



IT STRATEGY

EQUITY OF ACCESS FOR ALL

2020-2024



1. Introduction

The IT strategy sets out the ambition of the Trust to drive a culture of technological innovation and collaboration that delivers improved outcomes for every student and ensures that every member of the community has access to the technology and infrastructure they need to excel in their role.

2. Vision and Values

**To deliver excellent educational provision
that prepares our students for the world of tomorrow**

**To enhance the digital experience
and deliver equity of access for all students and staff**

**To harness opportunities for innovative use of IT
within a blended curriculum.**

Our Objectives

Inclusion and equity of access is at the heart of our vision and we will work pro-actively to ensure opportunity for all.

Our school leaders will:

- Ensure technology is available for every student, in every classroom, including for home learning, every day.
- Encourage staff to discover, explore and apply new technologies.
- Lead, inspire, and promote the use of technology to allow new ways of connecting, sharing, teaching, and learning.
- Empower students and staff to actively participate in the future direction of technology and how it is used in their school.
- Establish expectations for ongoing development and improvement in the use of technologies across the school community.
- Promote professional learning in the implementation of technologies, based on school context and student learning needs.
- Promote an environment where staff and students feel safe and supported in their use of technology.
- Monitor and manage the impact of technology and its use on the wellbeing of students, staff, and the school community.

Our Values

Underpinning our strategy are the following values:

- **User First** - Consider the user experience in everything we do, including considering the impact on disadvantaged students.
- **Stay Secure** - Be champions of good practice, proactively managing risks related to information technology.
- **Equitable and Open** - In our inclusive educational provision and our professional approach.
- **Agile approach** - Adopt a flexible operational approach and mind-set by anticipating and adapting positively to change.
- **Develop our students and staff** - Continuing to build capabilities and talents to deliver excellent teaching and learning and serve the school community.

3. Achieving the vision for staff

Our goal is for every member of staff to feel confident to embrace the use of technology in their work and recognise the value it adds to their daily activities. Our staff will have access to the latest technology to support their work with students and colleagues. They will also have access to training, as necessary, to enable them to maximise their use of the technologies that are available.

The IT Strategy will support staff by:

- Improving the IT infrastructure in both schools, including Wi-Fi access, to enable reliable, fast access to the use of IT for learning and working.
- Ensuring that the software and hardware will be fit for purpose, in good condition and secure to use
- Offering opportunities to purchase or access Chromebooks
- Delivering a whole school approach to online safety, embedded in everything we do
- Ensuring that IT hardware and software used by staff is fit for purpose and leads to confidence in the use of and reliability of IT platforms.
- Operating all IT equipment in line with agreed IT policies, thus ensuring that matters such as safeguarding and GDPR are fully addressed.

4. Designing the Curriculum

Our school leaders and teachers will select and apply technologies expertly to maximise every student's learning and progress. We will all need to learn like our students and our teachers will model collaboration, continuous learning, and the acquisition of new skills.

Our staff have the capacity to continue to develop innovative classroom environments and pedagogy using IT tools that will motivate and engage their students. Teachers can access a world of information and resources through the internet and virtual education repositories and portals.

Our teachers will:

- Identify new and existing technological resources to enhance student learning.
- Be flexible, fluent, and agile digital consumers in partnership with students.
- Seek out professional learning opportunities and use technology to collaborate with colleagues and the school community.
- Use technology to foster student creativity and engage them in real world problems.
- Model positive and responsible use of technology, focusing on wellbeing, cyber safety, global citizenship, cultural competence, and ethical practices.
- Provide students with more powerful opportunities to demonstrate learning and reflect on their progress through technology.
- Use technology to collect and analyse student achievement data to improve learning outcomes.
- Deliver greater opportunities for differentiation within the class to meet students' needs.
- Allow effective assessment for learning in and out of the lesson to both redirect the lesson and aid long term planning based on students' learning.

5. Achieving the vision for students

We want our students to be ready and able to capitalise on the opportunities of the future as empowered and creative users of technology in a world where technology rapidly evolves, and workplaces and job roles are transformed.

Our students will:

- Be inspired to apply creative thinking and design processes to generate and test new ideas and co-create solutions.
- Become discerning users of technology and choose the right tools at the right time.
- Navigate the digital environment responsibly, safely, and ethically, to maximise opportunities in learning, work, and life.
- Personalise their learning, and use technology to generate new ideas and new ways to learn.
- Be empowered to use technology to create, use and communicate complex ideas clearly and effectively for a range of purposes and audiences.
- Be critical consumers of information to enrich their learning and broaden their understanding.
- Model positive and responsible use of technology, focusing on wellbeing, cyber safety, global citizenship, cultural competence, and ethical practices.
- Be well prepared to take the next step beyond school into further education, training, or work.

Every student will have access to a Chromebook, which will enhance and accelerate their learning and help them learn in a way that suits them. This will include the ability to:

- Create, share, and collaborate using the Google suite tools to increase the potential of peer assessment and collaborative learning approaches.
- Organise homework and classwork through Google Classroom allowing easy access.
- Use excellent learning resources from our web-based tools, including up to date and relevant e-textbooks, where appropriate.
- Use digital tools to support research and writing. For example, academic bibliography and citation tools, read aloud and voice recognition tools to promote independent learning.
- Think and behave creatively across their subjects using Cloud Apps for design, planning, animation, mind-mapping, image editing, sound editing, video recording, etc.
- Use subject related Apps in the classroom and at home.

In a nutshell, the benefits of harnessing digital technology for teaching and learning are:

- Every student will gain the skills they need to use IT safely and effectively before they leave the school. This is an essential part of everyday life for our students and will equip them with these skills for life.
- Students will experience enhanced teaching and learning and excellent pedagogical practice across the curriculum leading to improved outcomes for all students.
- There will be improved support for students with medical conditions who may be unable to attend school but can access an extensive remote curriculum offer.

6. Key Features of an Effective IT Infrastructure

The DfE describes IT infrastructure “as the physical and technical components of an individual school network, or a wider network connecting a group of schools.

It comprises several different systems, including:

- *physical cabling and data connections that form part of the building fabric, typically using copper cabling with fibre-optic links between buildings.*
- *switches that move data from one place to another and make sure it routed correctly.*
- *wireless equipment - wireless access points (WAPs) provide the wireless connectivity (Wi-Fi) required in various locations inside or outside a building.*
- *equipment to connect to the internet and to other schools, including routers and systems for security and filtering.*
- *management systems to control and coordinate the systems in a cohesive, secure, and effective way.*

Poor infrastructure will have a negative impact on lessons and staff. Investment in infrastructure requires a sound strategy that looks several years ahead.”

The Trust acknowledges that the current IT infrastructure across the two schools – Admiral Lord Nelson School and Trafalgar School - requires further improvement to fully realise the opportunities technology can offer to staff and students.

Good IT infrastructure should be reliable and seamless. We will focus on:

- An infrastructure which is fit for purpose and reliable and underpins teaching and learning and an innovative curriculum,
- Supporting the school improvement ambitions of the Trust and its schools,
- Delivering equity of access for staff and students across the Trust, and
- Ensuring value for money and good quality from IT investment.

The IT infrastructure and associated processes and practice will need to take account of legislation and best practice, such as Keeping Children Safe in Education (Online) and General Data Protection Regulation (GDPR).

7. Analysis of current infrastructure

Feature	Current position	Future position
Internet connectivity (broadband)	Current SWAN system is slow and uses an old infrastructure which is susceptible to attack. The system has not proven to be reliable.	Following a full tender process, the Trust is moving to RM for a significantly increased capacity with a 1GB line. This is an increase on 10x on the speed achieved through Swan and better reflects the needs of the Trust and its schools for fast and reliable service. Implementation due October 2020.
Wi-Fi connectivity ALNS	Wi-Fi connectivity is at acceptable levels. Lease agreement expires in September 2021	No action required at present. Keep under review as use of Chromebooks increases volume of devices in school. Review the lease and consider best value for future: lease arrangement or capital purchase.
Wi-Fi connectivity Trafalgar	Wi-Fi connectivity is poor due to the construction of the building (thick walls etc.) This affects the speed and reliability of Wi-Fi coverage.	Quotes have been received to improve the Wi-Fi capability by adding 67 access points across the school to enhance the signal strength provide staff and students with confidence in a reliable connection. Work is being undertaken to get this completed by September 2020.
HARDWARE <i>Hardware incorporates fixed and portable devices, such as Chromebooks, laptops, desktops computers, docking stations, servers, and projectors. Hardware also includes maintenance, support, and upgrades to ensure that hardware is fit for purpose.</i>		
ALNS IT suites	Rolling programme of replacement, with one IT suite per year being upgraded.	ALNS: Rolling programme to continue.
ALNS staff computers	Computers were replaced in Summer 2020.	To be reviewed again in 2023
Trafalgar IT suites	Computers were replaced in 2019.	To be reviewed again in 2022
Trafalgar staff computers	Computers were replaced in 2019.	To be reviewed again in 2022

Feature	Current position	Future position
Chromebooks	<p>585 Chromebooks have been purchased to support the curriculum (295 – ALNS and 290 – TS).</p> <p>Through a Chromebook lease scheme, 1000+ students now have their own Chromebook.</p>	<p>Dynamic change for staff to ensure Chromebooks are integral to lessons. The vision is for every child to have access to a Chromebook.</p> <p>Future purchasing opportunities via the Chromebook lease scheme should increase numbers further. Staff have expressed an interest in a Staff Chromebook lease scheme – to be developed.</p>
ALNS switches	Lease agreement expires in September 2021	Review the lease and consider best value for future: extend lease arrangement, new lease or capital purchase.
Trafalgar switches	Purchased outright and reaching end of life as 3 years old.	Action required: Review and consider best value for future: new lease arrangement or capital purchase.
ALNS server and storage area network (SAN)	<p>Storage capacity is sufficient.</p> <p>Purchased outright and reaching end of life as 5 years old.</p>	<p>Storage capacity requirements may be reducing as more information is cloud-based.</p> <p>Action required: Review and consider best value for future: lease arrangement or outright purchase.</p>
Trafalgar server and storage area network (SAN)	<p>Storage capacity is sufficient.</p> <p>Lease agreement expires in September 2022</p>	<p>Storage capacity requirements may be reducing as more information is cloud-based.</p> <p>Review the lease and consider best value for future: lease arrangement or outright purchase.</p>
Projectors	<p>Rolling programme of replacement as required.</p> <p>Piloting the use of interactive TVs in the teacher wall, instead of an interactive whiteboard and projector, at ALNS.</p>	<p>To ensure a better display quality, replacement projectors are LED projectors.</p> <p>Determine effectiveness of pilot and value of any improvement compared to replacement costs. If effective, consider a rolling programme of replacement.</p>

SOFTWARE <i>Software packages/licences and maintenance, support, and upgrades – these are the main packages in use.</i>		
Feature	Current position	Future position
Microsoft	Recently renewed after a 3-year commitment. Prices have increased by 30%. However, limited scope for change of software.	Continue to review on an annual basis to ensure software is still required and that support for the software is still available. Plan to move to new versions of the software where possible and affordable.
SIMS (Capita)	SIMS is based on pupil numbers and price will increase as pupil numbers grow.	Consider benefits and drawbacks of new software options, such as email filtering software and make a business case for purchase.
Other licences Adobe, PARs, Insight, CPons (safeguarding), Show My Homework.		
PS Financial	Currently using old version of the software (v3) which has less functionality and features.	Action required: To maintain current preferred system by migrating to version 7 to improve usage including management reporting tools.
Anti-virus software	Current software is effective.	Continue to review on an annual basis
OTHER CONSIDERATIONS		
Cyber-security	Currently provided with SWAN broadband provision. Has not been effective against DDOS attacks (denial of service) and the service has suffered network collapse.	Will be provided by RM broadband provision from October 2020. Tender evidence suggest that the RM provision will be significantly more effective. It is reasonable based on the evidence provided to assume that the service will not be or will very rarely be affected by DDOS attacks.
Use of cloud-based technologies for students such as Googlemail and Google Classroom	Cloud-based applications are secure and well-used. IT team have capability to track misuse and take remedial action.	Continue to keep under review.
Use of social media, such as Facebook and Instagram	Used effectively with positive engagement from parents, students, and the local communities. Content and comments moderated by IT team.	Designated IT staff member to continue with monitoring and moderation of content

Feature	Current position	Future position
School websites	School websites are well maintained by a member of the IT staff in each school. Audit in August 2020 confirms that all requirements are being met.	Designated IT staff member to continue with monitoring of content to ensure ongoing compliance.
Trust website	Current site is out of date and the content is not compliant with requirements. Refresh of content and branding/style is being undertaken. New website due for launch by the end of September 2020.	Following launch of new website, CFOO to continue to monitor and update content to ensure ongoing compliance
GDPR policy and monitoring	Scheduled for a policy review in autumn 2020.	Consider refresher staff training to supplement the review of the policy.

8. Action Plan for 2020/21

The Action Plan outlines the initial steps that the Trust will take to deliver the Vision.

Action	Solution	By When?	Lead
Switch to new Broadband service from RM (following tender exercise in January 2020) to deliver improved Broadband service	Improved broadband service with better connectivity and protection	October 2020	IT Manager with oversight from CFOO
Improve the reach and effectiveness of Internet connectivity at Trafalgar School	Additional access points and boosters to implement a wireless solution	September 2020	IT Manager with oversight from CFOO
Implement Chromebook use in the curriculum	Staff to ensure Chromebooks are integral to lessons and enhance teaching and learning	September 2020	Headteachers
Continue with the Chromebook Lease Scheme for students, to support a 1:1 approach to Chromebook use.	Provide further opportunities for parents to buy a Chromebook for their child.	September 2020 & November 2020	CFOO
Develop a Chromebook Lease Scheme for staff, to support staff's desire to use same technology as the students	Develop a new scheme during 2020/21 for staff	Spring 2021	CFOO
Review future provision of ALNS switches and Trafalgar switches	Review and agree way forward before ALNS lease expires in September 2021. Seek best value across both schools.	Start: November 2020	IT Manager

Review future provision of server and storage area network (SAN)	Keep under review as reaching end of life at ALNS. Review and agree a way forward for both schools. Seek best value across both schools.	Unless urgently needed, tie the ALNS review into the end of Trafalgar school lease in 2022, by reviewing in 2021.	IT Manager
Evaluate the pilot use of interactive TV screens in new block at ALNS	Gather feedback from the teachers on the benefits and drawbacks of this approach	By Summer 2021	IT Manager
Upgrade financial software package	Migrate to PS Financial version 7	By Easter 2021	IT Manager/ Finance Manager, oversight by CFOO
Ensure compliance and currency of Trust website	Develop new Trust web presence, with complaint content. Ensure plans to maintain content are robust.	September 2020 Ongoing	CFOO
Review GDPR policy and ensure compliance	Review and update GDPR policy Annual refresher training for staff Training for new DPO Audit processes and systems for compliance.	January 2021 Spring 2021 Autumn 2020 Summer 2021	CFOO Virtual training via Portsmouth Learning Gateway Research and 1:1 refresher HTs

9. Oversight and Governance

The delivery of the Vision and the underpinning strategic objectives is a key priority for the Trust. It is vital that the Action Plan is delivered at pace.

The Chief Financial and Operating Officer (CFOO) will have responsibility for oversight of the delivery of the Action Plan.

The CFOO will provide regular progress reports to the Executive meetings with the CEO and the Headteachers.

Progress reports will be presented to the Trust Board for consideration in January and July. Overall accountability for the IT Strategy sits with the Trust Board.

The Trust Board is responsible for ensuring that sufficient financial support is provided to enable the Action Plan to be delivered. Requests for funding approval for specific items will be presented to the Trust Board, as per the Finance Policy.

Where there is an urgent time imperative between Trust Board meetings, the Chair of the Trust Board will be able to use executive powers to make a formal decision, as per the Governance Code of Practice. It is envisaged that the Chair would seek feedback from Trustees prior to making the decision, wherever possible, but the timescale for responses would be short i.e. 24 or 48 hours.

10. Review

The Strategy covers the period 2020-2024 and will be formally reviewed by the Trust Board in September each year to ensure its continued currency in the light of progress made at that time and technological change and developments, and to inform further IT investment.