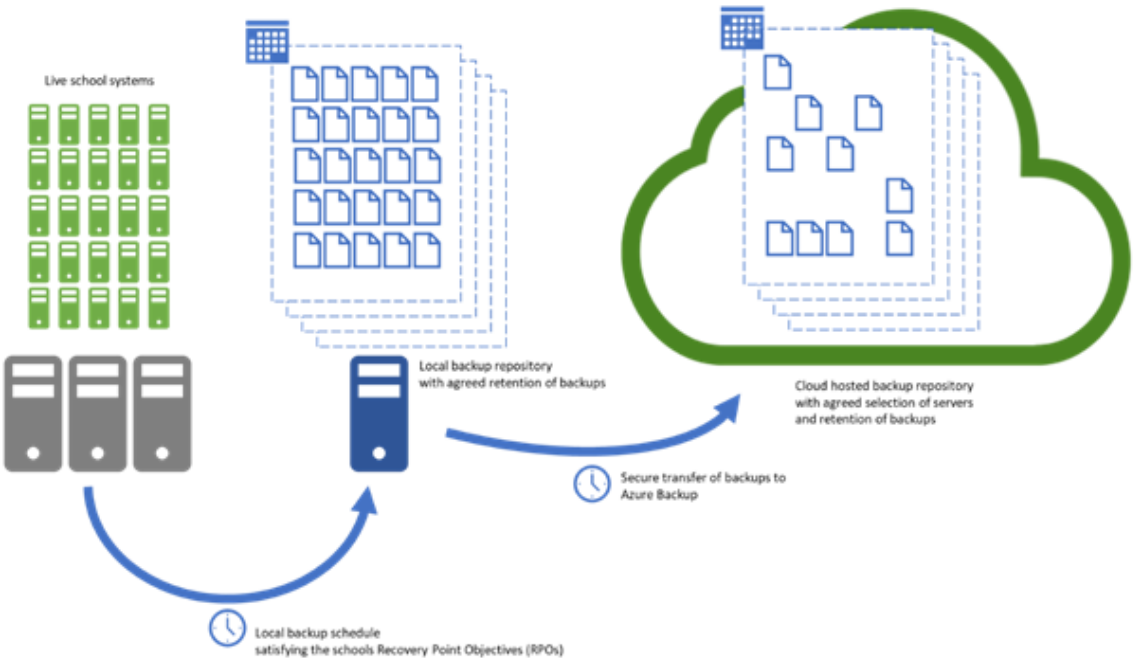


Figure 22: High level overview – Disk to Disk to Cloud (D2D2C). Backups are stored locally on a staging server and selected backups are then copied to a secondary location in the cloud. Cost reductions are possible if only the critical data is retained in the cloud storage, as opposed to backing up all data to the cloud.

Based on the output of the backup solution review process detailed above, RM would reconfigure your backup model for Excel Academy and Discovery Academy. Should the primaries continue to utilise onsite servers, RM will work with you to remove tape infrastructure and maximise the value of your backup repositories at Discovery and Excel and your fast connectivity between sites to protect the primaries.

A level of protection for your staff and pupils from network and internet threats and a level of monitoring that enables your pupils freedom to discover and learn, but provide tools for your staff to intervene when necessary.

You currently utilise RM SafetyNet, Windows Defender and eSafe to protect your users against internet threats which is excellent.

As you move to pupil one-to-one devices, continuing to provide this level of protection, including proactive alerting and monitoring of pupil devices *outside* of the school network, would be sensible; the devices are likely to be used in unsupervised locations once they leave the school.

6. **A device refresh policy and a technical roadmap** that recognises when your end-user devices no longer support your vision. Devices that are too slow, unsupportable, or unreliable should be removed or replaced.

   RM will support you by providing you with timely, relevant, and accurate insights into your IT estate. This will enable you to make informed choices and plan investments that will have the maximum impact in your academies.

   Leaning on RM's considerable expertise and experience in working with schools to select appropriate one-to-one devices and running many pupil device schemes, including many with a degree of parent funding, will be invaluable.

   One-to-one Pupil Device Programme Exploration – As you already have surplus pupil devices provided under the DfE laptops for students initiative, it is worth evaluating how suitable different subsets of these devices are for a pupil one-to-one programme that delivers on the Aiming Points detailed in this report.

   RM's analysis of the subsets of these 1,000 devices is in the next section. Only a portion of the 1,000 may be suited to the use-cases and the desired/essential attributes for a one-to-one device.

   As such, it is important that you use this opportunity to better understand what attributes are essential and desirable in your one-to-one device choice.

   This will become apparent during any pilot. As part of this, you should also research and pilot other types of device, such as Chromebooks and tablets (including iPads), especially those with pen input devices.

7. **A clear vision** as to which cloud ecosystems are used, where multiples are used, and which should be used for what purpose.

   You are clearly a Microsoft Office 365 Trust. Continuing to federate access using RM Unify will allow you to harness the power and benefits of this ecosystem.

   Google Workspace Services – In the future, there may be additional services within the Google Workspace that you wish to use, and RM is supportive of this. RM Unify can federate to Google Workspace **as well as**

Office 365. As long as there are clear expectations set for staff and pupils as to what services are for in each ecosystem, to avoid confusion, users should be able to utilise both ecosystems without barriers.

8. **Files should be stored in the correct (cloud) location** depending on what they are:
   - Personal documents should be kept in personal storage.
   - Shared documents that are used by more than one person should be held in shared storage.

   In both cases, these locations should be Cloud First, unless legacy working practices exist which mean they must be stored onsite. Any apparent legacy requirements would be worth challenging, of course.

9. **Technologies should be promoted that facilitate collaboration and reduce workload** for your staff and pupils.

   You have already started doing this and your continued use of RM Unify as your gateway to the cloud will allow you to position future cloud technologies you wish to use front-and-centre, by simply placing an App tile on your users' dashboards.

   Whether it be a simple single sign-in link to Teams or a new SharePoint document library for your departments, or links to handpicked content on the internet, you have the power to promote and facilitate the adoption of new resources by configuring dashboards in a few clicks.

10. **Most people don't like change -** To maximise your investments, training and development must always precede major changes to support your staff and pupils to thrive with the innovative technology.

Digital Coaches

For staff who are more confident with technology, we recommend the formation of a **Digital Coaches** group. A sustainable training model, this group will receive more advanced training, with the expectation that they will support the wider staff to develop their skills.

Student Coaches – opportunities to extend learning and personal development

We also advocate the adoption of **Student Coaches** at an agreed stage during the transformation process. These young people also receive support in the form of access to the Online Platform but as a group separated from staff. This way, they can be monitored in terms of their engagement with the content.

Student Coaches can provide support to their fellow pupils and to staff who may have a problem that needs solving during a lesson. The appointment of Student Coaches should be from appropriate year groups and seen as a badge of merit. The number of Coaches can change throughout the school year, and it would be envisaged that Coaches continue in the role throughout their time at the school.

A Transition Plan

How to move from current to future state

We have **four main workstreams** to this outline transition plan, figure 23. It is recommended that you appoint a named owner for each and someone with overall responsibility for all four, reporting back to Trust board on progress. See further thoughts on structure in figure 17 above.

Figure 23: Four key workstreams to this outline plan

In summary, the four are:

1. Flipped Learning "basic training"

A teacher-CPD-heavy "basic training" set of chunked activity, focused on up-skilling all teaching staff to utilise your existing investment in Microsoft Office 365 cloud platform, including some its tools that you are not yet using, such as OneNote Class Notebooks, Forms, Teams Assignments and Flipgrid.

This workstream covers **digitising lesson resources**, setting and marking **homework electronically**, using **digital tools for timelier and more specific pupil feedback**, coordinating **meaningful group work**, and replanning how to use homework vs classwork time to improve pupils' subject understanding via a **flipped learning** methodology.

Especially for the (majority of) teaching staff in the lower two Impact Survey quartiles, the Engagers and Adopters, this represents a very significant change relative to their existing teaching practice. The good news is that this future state is much nearer to the new ways of working that staff adapted to successfully during recent distance learning.

Of course, for this to happen in-class, one-to-one access to devices are needed for pupils. However, it is recommended that the pupil device choice is led via the Reading Aiming Point working group in (2) below.

To illustrate how this significant change can be turned into realistic bite-size chunks of smaller change, this has been chunked into 5 stages below, figure 24, each with example milestones and success criteria.

As illustrated from page 41 onwards, it is recommended that you make use of your Experts and Explorer staff to **create and define** the new ways of working, to put in place the templates that your less digitally confident Engagers and Adopters could then **make use of**.

The same approach (milestone success criteria and differentiating tasks between staff Impact Survey cohorts) could also be taken with the other three workstreams, though for brevity in this report that has not been set out explicitly.

2. Reading Aiming Point

This focuses on digital steps to provide the necessary **range of electronic reading material**, on **suitable one-to-one devices**, with **reading assessment** technology in place.

It also provides the trust-wide Microsoft Teams necessary for teachers to work together to define a standard approach to teaching reading, to embed wider-reading across all curriculum subjects, and to begin to develop the sequenced through-curriculum.

It will provide technology to help encourage writing and to develop oracy.

Digital's role to help improve parents'/guardians' literacy skills will be covered in (4).

3. Independent Learning Aiming Point

This provides the **cross-trust Microsoft Teams collaboration areas for the R&D work** that will be undertaken to research, trial, evaluate and roll-out best practice in approaches to develop pupils' independent learning skills. Building on the Flipped Learning CPD, it also would include steps to teach pupils the range of tools they could use to complete work and to **build teachers' digital resilience** to receive and provide feedback on pupil work submitted in a much wider range of formats.

4. Engaged Community Aiming Point

Simple **two-way communication tools** to aid efficient and effective communication with parents.

Digital steps in place to allow a subset of parents (EAL, low literacy) to also be learners within the Trust, allowing targeted resources and potentially teaching to parents as distance learning/hybrid learners.

PHASES: AWARENESS & DESIRE

- Launch a programme of activities that will articulate the nature of the change.
    - Why does Alpha Academies Trust want to this?
    - Why now?
    - What's the risk of not changing?
    - Describe the future state and what it means for the pupils and for the staff
    - Use the Aiming Points to pithily describe the future state with enough detail that staff start to understand what their own transition may look like

- Perhaps give it a name so it is identifiable, so comms and activity can be easily recognised as associated with this, e.g. Project Level-Up

- Schedule focussed workshops (department/group) and one-to-one discussions (all) – these will underline the fact it is a priority and help gauge the level and nature of resistance and objections.

- Share a detailed plan of how, with timescales and milestones, to reassure everyone they will be supported in successfully making the transition, whatever their starting point.

- Create an area to share materials, progress and project updates etc. (e.g. SharePoint, or a specific team within Teams)

PHASES: FROM WORKING ONLINE TO TEACHING ONLINE

These phases reflect the transition each individual needs to make.

In the outline plan below, we have described this journey in a staged way that relates to a specific context, one that is relevant to your aiming points.

The plan is structured around a five-stage journey for teaching staff, centred around the context of flipped learning, a methodology that supports and enables the collaborative lesson experience and independent learning.

There are additional steps necessary that are specific to each of the aiming points – improving reading, independent learning and engaged community – that are on top of this.

It is acknowledged that support staff will require a separate journey to this.

Flipped Learning

Flipped Learning is a pedagogical approach in which direct instruction moves from the group learning space (classroom) to the individual learning space (homework), and the classroom can then be transformed into a dynamic, interactive learning environment where the teacher guides the pupils as they apply concepts and engage creatively in the subject matter.

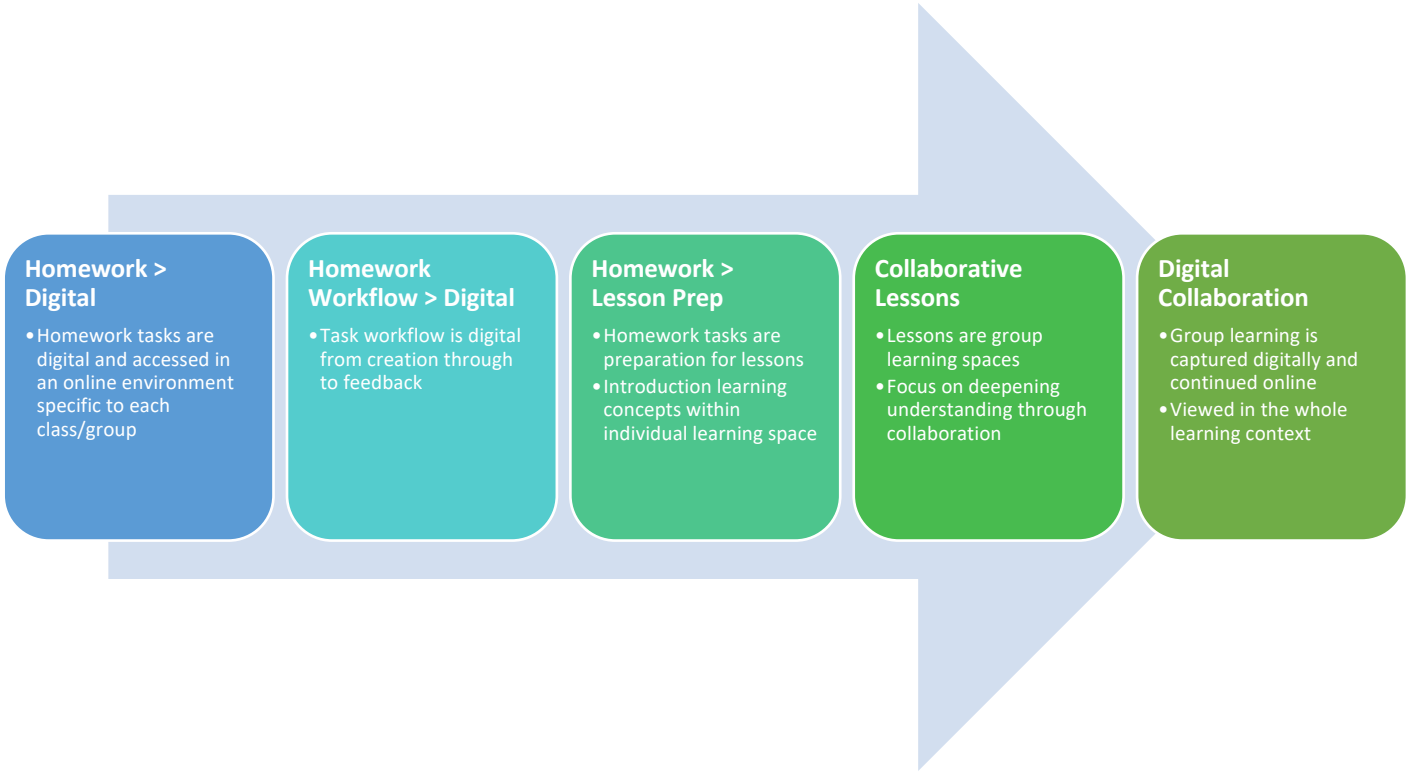


Figure 24: A five-stage flipped learning model to help teachers gradually adopt digital tools within their teaching practice

Stages 1 & 2 focus on sourcing and storing digital resources, digital homework flow and marking work digitally (Working Online)

Stage 3 is about the introduction of a flipped learning approach through staff adopting a new approach to how they plan (Lesson Planning)

Stages 4 & 5 is about creating opportunities for pupils to collaborate on work digitally, both in the classroom and outside of lessons (Teaching Online).

This staged approach makes the change manageable and ensures teachers are not being required to try to change everything in one go.

STAGE 0 - READINESS FOR TRANSITION

There are some key decisions to made prior to launch and before staff start to embark on the first stage:

Initial steps **common to all workstreams**

For all aiming points:

1. Governance and project structure

- Decide on your project structure and governance. Ideas for a structure are discussed above, figure 17. The sponsor or sponsor group would steer the project team's progress. The project team should include a change manager and individuals responsible for progress against each of the four workstreams. The project team should have a named individual responsible for overall progress. That project team leader could also be the change manager.
- As the workstreams flowing from each aiming point are broader than the purely digital elements described here, there may already be management capacity within existing teaching and learning workgroups to manage the work. Decide on how to structure working group resource to make the progress required.
- Appoint a set of working groups, each with responsibility for making recommendations flowing from one aiming point plus an overall 'basic training' group. Ensure each aiming point working group's project scope includes the digital (here) and non-digital (elsewhere) plan. Although digital is an enabler, it is not *the* plan for each of the aiming points.
- Each working group should propose success criteria for their recommendations, SMART objectives and key performance indicators, including leading indicators used to track progress.
- Relevant roles and responsibilities in relation to the programme should be agreed and published, including the role that Digital Champions will be expected to fulfil as well as the structure for governance of the project and steering groups required to approve decisions about who, how and what.
- Ensure educator representation from both primary and secondary phases for each workstream, with finance support for costing the recommendations.
- Include pupil voice reps from primary and secondary, ideally biased towards reluctant readers.
- For the parent reading at home element, seek input from primary phase EAL pupils and their parents.

2. Decide the basics

A clear strategy needs to be agreed for how OneDrive/SharePoint/Teams/OneNote Class Notebook will support this programme and how staff are expected to utilise these tools

It is vital that there is agreement and consistency how these tools and applications are used to ensure a coherent and consistent experience for the pupils. Aim for a single way to do each workflow.

For example:

- **OneDrive** - Materials that individual staff create, a WIP area for them (Private)
- **SharePoint / Teams / Shared OneNote?** - Departmental library of resources (Shared - Staff)
- **Teams / Class Notebook?** - Class library of resources (Shared - Class teacher and pupils)
- **Class Notebook / Teams Assignments?** - Setting homework assignments with relevant digital resources
- **OneNote / Teams Assignments Feedback?** - Digital feedback loop

Remember, keeping it simple for users will increase the chances of success.

3. Sustainable pupil one-to-one device strategy

- **Evaluate a suitable pupil one-to-one device** to meet the needs of all aiming points within this digital strategy but with a **particular focus on encouraging reading** in school and at home.

  To ensure the chosen device delivers on the main purpose of encouraging reading, you may want to make this a deliverable of the "aiming point 1: reading" working group, however, input is required from all as it does need to be a multi-purpose device suitable for the whole digital strategy.

  Consider device choice in parallel with evaluating preferred eBook platform, as the quality of available eBook systems' client reader software unfortunately still varies by device operating system rather than being cloud-based.

  Decide whether pen-based devices, (or optional pens for a standard device) are worth the premium and if so for which year groups.

  Consider whether the device needs to be different for primary vs. secondary phases, or not.

  Aim for a single strategy across the Trust.

  Audit existing circa 1,000 devices provided to pupils during lockdown distance learning, for suitability.

  - RM have undertaken an initial review of the 998 DfE-provided pupil devices, based on criteria around:
    1. touch or pen compatibility,
    2. full HD screen for reading,
    3. battery life suitable for the school day and
    4. supportability

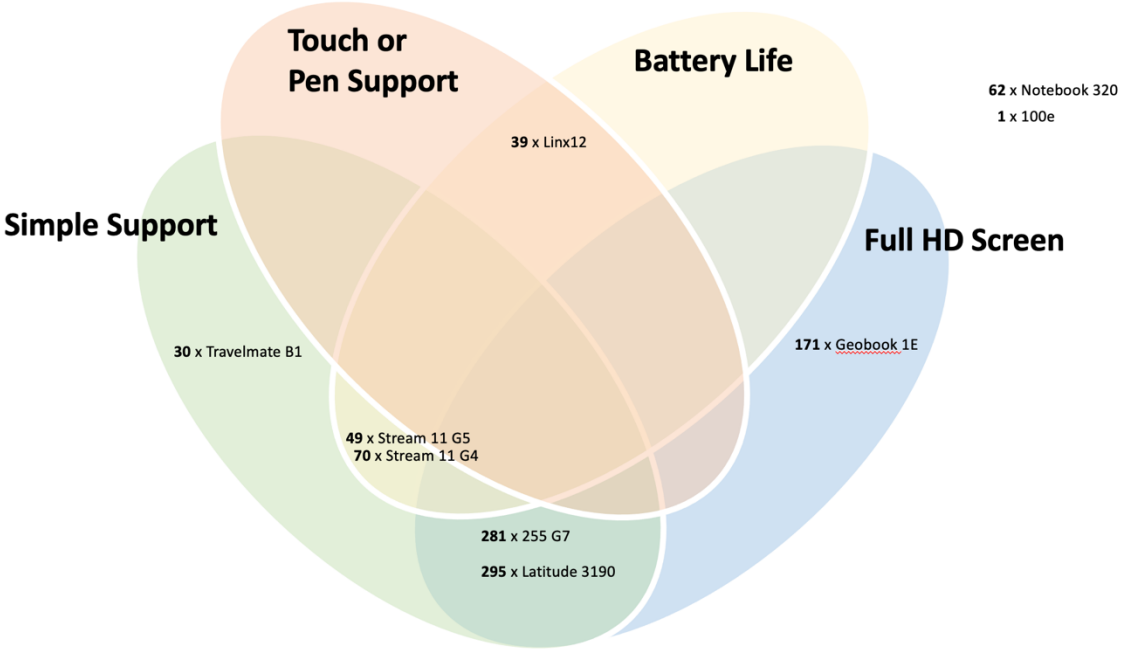


Figure 25: RM's summary of their review of your current DfE pupil devices

Based on the Venn diagram in figure 25, none of the DfE devices meet all the criteria.

Only the Linx12 meet the touch support criteria. Unfortunately, these devices are not particularly robust and are very difficult to manage at scale, making them a poor choice for one-to-one devices.

The HP Streams have good battery life but not a full HD screen for reading.

For devices with a full HD screen, supported by Windows 10 drivers, there is no touch support or all-day battery life.

The summary of the review is that there are **540 devices that have a full HD screen for reading and that are supportable**. Those do not have all-day battery. Battery life is important as without an all-day battery charging during lessons becomes a disruption. However, in terms of making the most of devices you already own, this is the most useful segment of devices to trial as part of the digital strategy pilot.

Shortlist a set of suitable devices, for example iPads with optional pens or Chromebook models, with high resolution screens and all-day battery life.

Trial a number of sets of shortlist devices, including the best cohort of DfE devices you already own, with input from pupils but also teachers.

Have your IT function evaluate real-life performance of class-sets of each device type with existing academy infrastructure (e.g. secure Wi-Fi, wireless displays in class), software (key Microsoft365 apps, electronic assignment workflow, classroom management tools), and safeguarding technology (MDM, ESafety filtering and monitoring technology, etc). We know your Wi-Fi needs updating, but this testing would establish whether small scale class trials can begin ahead of that.

- Identify any **server** and **infrastructure** investments necessary to enable use of pupil one-to-one devices, for example upgrading WIFI to cope with many concurrent devices.
    - Some of those may not be necessary for pilot stages of one-to-one that involve one or two year groups per academy, but would be required for later phases of one-to-one roll-out, so establish the phasing of any necessary infrastructure improvements.
    - Cost-model the infrastructure spend, identifying amounts additional to the rolling replacement of today's infrastructure.
    - RM have identified a number of infrastructure elements within their retender for your managed service, knowing that one-to-one was a direction of travel for the future. We have referenced these within section 2.2 of this document.
    - Wi-Fi infrastructure will need to be addressed before a wide deployment of pupil one-to-one can be considered.

- Ensure **support** technology and processes are in place to smoothly and **remotely manage** thousands of pupil devices (e.g. including Intune[5] MDM), including:
    - Remote OS, ESafety, support, MDM, core software and configuration build and rebuild mechanism in place, based on user identity. Note that the complexity of enrolment to an MDM depends on the device choice:
        1) Brand new Windows 10 devices are relatively straightforward, however
        2) Legacy Windows equipment will need to be rebuilt and manually added to the MDM one at a time.
        3) Google Chrome management with Google Admin Console is also straightforward.

[5] Microsoft Intune for Education: https://www.microsoft.com/en-gb/education/intune

4) Apple School Manager needs to be setup to work with Intune to manage iOS devices (iPads).

- Self-service portal for additional software downloads, specific to user identity, to control licencing. Microsoft store should be utilised where possible to allow users self-service functionality and application suites like Adobe Creative Cloud should be linked to Office365 identities and enabled for install on one-to-one devices. This is not technically possible to achieve on shared devices where software will need to be pre-installed for users, but this is possible for one-to-one.
- Remote IT support expectations and processes in place for pupil devices. For example, support for pupils could be provided by a student helpdesk in the library areas staffed by computing students to gain work experience. Remote support tools would be required, allowing for remote desktop takeover for simple problem resolution.
- Processes in place for expediting repair of damaged devices.

- Identify a **sustainable funding model** for pupil one-to-one devices. The pupil multiplier means that pupil devices are usually the majority of spend for any digital strategy, unless entirely parent-funded (option 4 below). Most schools find that an additional financial contribution from parents is necessary to move from school-funded devices to many more one-to-one devices. Planning for a phased roll-out in year-group stages, starting with key stage entry points – furthest from examinations – is usually easier.

  Begin cautiously. Pilot devices in smaller numbers, for example, initially with some of your Expert and Explorer teachers, then for a couple of year groups (one primary, one secondary). Based on this experience, cost-model a phased roll-out of pupil devices.

  Ultimately though, ensure the preferred route is affordable and sustainable by modelling the rolling annual costs once you reach the new steady-state of one-to-one devices for all pupils. Some of those cost increases may be able to be offset against Trust-wide cost savings that these devices make possible. See point 4 on the next page.

  Common one-to-one options to consider, each with very different cost implications, include:

  1. **Trust funded**: Fully-funded, insured, standard device for all pupils, optionally with local swap-out stock in case of damage. Bulk procurement process, usually on rolling lease.
  2. **Trust with parent top-up funding**: Means-based parental contribution scheme towards the cost of an insured, standard device. Local swap-out stock. RM provides a tried and tested scheme for this.
  3. **Parent-funded with Trust funding FSM pupils**: A choice of three model specifications for an insured device of the same type; Trust sourced devices, but primarily funded by parental contribution with Trust paying for devices for disadvantaged pupils. Known as CYOD, choose-your-own-device. RM also provides a suitable scheme for this.
  4. **BYOD**: Bring-your-own-device, to a broad definition of necessary minimum specification, such as OS, screen size and battery life. Parents and pupils responsible for ensuring device is purchased, insured, repaired, charged and working. Pool of separate Trust-funded devices for FSM pupils. Care needed to obtain explicit parent permission for ESafety filtering and monitoring of parent-owned devices.

  Options 2) or 3) tend to strike the balance between affordability and standardisation of device so they work reliably with school front-of-class audio-visual (AV) and WIFI, such that teachers can trust that pupils always have working devices.

  For options 2) or 3), based on their experience with many other trusts and academies, RM can provide a trust-branded parent portal website for parents to rent or buy suitable devices a curated list that you've selected, including insurance. That's with a no-touch (for your IT support team) approach to deployment of these devices, with all necessary software and configuration to work safely as a learning tool inside and outside of school.

4. Identify and model Trust-wide cost savings that one-to-one device strategy enables.

Areas to consider include:

- **Print** consumables and printer hardware refresh.
    - One proxy measure for the degree to which your one-to-one strategy and cloud platform is embedded, and your teachers' faith that it will always work reliably, is the reduction in spend on print.
    - Cost savings from likely scenarios, including consolidation of printers to fewer multifunction devices at printer refresh points, could be modelled.

- Reducing and not replacing **local servers and storage**.
    - A move to making learning resources easily available digitally for pupils and teachers outside school via Microsoft 365 cloud storage, creates an opportunity to decommission and not replace local on-site network storage solutions.
    - Consolidating then migrating services that run on local network servers to cloud alternatives, or, where cloud alternatives are not yet available, to run from Microsoft Azure, creates an opportunity to reduce and not replace network servers. For example, five local library management systems to manage paper library stock could be consolidated to a single cloud-based instance.

- Consolidate to a single **cloud MIS**.
    - Although larger in scope, migrating away from five local SIMS instances to a single cloud-based Management Information System (MIS) for the Trust would bring significant cost savings. That saving is not just in the software licence costs, but also in the servers and associated maintenance and power costs needed to run today's MIS.
    - A cloud MIS would also make it easier for teachers to access the MIS data when outside of the school and from non-Windows devices.
    - RM Integris is one such system and as RM is your managed service provider it is easily price benchmarked to assess the potential savings for this class of product.

- **Consolidation of common workflows** to cloud platform.
    - As well as making it less confusing for staff and pupils, especially for staff who aren't Experts, a concerted effort to systematically agree on **one way** of doing each teaching and learning workflow, such as allocating homework, will reduce software spend across the Trust and help staff adoption.
    - It is recommended that the default preference should be to make use of Microsoft 365 cloud platform's functionality rather than buy additional software to (mostly) duplicate functionality.
    - Strategically, over time, with the exception of the MIS, most functionality currently provided by third party software will be provided by the Microsoft 365 cloud platform, so developing skills and a reliance on other software is a distraction.

5. Teaching staff will need access to a suitable device

To build confidence in your Engager and Adopter staff especially, that device will need to work robustly and reliably with your chosen AV solution, even when classes are full of other wireless devices, so rigorous end-to-end testing is key.

Pen-based devices make it easier for teachers to provide electronic feedback on pupils' work in a timely manner.

Note that Tier 1 hardware providers (e.g. HP or Dell) can often provide equivalent functionality to Microsoft's Surface reference designs at a significantly lower cost. These should always be managed devices by MDM, such as Microsoft Intune (see pupil one-to-one device notes above), as security steps and controls are necessary.

Swap-out units kept on-site are a good idea. Swap-out units are more cost effective if the vast majority of teaching staff standardise on a single device type.

Although you can roll teacher devices out in stages, it usually makes adoption of your cloud platform quicker if you equip all staff in one go, via leasing if necessary, to avoid the “I’ll get to that, once I receive my device”, delay and staggered start.

However, having recently invested in wired fixed classroom computers, it may be that providing all teachers with a mobile device is not viable until a later stage. If this is the case, it is recommended that you initially equip those teachers who will be teaching the three pilot year groups that are first to receive pupil one-to-one devices.

Note that if you instead only rely on teachers using their personally owned devices at home, expect up-take to be slower and extra CPD effort to be required. Staff would need to confidently avoid Office 365 offline sync teething issues as they jump between marking work and preparing lessons at home on their own device, to then delivering lessons using a wired school classroom computer.

STAGE 1, Flipped Learning[6]

The flipped learning "basic training" workstream is now broken down into stages with success criteria and milestones, and with different tasks for staff depending on which Impact Survey cohort they belong to.

	People	Technology
Homework > Digital •Homework tasks are digital and accessed in an online environment specific to each class/group		
SUGGESTED FOCUS AND ACTIVITY	**Engagers/Adopters:** Strengthen their core digital competencies through focussed workshops, coaching and application Stage related competencies: • *Sourcing and Searching* • *Creating/adapting* • *Converting to digital* • *Storing*	Use tools identified by the Explorers and Experts. For example, use suggested tools to convert materials to digital format and store. Create a termly targets for all staff, for example: Term 1: Moving your personal files to OneDrive. Term 2: Moving and Accessing departmental information from the Teams areas. Term 3: Tagging your files to make them easier to find Term 4: Developing documents with your team online Use Teams created by Experts to share successes and failures, with examples.
	Explorers/Experts: Setting up the departmental libraries Finding good sources of materials Sharing best practice resources	Identify an Explorer or Expert in each department to set up and champion a departmental Microsoft Team. Each department may operate differently due to the differences in subject matter, the important thing is adoption and engagement. Provide clear guidance on an agreed single, common way to achieve each workflow. Ensure there are Staff Areas and Student Areas within the Teams. Share content and examples of successes and failures with examples. Provide examples of sharing content using PowerPoint tools, sharing these on as Videos in Teams or to the whole Trust on Microsoft Stream. Create a learning practitioners' area in Microsoft Teams to focus cross school communications around great practices and improvement activities that can be evaluated as a group.

[6] These five stages refer to piecewise model in figure 24.

	Tagging/metadata strategy	Develop a Trust-wide taxonomy that can be converted into managed metadata in Office365 whereby resources can be tagged to improve presentation of search results across the organisation.
SUCCESS CRITERIA	**Every pupil in target year groups can access homework tasks and related lesson materials in an online space dedicated to their class/group, for every subject.**	
SUGGESTED MILESTONES FOR ACHIEVING DESIRED OUTCOME	Jan 2022 - All pupils in the first cohorts set to receive devices, e.g. Years 5, 6 and 7. Sept 2022 - All pupils in Years 5, 6, 7, 8, and 10 Sept 2023 - All pupils	

Differentiating your Staff CPD

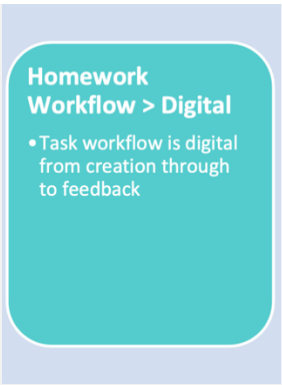
Impact Survey results are available for each staff member who completed the survey, so you know which of the four cohorts (Experts, Explorers, Adopters or Engagers) each staff member sits within. See figure 7.

This is clearly an excellent opportunity for differentiating more effective digital CPD and for setting realistic expectations and adoption objectives of your staff as part of this programme.

You can now avoid the traditional ineffective one-size-fits-all generic INSET IT training. Instead, develop a differentiated staff CPD plan, drawing on a combination of your in-house expertise and trusted external training providers. Usually, a greater proportion of training time and budget is focused on the Engager and Adopter staff cohorts, as they've the largest transition to make. For those cohorts, training would be regular half-termly, in-person workshop sessions with coaching phone / Teams calls in between to discuss staff's progress in applying the learning

Note that you may want to allow staff to move themselves into different cohort groups rather than sticking rigidly to the groups identified by the Impact Survey. Similarly, for staff who didn't take part in the survey and for new starter staff, it's suggested they choose the group they feel most comfortable within.

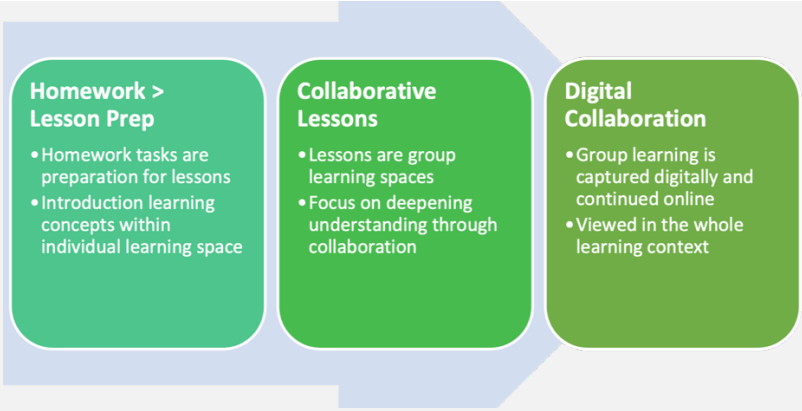
STAGE 2, Flipped Learning



	People	Technology
SUGGESTED FOCUS AND ACTIVITY	**Engagers/Adopters:** Develop their ability to manage and mark homework tasks submitted in a variety of digital forms/media Stage related competencies: • *Storing* • *Sharing* • *Communicating* • *Digital Inking*	Build upon the work in Stage 1. Use the tools identified by the Explorers and Experts to gain confidence in setting work digitally. Develop, share and feedback on work submitted in digital form. Use front-of-class teaching systems to share content, to build confidence in using these systems to support a flipped learning methodology in the next stage. Use the Learning Practitioners' Teams area to share successes and failures.
	Explorers/Experts: Exploring tools to mark, annotate and feedback on work submitted in digital form and make recommendations based on experiences.	Build upon the work in Stage 1. Evaluate tools available for teachers to manage electronic homework workflow and to provide electronic feedback and marking. Develop more sophisticated use of Office365, Forms, OneNote Class Notebooks and Teams to develop, share and feedback on work submitted in digital form. Remember, combinations of tools will make it more difficult for most IT users to understand, so simplify the processes where possible. Work with teacher colleagues to agree and gain buy-in to a single workflow and set of tools for this job. Share experiences in Microsoft Teams, set targets for adoption and support Engagers and Adopters. Celebrate successes. Lead the way in making use of front-of-class teaching systems to demonstrate and share work (from staff and pupil devices), build confidence in using these systems to support a flipped learning methodology ready for the next stage.

SUCCESS CRITERIA	**Every pupil in target year groups can complete and submit homework tasks in a digital format, using applications of their choice where appropriate.** **All teachers use digital tools to provide timely and specific feedback to pupils.**
SUGGESTED MILESTONES FOR ACHIEVING DESIRED OUTCOME	April 2022 - All pupils in the first cohorts set to receive devices, e.g. Years 5, 6 and 7. January 2023 - All pupils in Years 5, 6, 7, 8, and 10 January 2024 - All pupils

STAGES 3-5, Flipped Learning



	People	Technology
SUGGESTED FOCUS AND ACTIVITY	**Engagers/Adopters:** Adapt approach to lesson planning that embraces the flipped learning methodology. Stage related competencies: • *Sourcing and Searching* • *Storing* • *Sharing* • *Communicating* • *Collaborating*	Use Office 365, Forms, OneNote Class Notebooks and Microsoft Teams (according to agreed best school standard and practice) to support a flipped learning methodology. Learning concepts are delivered, evaluated, and responded to digitally. School infrastructure supports reliable sharing and collaboration across all device types and independent of location. Identity management and single sign-on support security and governance while providing ease of access for end users. Use the Learning Practitioners' Teams area to share successes and failures.
	Explorers/Experts: Lead on developing best practice for Flipped Learning in Subject Areas. Sourcing appropriate materials and proving shadowing opportunities. Decide on a sustainable and scalable approach for the right pupil one-to-one devices.	Use the Learning Practitioners' Teams area to share good practice and celebrate successes and failures. Source or record factual content in advance using PowerPoint tools and sharing on Microsoft Stream, and/or OneNote Class Notebook. Moderate collections of materials, ensuring effective tagging and using optimal formats for sharing. It is suggested that the "Aiming Point 1: Reading" workgroup lead on device selection. Although a one-to-one device is required more generally, its

		immediate priority is to facilitate a step increase in reading.
	By stage 5, pupils will need to have access to their own devices in class	Decide on key features necessary, work with your IT team and partner to source example units of the candidate shortlist devices, test the in-class experience at scale, and find a suitable parent portal solution. Roll-out small-scale pilots of candidate device types, managed via Intune, ideally using Expert and Explorer teachers' classes. Evaluate against your success criteria with feedback from pupils and teachers before wider roll-out. Communicate early with parents, providing plenty of notice of intent so they don't buy other (unnecessary) devices for their children in the interim.
	Ensure devices don't introduce an unsustainable IT support overhead	Manage your one-to-one devices using an MDM tool like Microsoft Intune. It is possible to set up Intune so once a pupil logs in to their device for the first time, they will receive all the software (e.g. the eSafe online safety monitoring client) and settings you have defined for them to be able to work safely inside and outside of school. This allows you safeguarding oversight without the increasing support burden for your technical staff.
SUCCESS CRITERIA	**All pupils have the opportunity to use technology to work collaboratively in class with their peers, in order to develop their own learning.** **All staff encourage and facilitate collaboration in the classroom to drive improved learning outcomes through peer review.** **Staff skilfully use technology to provide feedback to pupils that takes less time to generate but is of a higher quality, more specific and timelier.**	
SUGGESTED MILESTONES FOR ACHIEVING DESIRED OUTCOME	**Stage 3 & 4** Sept 2022 - All pupils in Year 5, 6 & 7 Sept 2023 - All pupils in Years 5, 6, 7, 8, & 10 Sept 2024- All pupils **Stage 5** Sept 2023 - All pupils in Year 5, 6 & 7 Sept 2024- All pupils in Years 5, 6, 7, 8 & 10 Sept 2025 - All pupils	

Next steps for Aiming Point 1: Improving Reading

This focuses on those digital steps to provide the necessary **range of electronic reading material**, on **suitable one-to-one devices**, with **reading assessment** technology in place.

It also provides the trust-wide Microsoft Teams necessary for teachers to work together to define a standard approach to teaching reading, to embed wider-reading across all curriculum subjects, and to begin to develop the sequenced through-curriculum.

It will provide technology to help encourage writing and to develop oracy.

1. Identify and make available suitable digital reading content

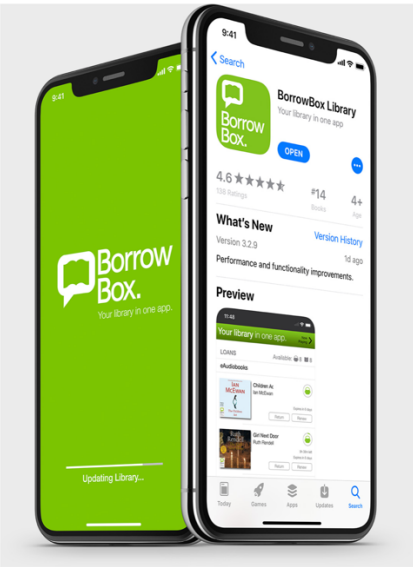
- **Identify** suitable reading material in eBook (and optionally also audiobook) format. Consider:
    - Licencing models necessary to also enable concurrent reading of the same title by many pupils where necessary or desirable, e.g. VLeBooks[9] credits-based licence types for book groups, set texts, popular titles. (Note that traditional eBook library systems mimic paper libraries, where the eBook licencing is purchased 'per-copy' which is then read sequentially.)
    - Breadth and availability of material, such that
        - free-reading onward pupils can always find available engaging books at their appropriate reading level and at their interest age (Hi-Lo and Lo-Hi material)
        - you have the desired content coverage for future structured wider reading linked to curriculum topics, for the support of your 4-16 curriculum
    - Link to chosen reading assessment system (2) below, for example, ensuring a great coverage of Accelerated Reader[10] quizzed books within What Kids Are Reading[11] and similar popular content.
    - Decide how and when digital and paper based books will be used.
    - Consolidate library management systems for managing paper book library content to a single system across the Trust.
    - Decide what the scope of a Trust or academy librarian should now be.

- Ensure the reading material is **made easily available** in the volume and licence type required:
    - There is precedent for successful partnership with council library services, such as Falkirk Council[12] and LEARNER's Trust in Sheffield, using BorrowBox eBook platform via RM Unify.
    - Suggest you start exploratory conversations with Staffordshire County Council Library Service who also use BorrowBox, to access their extensive collection. Increasing utilisation of existing council-procured eBooks is worth considering. For example, you may be able to just incrementally add to their collection, which may be more cost effective than starting you own catalogue from scratch.

- **Motivate** pupils to read:
    - Take proactive steps necessary to encourage reluctant readers to read, drawing on good practice from the National Literary Trust[13] and other organisations.
    - Link to reading assessment system (which can provide competition metrics to help).
    - Celebrate reading progress and success across the Trust in a sustainable manner.

[9] Browns Books for Pupils: https://www.brownsbfs.co.uk/vlebooks
[10] Accelerated Reader from Renaissance Learning: https://www.renlearn.co.uk/accelerated-reader/
[11] *What Kids Are Reading* is the world's largest annual study of K–12 student reading habits: https://www.renaissance.com/wkar/
[12] Falkirk Council making eBooks and audiobooks available to their schools' pupils via Glow (RM Unify): https://blogs.glowscotland.org.uk/fa/LearningResourceService/2020/04/08/borrowbox/
[13] National Literacy Trust's own research: https://literacytrust.org.uk/research-services/research-reports/

Borrowbox



Falkirk Council's Learning Resource Service has added e-books and unabridged e-audio books to the resources available to borrow for pupils and school staff. This is a brilliant way to develop and maintain a love of reading especially in the current situation where schools and public libraries are closed.

We have invested in a number of campaign titles allowing simultaneous access to certain titles e.g. Holes, The Wizards of Once and The Boy Who Grew Dragons.

Also, BorrowBox has been working with J.K. Rowling and *Pottermore* to support the **#HarryPotterAtHome** initiative and we are offering *unlimited*

Figure 26: Falkirk Council's join-up between schools and county library, using Glow (RM Unify) login to avoid the need for pupils to have a separate library card

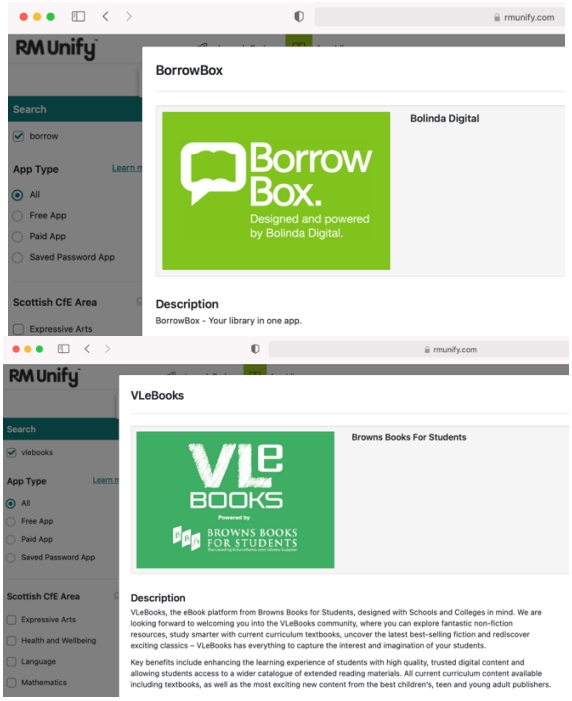


Figure 27: eBook reading apps already integrated within RM Unify

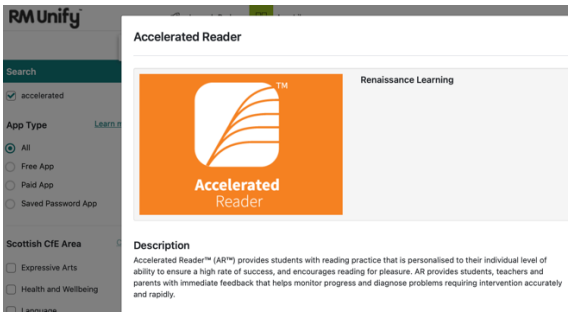


Figure 28: A leading reading assessment solution, integrated within RM Unify

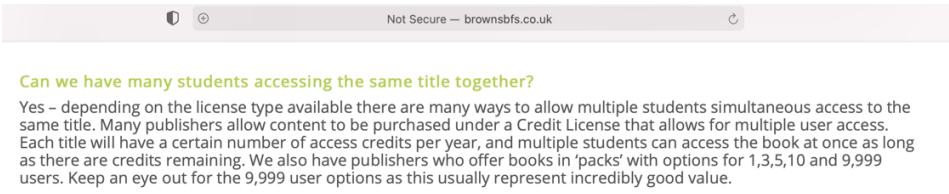


Figure 29: VLeBooks's credit-based licence type for concurrent reading

2. Identify your reading assessment strategy

- Research proven reading assessment tools. National Literacy Trust have conducted studies, for example.
- Shortlist candidate reading assessment tools. Renaissance Learning's Accelerated Reader is worth considering. Aim for a single Trust-wide system reading assessment tool.
    - Decide on the essential elements of this strategy, including (only) those assessment metrics you *need* to know. Acknowledge the more measurement requirements and constraints you add will limit content and content platform choice, e.g. insisting on reading tracking (time, pages), may preclude the use of Staffs Library Service content and eBook reading system.
    - Ensure the reading assessment strategy is consistent with your content strategy and is easy for pupils to use.
- Trial end-to-end process of pupils choosing a book, reading it on a device, then finding and completing a reading assessment quiz, to being recommended another book; through to teachers being presented with the insight from that assessment.

3. Make lesson resources and teaching materials available online in targeted online spaces.

Use the steps within the Flipped Learning workstream, teachers will digitise their lessons resources. To reduce the workload for each teacher, staff could use department-level MS Teams and/or department OneNote Class Notebooks to plan lessons together as a faculty team.

Whilst refreshing schemes of work and lesson plans, take the opportunity to begin the deliberate inclusion of wider-reading eBooks for every topic, initially at an academy level.

4. Develop digital collaboration spaces for teachers to work between faculty and academies

Map out the collaboration groups necessary for your different collaboration groups. It is easier to think this through in advance to avoid confusion later from a legacy of multiple, similar purpose, MS Teams.

For example:

- Create Trust-wide MS Teams for primary phase teachers to collaborate together to plan a consistent and efficient approach to the teaching of reading across all primary academies – and the steps and resources required for that – working as a primary team.
- Create a curriculum development MS Team for heads of departments to work together on the optimum sequencing of curriculum topics to improve pupils' comprehension.
- Create Trust-wide MS Teams for heads of department and teachers to collaborate together to begin the development of a 4-16 through curriculum.
- Librarians, teachers and literacy coordinators use this MS Team to structure a comprehensive wider reading programme to support the 4-16 curriculum.

5. Create digital 'book group' collaboration spaces for pupils to discuss books and reading

Book group collaboration spaces allow pupils to discuss books together, either from their book group (concurrent) reads or from structured wider-reading texts linked to the curriculum. This could utilise functionality within your consolidated cloud library management system, such as writing or recording book reviews or blogs/vlogs within Reading Cloud, or as a structured MS Team with Flipgrid video functionality added.

Choose systems that allow adults to review and approve pupil content prior to making available for others to comment. To start with, you could set this up so pupils' responses can also be approved before becoming live. You may want to investigate whether trusted pupils could help moderate pupil content.

- Trial some alternatives and then decide a single way to do this, implementing one tool and process for book reviews.
- Ensure any content moderation steps are necessary and realistic in terms of resource required.
- Use digital tools to encourage further writing inspired by pupils' reading. For example, pupils writing (or recording) and responding to other pupils' book reviews.

6. Oracy skills development

Develop pupils' oracy skills, those speaking and listening skills to confidently and clearly express themselves for effective communication and collaboration, inspired by their reading.

- Investigate the range of digital tools to help pupils structure their thoughts into a coherent argument, to practice their verbal delivery of a pithy proposal, and to confidently and respectfully disagree with others' points of view.
    - The Flipgrid[14] video discussion tool is recommended as it's flexible and easy to use. It has recently been acquired by Microsoft and is being integrated into the Office 365 cloud platform.
    - Many schools have run their debating societies effectively over MS Teams video conferencing during the recent pandemic lock-down period.
- Agree a core set of tools and processes to aid pupils' oracy development and roll this out across the Trust.

7. Teachers facilitating in virtual classrooms

Primarily, this is a differentiated programme of teacher CPD and should be delivered by the later stages of the Flipped Learning workstream.

8. Deliberate steps to ensure EAL and lower literacy level parents read with their children

Reading at home with a parents/carers correlates with an improvement in pupil's reading, so the aim is to ensure all pupils read at home with an engaged adult, at least during their primary phase. Parents for whom English is an additional language and/or who have lower literacy skills themselves, tend to do this less frequently.

- This is a subset of the scope covered by the Engaged Community aiming point.
- Create a deliberate and sustained programme to improve English skills of parents/carers such that they can confidently read with their children.
- Consider FE college partnership where tuition of adults is required.
- Provide access to EAL content online through your website, linking to a suitable repository.
- Ensure parent communications use tools such as Google translate to present information in their first language.

[14] Flipgrid video discussion tool: https://info.flipgrid.com

Next steps for Aiming Point 2: Independent Learning

This provides the **cross-trust Microsoft Teams collaboration areas for the R&D work** that will be undertaken to research, trial, evaluate and roll-out best practice in approaches to develop pupils' independent learning skills. Building on the Flipped Learning CPD, it also would include steps to teach pupils the range of tools they could use to complete work and to **build teachers' digital resilience** to receive and provide feedback on pupil work submitted in a much wider range of formats.

Most of the digitising learning materials, electronic homework flow, electronic feedback and marking, and skills to manage meaningful digital group work should be delivered within the first stage of the Flipped Learning workstream. Key steps and recommendations are listed here as a cross-check.

Access to a pupil device is required to encourage academic curiosity and to support approaches to develop independent learning. This should be delivered by the Reading workstream.

1. Developing R&D digital collaboration spaces

For teachers to work together on evidence-based improvement in developing pupils' independent learning.

- Developing online professional communities.
- Developing how we plan group learning and independent study.
- Teachers using cloud collaborative technology to work together, to share successes, CPD and resources.
- Embedding latest best practices into teaching across the trust.
- Collaborating more effectively with colleagues from across the profession.

Setup a Trust-wide MS Team (or set of Teams) and carefully structure their associated SharePoint online and OneNote Notebooks to create collaboration areas suitable for this research and development work. Map this out in advance as this is probably the most ambitious collaboration area across the strategy. Use the EEF toolkits[15] as inspiration.

The collaboration spaces would need areas for:

- collecting and prioritising ideas for potential interventions to trial;
- recruiting groups of teachers to develop the chosen ideas into trials;
- teacher teams to work together on their trial, to make it happen, collect date and to evaluate each trial's effectiveness;
- presenting an evaluation of the effectiveness of the interventions, relative to one another;
- collecting resources and materials to aid the wider roll-out of those that work best, as good practice CPD to fellow teachers.

Once you have confidence in wider roll-out you may also wish to use digital tools to help publish outside of the school and present at conferences.

[15] Education Endowment Federation Teaching and Learning Toolkit: https://educationendowmentfoundation.org.uk/evidence-summaries/teaching-learning-toolkit/

2. Making lesson resources and teaching materials accessible in targeted online spaces

- Put steps in place to automate MS Teams setup for each class within the MIS, with OneNote Class Notebooks being automatically created, ideally with required Notebook tabs homework populated.
- MIS timetable information to flow to teacher and pupil Teams (and therefore Outlook) calendars. This saves teachers time in manually creating their calendar within Teams. You already have a tool to do this, covered within the technical section above.
- It is recommended that OneNote Class Notebooks[16] become the default workbook for all electronic learning materials. These integrate simply from MS Teams and are one of the best features of Microsoft's cloud platform.
- Teachers plan interactive lessons in OneNote, with OneNote effectively becoming their whiteboard software, and allocating learning materials out to pupils via OneNote Class Notebook. Pupils can annotate over these. Additionally, Teachers can share the workload of planning lessons with OneNote via shared department OneNote notebooks.

3. Setting and managing homework (and flipped homework) workflow electronically

- Standardise on one electronic workflow method of allocating and handing in assignments and homework to pupils. The Assignments functionality of MS Teams is recommended for this.
- Include activity metrics, such as by adding MS Insights to Teams, to give teachers awareness of whether set work has been looked at / how long homework was worked on.
- Include a simple tool to allow pupils to submit work in video format. Flipgrid is becoming part of your cloud platform and can be added to class Teams. This tool also directly supports the reading to speaking and oracy sections of Aiming Point 1.

4. Proactively developing pupils' digital skills

Initially focused on those skills necessary to intelligently evaluate information sources, (safely) collaborate with peers as appropriate, and to creatively and confidently use a range of digital tools to author work that meets the learning objectives[17].

- Review how these digital skills can be embedded within pupils' wider curriculum rather than relying only on ICT lessons. E.g.
    - evaluating sources (including digital sources) within history and library lessons;
    - digital footprint within PHSE;
    - opportunities for digital group-work within science practical lessons and write-ups;
    - change how teachers specify homework tasks – concentrating on *what* should be covered rather than explicitly specifying its format – regularly praising the most creative and effective formats received to encourage pupil experimentation and digital skills development;

5. Teachers using digital tools to efficiently provide pupils timely and specific feedback.

- Investigate the range of feedback tools already available within your Microsoft cloud platform. Decide on a set of tools to use, with teacher guidance on scenarios for use. For example:
    - Teachers are able to comment on pupil Office documents and OneNote pages ahead of work being submitted. In conjunction with Teams messaging, this provides a simple way for pupils to request help when stuck.

[16] OneNote Class Notebook: https://www.onenote.com/classnotebook
[17] "Guidance: Essential digital skills framework", 23 April 2019, DfE

  - OneNote Class Notebook Collaboration Spaces provide a simple canvas for group work and live teacher input during that group work.
  - Richer and specific pupil feedback can be recorded directly into OneNote pages as audio and/or text or digital ink annotations.
  - Teams Assignments functionality can provide overall feedback on submitted work.

- Investigate use of a quizzing platform for simple understanding-checking questions or for auto-marked homework. For example:
  - Where you want to record scores into your markbook easily by pupil, MS Forms can do this, noting you can also allocate Forms quizzes to pupils via Teams Assignments for auto-marked homework.
  - Quizizz is a fun alternative that allows live competition between pupils, suitable for lesson starters or plenaries to add variety.

6. Building teachers' own digital resilience

- CPD to cope with less a restrictive approach to how pupils complete work, covering Flipgrid too.
- CPD on feedback and marking in OneNote and Teams.

7. Teachers facilitating in virtual classrooms.

- Use of Teams and breakout rooms for in-person teaching and homework.
- Use of Collaboration Spaces within OneNote Class Notebooks.

8. One-to-one pupil device

Providing access to an appropriate (and managed) device that pupils can use in class and at home to develop their independent learning and academic curiosity. This should be delivered by the reading aiming point workstream.

Next steps for Aiming Point 3: **Community Engagement**

Simple **two-way communication tools** to aid efficient and effective communication with parents.

Digital steps in place to allow a subset of parents (EAL, low literacy) to also be learners within the Trust, allowing targeted resources and potentially teaching to parents as distance learning/hybrid learners.

1. Audit existing community engagement systems and processes

Your academies currently use a mix of technology to report and send communications to parents, see Table 1. There is already a degree of standardisation of best-practice within the Trust.

Table 1: RM audit of existing community engagement digital tools

School	Parent Comms Systems
Discovery Academy	Parent Mail Keep Kids Safe SchoolCloud Go4Schools
Excel Academy	Parent Mail for most bulk comms, newsletters, lunch & event money etc GroupCall Truancy module SchoolCloud Parents Evening Go4Schools
Sneyd Academy	Parent Mail
Maple Court Academy	Parent Mail Teachers 2 Parents Class Dojo
Eaton Park Academy	Teachers 2 Parents School Cloud for parents' evenings & Class Dojo

2. Two-way community engagement platform

Clearly requirements will differ between academies, however having a method of **two-way** communication in place between staff and parents is key to engaging the community.

Even for more traditional one-way outbound communication from the school to brief parents, if engagement isn't at least measured, how do you know if anyone is listening? Personalise your comms to target only relevant articles to avoid overloading parents. Automated translation to their first language may help. Reporting, to be able to see open rates, click-throughs and completed call-to-actions, is key to knowing whether your comms is working.

Having systems that are similar between primary and secondary is also are important as this helps to continue good practice from the primary setting into secondary. Families are typically more engaged during the primary phase of their children's education, so it is worth considering all steps to sustain this, including not introducing any new digital barriers for parents that stop them doing what they have always done!

You have some synergy with the software you have in use, however it is possible to consolidate all these offerings to provide a common Trust method.

For cost saving and simplification, ParentMail appears to have the features to do this and as it also offers some of the functionality of SchoolCloud parents evening.

Looking deeper, Iris Reach for Education[18], which is from the same developers as ParentMail, offers a suite of cloud based tools that can be integrated into your MIS to communicate with parents across multiple languages via email, SMS, to its own mobile app and even social media. By investigating the features software such as this offers and applying a single approach across the Trust you should be able to standardise the process for parent communication and remove any barriers.

3. Staff making choices in how they communicate

This includes staff choosing the tools and channels they use to make their communication most effective.

As with point 2, communication should be two-way, but simple, consistent and intuitive. Communication technology should be used based on its suitability for a situation, so this should include telephony and video calls as well as the parental engagement platform. This may mean that legacy communication methods such as direct email or text messages should cease in favour of everyone using a standard set of tools. Providing communications measurement metrics will help staff tailor their approach.

You may also wish to consider taking some of the good aspects of digital communication from the Covid-19 pandemic and its increased use of video. So, for example, continuing to conduct parents consultations over Teams, recording parental briefings and making those available online, as well as sharing work electronically with parents. What has been learnt during the pandemic should not be lost but built upon. Face-to-face communication, whether in-person or via video (one-to-one or one-to-many) is engaging and helps to build a trusted relationship between the school and the parents.

4. Providing a best-in-class set of digital tools for parent two-way communication on the full life of the school and the progress of their child.

- Exposing markbooks, attendance and behaviour, merits/demerits to parents. You are currently utilising Go4Schools, but perhaps investigate other alternatives as part of a single parent platform such as Iris Reach which is an example of consolidating multiple systems in one platform.
- School cocurricular activities, matches, scores, performances and diary. Systems such as SOCS are worth considering if your cocurricular activities are extensive.
- You are already using SchoolCloud for parent evenings bookings and electronic parents' evenings which nicely integrates with Office365, however this could also be replaced by a single parent platform for consistency.
- Providing engaging digital content, news, examples and successes, all coherent with the theme of aspiration and ambition.

[18] Iris Reach for Education, parental engagement platform: https://www.iris.co.uk/products/iris-reach-for-education/

- Investigate upgrading your Trust and Academy websites with a content management system that will pull newsletter, blog and social media content together in an engaging way for parents and prospective parents and to help you celebrate success. You may wish to see examples created by a web design house called Interactive Schools[19].

26. Resources, tools and tuition to help improve parents' literacy

Building on the reading workstream, improving parents' literacy enables all parents to be more involved in their children's learning. Consider differentiating your approach and provision for EAL and low literacy level parents.

- Create a deliberate and sustained programme to improve English and literacy skills of parents/carers such that they can confidently read with their children during primary phase and take an active interest in their children's learning throughout their school-life.
- Start by developing and/or sourcing resources and tools to help improve parents' literacy.
- You could treat a cohort of parents as learners. Those parents can also be setup as learners within your Microsoft cloud platform.
- Investigate a potential FE college partnership where tuition of adults is required. Working with your FE provider, you may collectively have the resource to run adult literacy lessons within your academies.
- Novel approaches, such as Shireland Collegiate Academy's L4L programme[20] of a thematic key stage 3 curriculum that involves parents, including parent literacy classes in school (with parents and their children working together and where pupils help teach their parents), are worth considering.
- Provide access to EAL content online through your website, linking to a suitable repository.
- Ensure parent communications use tools such as Google translate to present information in their first language.

[19] Interactive Schools: www.interactiveschools.com
[20] Shireland's L4L curriculum https://collegiateacademy.co.uk/curriculum/l4l-and-key-stage-3/

Overview Timeline

	Autumn 2021	Spring 2022	Summer 2022	Autumn 2022	Autumn 2023	Beyond
GOVERNANCE	Change and project management team structure and working groups established Sponsor and steering groups	Learning Practitioners' Team setup Promote use of official IT systems	Police single workflow for each task Decommission any "shadow IT", such as other cloud storage: G Suite, Dropbox etc			
CPD	Digital Competency Workshops tailored to Impact Survey cohorts, supporting stage of Flipped Learning basic training "Art of the possible" coaching and shadowing opportunities					
COMMUNICATION	Awareness events (Sponsor Roadmap begins) Head of Dept Coaching Plan Project Collaboration Space and Calendar launched	Sharing success stories Progress against success criteria shared and discussed Communicate school device choice and one-to-one device expectation with parents.	Sharing success stories Reinforcement Launch improved parent engagement platform to families ahead of new term			
CLOUD SYSTEMS / APPLICATION ADOPTION	Teams Assignments OneNote Class Notebook Forms SharePoint Online hubs setup Migration of resources to teacher OneDrive or SharePoint	Create managed metadata to use across the trust. Tagging of resources. Microsoft Intune MDM + Autopilot/Google Management Console/Apple School Manager working with pilot devices Electronic homework workflow for all years with devices.	. Self-service app install process live for pupil & staff devices New Homework submission and review process go live	Cloud MIS transition plan created	Cloud MIS deployed	
LEGACY TECHNOLOGY	Refresh, upgrade, support or remove legacy technology. Implement Azure Virtual Network and begin IaaS migrations of legacy servers.	Complete migrations from Physical Servers and implement lower cost and smaller servers at the secondary schools Upgrade WIFI to match first large-scale roll-out of pupil devices.	Enact remaining consolidation steps to realise 1:1 device era cost savings Cloud MIS decision			

	Autumn 2021	Spring 2022	Summer 2022	Autumn 2022	Autumn 2023	Beyond
DEVICES	Pilot class sets of shortlisted pupil devices with Expert teachers' classes Decide on preferred device	Deploy first three year-groups of pupil device, e.g. Y5, 6 & 7 Trial first teacher mobile devices, e.g. laptop with pens	Parent contribution scheme for pupil devices launched	Deploy one-to-one pupil devices to 3 more year groups Deploy selected teacher devices to match pupil roll-out	Deploy one-to-one pupil devices to all pupils from Y3 Teacher laptops with pen deployed.	Remove Fixed IT suites
FRONT OF CLASS TECHNOLOGY	Front of class technology strategy defined Ensure front of class teaching solutions match the pupil devices selected	Pilot a range of WCT technology (compatible with chosen pupil device) with staff and pupils and obtain feedback	Begin rolling replacement of WCT wired PCs with laptops with pens & fixed USB-C docking stations in each classroom. Begin rolling replacement WCT screens.		All classroom fixed computers replaced with wired ethernet USB-C docking stations	Standardise front of class technology across all classrooms
END USER EXPERIENCE	Simplify wireless implementation Begin Intune management pilots for Windows 10 devices.		Migrate all systems to Intune management except those requiring legacy systems support for active directory network.			
AIMING POINT SPECIFIC APPLICATIONS & KEY RESOURCES	Choose suitable eBook platform and reading assessment platform. Cross-dept, cross-trust, R&D and learning practitioner Teams setup	Deploy eBook platform + content + reading assessment platform Deploy book review software Flipgrid deployed Select then pilot parent engagement platform	Migrate to parent engagement platform to consolidate and replace existing systems			
BUDGETING	Create a costed refresh plan for all supporting and legacy technology. Create sustainable sourcing model for pupil one-to-one devices and associated infrastructure.	Signoff on cost model for one-to-one devices Begin 1st phase of consolidation and cost-saving implementation work		Microsoft A3 or A5 Licencing required depending on security levels chosen		
SAFETY & SECURITY	Review of policy and practice	Address and replace Safeguarding technology	Simplify filtering experience to tie in with Wi-Fi logins	Embed Microsoft Information Protection technologies		