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**IT**

# **HOW TO CONDUCT AN IT REVIEW FOR SCHOOLS**

**NET TECHNICAL SOLUTIONS LTD**  
THE MILLENNIUM CENTRE  
CROSBY WAY  
FARNHAM  
SURREY  
GU9 7XX



**net technical** solutions

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# INTRODUCTION

**This document outlines our *step by step guide to performing your own IT health check*. It will help you conduct a complete review of your current situation and is ideal for anyone working within the Education sector and looking to review or update their current technology.**

Now more than ever, educational establishments such as schools, colleges and universities depend on robust, reliable IT systems to keep their daily activities running as smoothly as possible and maximise their pupils' learning.

As well as being used for the general management of a school, technology is now firmly integrated within the classroom. The potential of technology when it comes to improving teaching and learning has never been greater and the majority of teachers use some form of IT equipment in class on a daily basis.

However, failing equipment, outdated software and slow or difficult-to-use IT systems can have a huge impact on the overall effectiveness of a school's operation and the ability of teachers to teach, not to mention adding to the daily frustrations and pressures for all staff.

Add to this stretched budgets, the pace of change, rising costs and ever increasing cyber security threats and it makes sense to adopt a **thorough IT review on a regular basis**. This will enable your school to understand its IT framework and put a plan in place to ensure systems are working efficiently, running smoothly and are cost-effective and secure.

By fully understanding your current situation with regards to your technology, you will be taking the first step towards creating a more successful, productive learning and working environment for both staff and pupils.

“ *While the majority of teachers see the benefits of using technology in the classroom, budget cuts are making its' effective implementation, maintenance, and use quite difficult.* ”

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Education Report 2017-18**

# THE IT REVIEW

## 1. CREATE AN IT EQUIPMENT INVENTORY

The initial step for any review is to make an inventory of which IT equipment you are actually using in and around your building(s).

Create a detailed list of all classroom/school technology which can be kept to hand and easily and regularly updated.

- ✓ Detail what equipment is working and what is failing.
- ✓ Note how the equipment is being used, or not used.
- ✓ Document any warranties for core IT equipment and establish when they are due to expire.
- ✓ Record the manufacturer, name of the model, age and performance of each piece of equipment and note when upgrades are likely to be needed. (It may be more cost effective to replace a piece of equipment rather than repair it.)
- ✓ Check that any licences are still in date and that everything you use is correctly licensed. This may include your database, Microsoft software and security and back-up products.

As part of this step it is worth trying to establish how your overall existing IT is helping (or hindering) your school's ability to teach and operate efficiently and what you could additionally do to improve.



## 2. ASSESS YOUR IT INFRASTRUCTURE

Once you have an overview of the equipment in use, you will need to identify and record any existing IT or infrastructure issues/frustrations and look into what you can do to overcome them. This may be achieved via a questionnaire to all teaching and admin staff for example, or simply through your own experience.

Issues that you may encounter include:

- Equipment that creates challenges in class (e.g. not enough terminals for the class size).
- Restrictions on what can or cannot be download or installed.
- Blocked websites and internet restriction.
- Restrictions on what software/applications can and cannot be updated.
- Ease of access to data - how easy is it to access data when needed?
- Length of time taken to resolve issues and fix problems - how long are staff and pupils waiting to get issues resolved or fixed? Do they have to book a time in for an IT person to assist them or can they get help in minutes?
- Users being kept up to date with progress (and any changes to software, etc.).
- Photocopier and paper restrictions (Would it be more efficient to have everything online – easily accessible by all?)
- Mishandling of IT equipment. (Kids can be very unforgiving with school equipment and more likely to look after their own. Is there a balance between BYOD and what you provide?)

Following the initial review, it should be possible to spot trends and create a shortlist of items that can and need to be addressed. This could be communicated to staff along with a list of actions and timelines.

### 3. ASSESS THE COMPATIBILITY OF YOUR CURRENT TECHNOLOGY

The best way to make the most of your existing technology is to ensure that you have cross-platform compatibility of all devices and software. Review your technology making a note of where you can streamline it wherever possible.

Not only will this help support a more seamless way of working between departments, staff and pupils but it will also make your complex IT systems much easier to manage. For example:

- Microsoft Office with Windows, OSX, Android and IOS devices.
- Google Docs with Windows, OSX, Android and IOS devices.

### 4. ESTABLISH THE NEED FOR NEW TECHNOLOGY

As part of your review, it is worth considering which technology needs replacing or upgrading in the next 12 months and/or what new hardware or software you will need to purchase, (both at classroom and school level.) For example, do you require new tablets, laptops, ActivPanels, etc.?

If you are bringing in new technology, make sure you consider how best to maximise your investment.

- Ensure that the new equipment is compatible with your existing system for easy integration.
- Consider whether there is any free software that you could use as an alternative. (e.g. ClassFlow apps, etc.)
- Where you are buying in technology, be sure to consider the total cost of ownership. A higher upfront cost could save you money in the long run if it requires less maintenance and has a favourable warranty. Likewise, technology such as the Promethean ActivPanel uses upgradeable Android

“...Faulty networks and out of date equipment are two key reasons for insufficient technology use in school... 83% of teachers believe that a lack of appropriate/working technology prevents them from using it to tackle common teaching issues.”

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technology. This means it is upgradable over time and extends the overall life of the ActivPanel.

- Consider Cloud-based tools that don't require annual upgrade costs. However, if your school Internet connection cannot facilitate Cloud-based software, you could look at free downloadable platforms such as ClassFlow Desktop, etc.
- Make sure that anything you invest in delivers benefits when it comes to future-proofing (e.g. with regular free updates there is less need to invest in new hardware, etc). It is also worth looking at where it might be more cost-effective to replace equipment rather than have it repaired.

## 5. EVALUATE YOUR BACKUP

Too many organisations make substantial investments and spend a lot of time backing up their data only to find the backups won't work when something goes wrong with their data storage. As your data is critical to your school, one of the most important daily aspects of your IT network will be in backing up and storing all of your data correctly.

A robust backup system will allow you to restore files easily and so by finding out how long it takes to restore a file or your whole system you will be able to know just how good your back-up is for you.

You will need to consider the following:

- ✓ What type of backup system do you use and is it efficient and secure – is it a tape system or Cloud? If Cloud, what is being backed up, how often, where stored and what's the security like?
- ✓ How frequently are you running a backup of all your files and data?
- ✓ How frequently are you testing your backup systems? Simple backups should be tested regularly and also whenever there is a major hardware or software change to your system.
- ✓ How often do you test the ability to restore a file, folder or systems and how long does the recovery take?
- ✓ Do you have a recovery plan in place and do relevant staff know about it?
- ✓ Do you have any single points of failure?

## 6. ASSESS YOUR NETWORK MONITORING AND UPDATING

Do you have a member of staff or external organisation who is responsible for managing and monitoring your network?

If someone is actively managing and monitoring your network you will more easily be able to predict critical events and problems before or as they arrive.

Your network should be set up with monitoring tools that automatically alert you to any potential risks, such as spikes in disk space, backup failure, failing hardware, attempts by hackers, and devices on the network that haven't got up to date antivirus software.

These alerts should be set up to prompt in a timely manner so that you prevent something small from escalating into a much more serious and potentially costly problem.

Make sure that someone is also monitoring all your users' devices and your servers for patches and updates to ensure that systems are being kept up to date and therefore safe. The best time to update your servers will be when it's quiet – they will need to be reviewed, managed and installed when the network is least busy so as not to disrupt the working day. Additionally, updates should be planned, controlled and enforced so that the whole system benefits and performed on a regular basis.

“

*.. 80% of educators surveyed believe their schools have a specific ICT strategy in place, the majority also felt that technology is not always being used correctly or maintained.* ”

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## 7. EVALUATE YOUR IT SECURITY

Although generally a good thing, any increase in the use of technology within your school also means an increase in the vulnerability of your establishment to cyber security threats - threats on your data and information via the Internet.

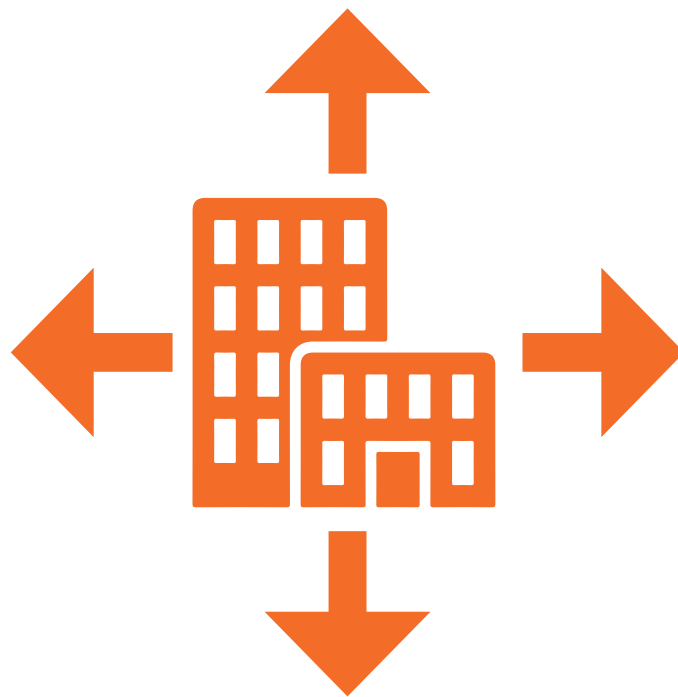
To reduce the risk, make sure:

- **Any old technology is replaced:** you will need to ensure that your system is kept up-to-date and any aging technology is retired or updated. Not only does old equipment hold you back when it comes to getting the most out of your IT but it is also less secure and can leave you open to attacks from viruses or malware.
- **Security software is in place:** By using firewalls, robust antivirus software and good housekeeping techniques along with having a sound back-up procedure in place you should reduce your risk significantly.
- **Systematic and regular review of online safety policies are undertaken.** Once done, establish a monitoring and evaluation processes and make sure that staff, parents, and pupils are aware of the safety rules and expectations.
- **Access is controlled:** make sure you have a good password policy in place with monthly checks on the user directory to query if accounts have passwords that are not set to expire and accounts that haven't been accessed for over 30 days are perhaps reviewed/closed. Also check who has access to your systems and what level of access they require.
- **Pupils and staff are kept safe:** as well as protecting your database and information, it is your duty to keep your pupils and staff safe from cyber bullying and cyber threats. Make sure you have good web filtering software in place which meets the current requirements.
- **Staff and pupils are trained on IT Security and online safety** - what to look out for and be aware of to remain safe. Having regular training sessions in place, access to reminders (posters, leaflets) for all users will help keep this front of mind and establishing robust reporting measures and processes to respond to any incidents will help contain any issues. (Remember, you need to make sure that your IT is helping you to meet your obligations to KCSIE.)

## 8. ESTABLISH TRAINING NEEDS

It goes without saying that your IT systems are only as good as their users. To get the most out of your equipment, therefore, you should **regularly review training needs** – who has been trained and on what systems, and who needs training. This will apply not just to office staff and teachers but perhaps to your students as well.

Establish a training schedule so that all staff have the opportunity to learn to use their equipment fully, be updated when new technology becomes available and go on to advanced learning if required.



## ABOUT NET TECHNICAL SOLUTIONS

**Net Technical Solutions** has a wealth of experience working with customers in the Education sector and a wide variety of clients based across Surrey and Hampshire. From working closely with our customers in schools and colleges, our team has been able to build up a wealth of sector knowledge and an in-depth understanding of the daily demands faced by these establishments as well as the right IT systems and infrastructure needed to support them.

We are a Managed Service Provider with nearly 20 years' experience in providing personalised IT services to a variety of organisations and currently employ a responsive and skilled team of around 35 people, offering the full package for all ICT requirements, from day to day PC, server and network support through to network installations, strategy and advice.

### Our services include:

- **Proactive IT Service Desk** – friendly and experienced staff who are on hand to deal with your issues and resolve them quickly, supported by our own bespoke case management system.
- **Advice and Guidance** – through regular reviews and checks, we can make sure that your existing equipment is kept up-to-date and working efficiently.
- **Supply and Installation** – based on impartial advice, we can help you select the right upgrades or new equipment to meet your budget and technical requirements and keep your network up to date.
- **Network Security** – by putting in place the right support, software and hardware, we can keep your company's network and critical data protected from unwanted threats, viruses and malware.
- **IT Services** – from Internet connectivity, domain/web hosting and Office 365, through to spam filtering, anti-virus and offsite backup, we can cater for all your additional IT service requirements.
- **Software Development** – if you are looking for bespoke software to help streamline your school's processes, we can help with anything from database applications, systems integration to a dynamic website.

**For more information please visit [www.ntsols.com](http://www.ntsols.com) or contact us on **01252 235 235** to request a brochure or to book a free of charge, no obligation consultation.**

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# NOT JUST YOUR IT

**NET TECHNICAL SOLUTIONS** provides professional, proactive IT support and services for business organisations of all different shapes and sizes. As a friendly, talented and experienced team, we are dedicated to building strong customer relationships and delivering excellent service at an honest price. We love what we do and are constantly investigating new technologies and ways of working, so that we can continually provide reliable solutions that add real value and help create efficient, productive business environments.

[www.ntsols.com](http://www.ntsols.com)  
01252 235 235  
[sales@ntsols.com](mailto:sales@ntsols.com)

Net Technical Solutions Ltd  
The Millennium Centre  
Crosby Way  
Farnham  
Surrey  
GU9 7XX

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“ We enjoy excellent relationships with every member of Net Technical staff we have encountered. The improvements have made a tangible impact on the way we work in our department as we rarely spend time fighting fires any more but can focus instead on delivering a really good service to our school population.  
E Wiczling, Network Manager, Woking High School, Surrey. ”

“ Last spring we prepared a very detailed IT tender document and sent it to both local and national support providers. Net Tech, based in Farnham, were incredibly competitive with their pricing and the service they could offer. They started with us last September and we have not been disappointed. In fact they are a huge hit with the teaching staff because of their very prompt and efficient manner in dealing with their time-pressure IT issues.  
K Pillar, Bursar, Rydes Hill Preparatory School, Surrey ”

“ We have worked with Net Technical for a number of years and the support, advice and service from the whole team is fantastic. We are always happy to recommend their services and have lots of positives to share...  
M Curtis, Headteacher, Ash Grange School ”

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