



Digital standards in education

Build your digital
transformation strategy on
rock solid ICT foundations
that make the grade



We're here to support your digital transformation journey

Technology's changing quickly in education. And it plays a big part in delivering the best possible outcome for every student you teach.

Through our dedicated team of education experts and our range of world-class ICT solutions, we help schools and colleges to create reliable and secure digital learning experiences that mean each individual student can achieve their full potential.

Student Centres

- Pg 3** **Government standards overview**
Our solutions measure up across all of the expectations in the DfE's digital standards
- Pg 4** **Broadband internet standards**
BTnet delivers lightning fast speeds and rock solid reliability for uninterrupted learning and cloud-based confidence
- Pg 5** **Backup internet requirement for resilience**
Our resiliency options keep learners connected - even if the worst happens
- Pg 6** **Wireless network standards**
We'll help you upgrade your school or college Wi-Fi to make the grade
- Pg 7** **Network cabling standards**
Improve the wired backbone of your Local Area Network with modern structured cabling
- Pg 8** **Network switching standards**
Optimise LAN performance with modern, manageable network switching
- Pg 9-10** **Security and safeguarding standards**
Our solutions protect your network, your data and help keep students safe from digital harm
- Pg 11-13** **Adopt 1:1, streamline processes and improve efficiency**
From 1:1 devices, to efficient cloud-based services, we'll help you do and save more using your transformed infrastructure
- Pg 14** **More than just a technology supplier**
We're committed to helping the next generation thrive

Our solutions measure up to the Government's digital standards for education

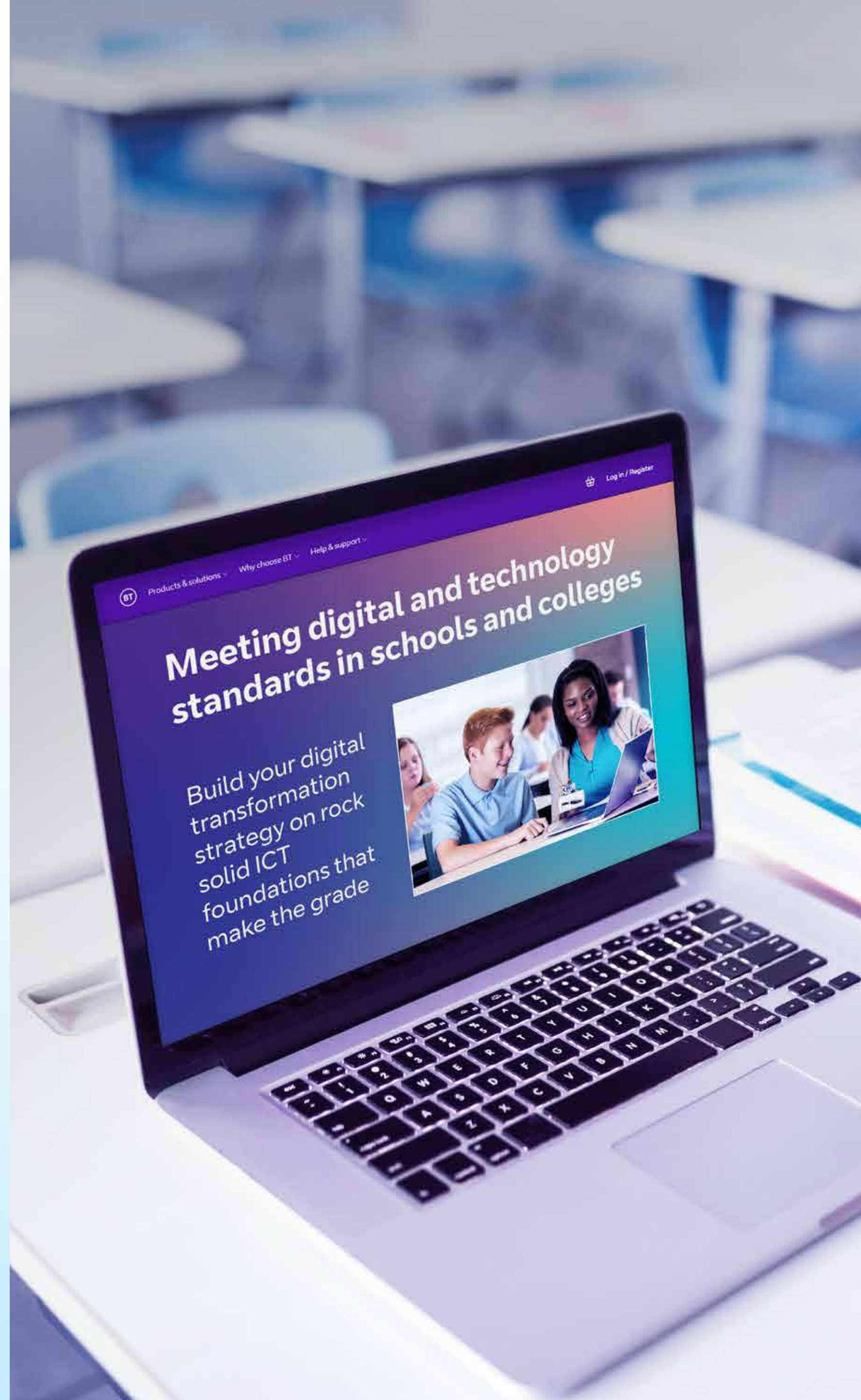
Just like the Department for Education's digital standards, our solutions are designed to give your school or college the right digital infrastructure to support your long term transformation strategy.

We've got solutions that measure up to expectations, right across the Government's digital standards. And because we're BT, you'll know that quality and reliability are built right in.

With no worries about performance or interruptions to learning, your teachers and School Leadership Team can focus on using the technology to help transform student outcomes.

We'll help your school or college to:

- Meet all of the DfE's digital standards
- Build a reliable underlying technology infrastructure capable of supporting modern teaching and learning approaches, like 1:1 devices and a cloud learning platform
- Provide students with new learning opportunities
- Create a safer learning environment
- Adopt more cost-efficient ways of working, like switching from on-premise to cloud-based solutions



How our solutions measure up against the standards

Meeting Digital and Technology Standards in Schools and Colleges

Covers expected standards for:	Our solutions
Broadband internet connectivity	✓
Backup internet for resilience	✓
Wireless networking	✓
Network cabling	✓
Network switching	✓

Keeping Children Safe in Education - KCSIE

Covers expected standards for:	Our solutions
Appropriate IT security and safeguarding systems	✓
Effectively managed solutions that support identification and escalation of concerns	✓



Get the right internet connectivity for education. Choose BTnet

Cloud technologies can be transformational. Not just for teaching and learning, but for streamlining operations and saving money too. Technology is empowering, but it can only ever be as good as your internet connection. So don't compromise.

Super reliable and lightning fast. BTnet is the UK's number 1 leased line internet¹

24/7 dedicated bandwidth that you'll never share

BTnet offers a dedicated, full fibre connection just for your school or college. It's a leased line, with unlimited data and no restrictions.

The same upload and download speed of up to 10Gbps

Scorching fast symmetrical speeds mean uninterrupted learning, even when everyone's online at the same time.

Flexible bandwidth to save your school or college money

Flex up when you're busiest and down in the school holidays. Plus, choose from different capacity options to meet your needs.

Value for money

All the reliability and performance you need at a fair education price.

Reliable service you can trust

Including UK-based 24/7 support and our market leading Service Level Agreement, with 100% target availability.

Direct peering connection to education CSPs

There's no need to route over public internet when connecting to education Cloud Service Providers like Microsoft and Google. Performance is even better.



To learn more about BTnet and why it's perfect for education

[Read our brochure](#)

Government standards for broadband internet

Our solutions

A full fibre internet connection



With a minimum of 100Mbps download and 30Mbps upload speed for primary schools



Secondary schools, all-through schools and further education colleges need capacity to deliver 1Gbps download and upload speed



Not ready for a leased line? Ask us about FTTP

Our Fibre to the Premises broadband internet may suit your needs better – especially for smaller schools. It's a full fibre connection right to your door, with no copper or cable sharing. And there's speeds of up to 900Mbps, all the time.

We'll help you build an even more resilient internet connection

With BTnet, you enjoy dedicated internet speeds with no delays – on a circuit all of your own. We expect to keep you online, all the time – with a 100% availability Service Level Agreement (SLA). But sometimes it's out of our control and circuits can break. That's why your school or college needs to protect its connection with a second circuit.

Learning continuity through floods, fires and destructive roadworks

Backup

If the main circuit connecting your school or college fails, a second one switches on. Everyone keeps connected and the learning continues. You can keep costs down by reducing the bandwidth on your second circuit, as long as it's good enough to see you through. Diversity in cabling and routing is limited with this option though, so go for Failover if you need even more resilience.

Failover

A failover circuit has the same bandwidth as your main circuit. It switches on if your main circuit fails. Each circuit follows a different route from end to end, helping to protect your school or college further. Your staff and students won't notice any difference if your first circuit fails, as the performance is exactly the same.

Load balancing

This spreads work evenly between both circuits all the time. Neither bears too much demand, so improves performance. If one breaks, the other can still carry all the traffic. As with failover, each circuit follows a different path end to end, giving an extra level of resilience. It's not right for all schools though. You'll need a technical expert to do some configuration to get the load balance right.

We'll help you choose the second circuit that's right for your school or college based on these features:

	Backup equipment	Diverse routing	Cabling type diversity	Exchange resilience	Site diversity	Core network routing diversity
Backup	✓		✓	✓	✓	
Failover	✓	✓		✓	✓	✓
Load balancing	✓	✓		✓	✓	✓



Government standards for backup internet	Our solutions
Multiple internet connection services (of different service types)	✓
Multiple routers and appropriate associated router programming to provide automatic failover to backup services as and when required	✓
Redundant power options on core active network equipment	✓



Improve your wireless network. Upgrade to Wi-Fi 6 with us

Even with the fastest and most reliable internet connectivity, neglecting your Wireless Local Area Network (WLAN) means the overall experience could still feel slow and clunky. We'll help you upgrade to Wi-Fi 6 – it's the latest generation of Wi-Fi. It'll help you banish dead-spots and boost performance across campus. Inside and outside if that's what you need.

Get faster, more reliable wireless coverage with BT and Cisco Meraki



We've partnered with Cisco Meraki to offer your school or college world-class Wi-Fi performance and reliability. Together, we provide a complete Wi-Fi 6 solution which includes:

- Site survey and solution plan
- Hardware supply
- Installation and set up



Government standards for wireless networks	Our solutions
Use the latest wireless network standard approved by the Wi-Fi Alliance	✓
Have a fully functional signal throughout school or college buildings and externally where required	✓
Central management of the wireless network	✓
Security features to stop unauthorised access	✓

Wi-Fi without disruption

Provides a consistent and dependable wireless network connection with minimal interruptions. Ideal to support modern teaching tools and always-on classroom technology.

End-to-end security

Proactive security ensures harmful content is blocked and school data is protected. Get endpoint, network and physical security all in one place.

Centralised easy management

From a single school building to a large academic campus, the Meraki cloud-based dashboard provides complete visibility and central control. You can manage everything with a few clicks.

Value for education budgets

Quick and simple installation and configuration save time and money. Licenses include everything from feature updates to 24/7 support. With flexible three, five or ten-year options.

We'll help you modernise your network cabling to keep pace with your tech

Cabling is the backbone of your school or college's Local Area Network. It's the hard wired foundation that ultimately supports all the voice, data and video traffic that moves around your site - even if endpoint devices connect wirelessly.

Digital transformation needs reliable network cabling

Old or damaged cabling can impact the performance of your network - and the systems attached to it. It can cause intermittent connections and sluggish speeds. As your school or college's digital strategy matures, there'll be more and more data to move around. So the problems of failing network cabling will just get worse.

Modern structured cabling gets network basics right

We'll help you upgrade to a structured cabling solution that's ready for digital transformation. It'll meet the Government's standards, and provide a stable foundation that's ready to cope with your school or college's increasing demand for higher bandwidth. Access to applications will be faster, with improved overall network performance and reliability.

We provide an end-to-end cabling upgrade service

Through our specialist partners, we offer a complete service to help you replace the cabling infrastructure across your school or college campus. It starts with a thorough assessment of your existing cabling architecture. We'll then design and install a new solution using modern cabling technologies. Everything will be installed and thoroughly tested in line with the relevant British Standards.

Assess Design Install Test Warranty

1 — 2 — 3 — 4 — 5



Government standards for network cabling

Our solutions

Copper cabling should be Category 6A



Optical fibre cabling should be a minimum 16 core multi-mode OM4



New cabling should be installed and tested



Prioritise learning-critical traffic and apps with managed network switching

The right switching solution can make a big difference to Local Area Network performance. We'll help you give it a boost, with manageable network switching.

Government standards for network switching

Our solutions

Fast, reliable and secure connections for both wired and wireless users



Central management of the network switching infrastructure



Security features to protect users and data from unauthorised access



Core network switches should be connected to at least one UPS (Uninterruptable Power Supply) to reduce outage impacts



CISCO
Meraki

Working with Cisco Meraki, we offer managed switching solutions for education that measure up

Managed switches move data around your LAN more efficiently than standard switching solutions. Certain traffic types can be prioritised over others, which means you can optimise the performance of applications that are central to the learning experience. They're also more secure, providing features to monitor for attacks and control who's accessing the network.

Our IT experts can help you decide on the right managed switching solution for your school or college. We offer a wide range of options, including those from world-leader Cisco.

Monitor traffic

See where bottlenecks are slowing things down, so you can take action.

Easy management

Manage your switches through a simple, centralised interface that's accessible from anywhere.

Prioritise traffic to improve performance

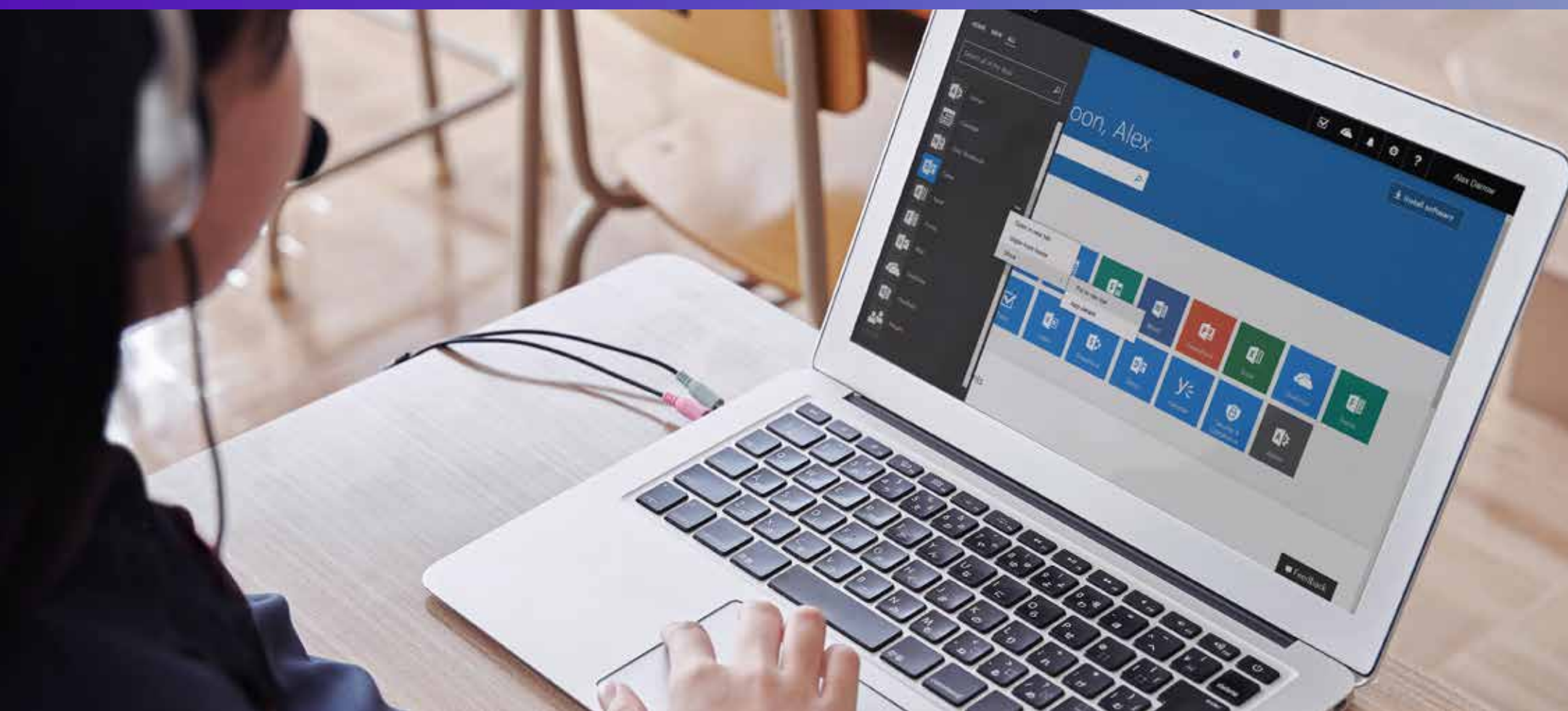
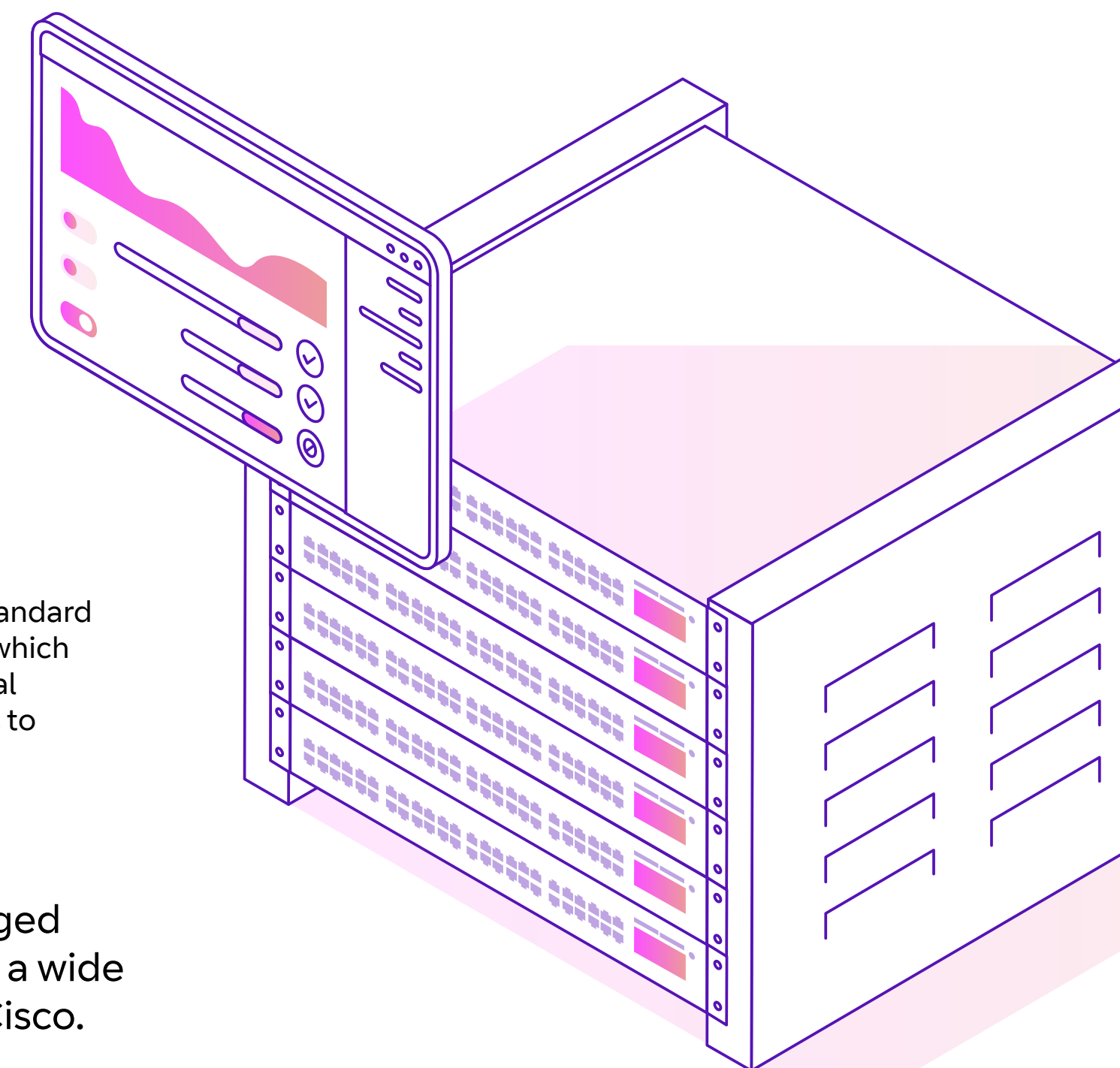
Give priority to traffic that most affects teaching and learning – like video for a live online lesson. You can also deprioritise traffic that can wait a few seconds – like a printer output.

Improve security

Configure settings to protect the network. And identify and remediate any breaches that occur.

Wide UPS range

We also offer a wide range of Uninterruptable Power Supplies from all the leading brands. We'll help you choose the right solution.



Need help?

Not every school has a networking expert. That's why we offer technical services to help with:



LAN design



Switch installation



Configuration



Warranty

Protect your network and keep students safe from digital harm

Built with education customers in mind, our best-in-class security and safeguarding solutions help keep everyone safe. And they meet the guidance outlined in the DfE's Keeping Children Safe in Education and Prevent Duty.

Our security and safeguarding solutions will help your school or college to:

Secure your network

Prevent attacks that cause downtime and disruption to learning.

Block access to digital content

Protect students from harmful or dangerous online material.

Proactively monitor students' digital activity

Identify inappropriate or concerning online behaviour.

Get insightful reporting and alerts

Intervene early in high risk cases.

We'll help you build a safer, more secure learning environment

Firewall and Unified Threat Management

Prevent unauthorised users from accessing your network and sensitive data. Protect against malware and ransomware too.

Content aware web filtering

Protect students from accessing unsuitable or harmful online content, without restricting their freedom to explore and learn.

Proactive student digital monitoring

Alert safeguarding teams to digital risks as they happen, so they don't become real-life incidents.

DDoS detection and mitigation

Fight back against attacks which can cause disruption, downtime and lost learning.

Learn more about our safeguarding and security solutions for education

[Read our brochure](#)



Government standards for security and safeguarding

Our solutions

Appropriate IT security and safeguarding systems, under both child and data protection legislation



Effectively managed solutions that support identification and escalation of concerns



Content filtering



Firewall



Digital safeguarding is much more than filtering. It's about protecting young people at every touch point

That's why we've partnered with Smoothwall – the leading provider of digital safeguarding solutions to UK education. Together, we'll help you exceed the Government's standards for digital safeguarding and security.

We're a Smoothwall Platinum partner, with a dedicated education team who can guide and advise you on the best ways to secure and protect your school or college.

Smoothwall Firewall

Built especially for education, Smoothwall Firewall inspects the data that passes in and out of your network to ensure all traffic is legitimate. It allows students and staff to access all the resources they need, whilst keeping out malicious users or programs. Combine it with Smoothwall Filter for a wider threat management solution.

- **Layer 7 application control**
Identifies and stops apps you don't want on your network and prioritises those you do
- **Perimeter firewall and internal segmentation firewall**
Protects your network against web and non-web borne threats
- **Gateway anti-malware**
Protects against known and zero day threats

Smoothwall Filter

In line with Government guidance, children shouldn't be able to access inappropriate or harmful content via school or college IT systems. Neither should they be hampered by "over blocking" or unreasonable restrictions that could negatively impact the learning experience. Effective filtering is about balance. We'll help you get that balance right.

- **Policy based rules for age appropriate filtering**
One approach doesn't have to fit all your staff and students
- **Dynamic content analysis**
Real-time, content aware web filtering offers protection without over blocking
- **Granular reporting helps assess system effectiveness**
Insightful automated reports give a clear picture of student online activities

Smoothwall Monitor

As well as filtering, Government guidance says that monitoring systems should be in place. And they should support identification and escalation of concerns. Smoothwall Monitor helps schools to proactively detect online risks before they become real-life incidents. It's a real-time digital monitoring solution with a 24/7 human moderated service.

- **Works online and offline**
Captures potential risks outside of regular web browsing activities
- **Works in real-time**
Human moderated service 24 hours a day, 365 days a year
- **Immediate alerts to your Digital Safeguarding Leads**
Intervene and escalate quickly when concerning student behaviour is identified

Ask us about a free 30 day Smoothwall Monitor trial²

Test the impact that Smoothwall Monitor could have on your safeguarding processes. Trial the full solution for 30 days for free.

Now you're all set for digital transformation, we'll help your school or college to achieve more

Choosing our solutions to meet the Government's digital standards gives you confidence that your school or college's digital infrastructure is right-sized and ready to support your long term transformation strategy. And once we've helped you to upgrade, we'll help you make the most of your investment too.

Four ways we can help you to do more, or save more

1.

Adopt 1:1 devices and cloud-based learning

Wherever they're learning and whatever the lesson, a device per pupil is a real enabler for improved learning outcomes. A 1:1 programme can help to ignite creativity, encourage independent thinking and allows personalised learning experiences that support each individual student's needs.

2.

Save time and use less physical resources

With 1:1 and a cloud-based learning platform teachers can save time on everything from lesson planning to marking. Everything's stored securely in the cloud, so it's accessible from anywhere. Plus save time, cost and go a little greener by reducing the need for books and photocopied worksheets.

3.

Less on-site infrastructure needed

With modern ICT foundations that won't let you down, you can move key school or college services to the cloud with confidence. This can reduce the need to spend on technical infrastructure, like on-site servers, storage, cooling and power. Not to mention the skills needed to manage and maintain them.

4.

Prepare for the move to digital voice services

Enjoy all the functionality of a full blown traditional phone system, without the hardware overhead. Take and make calls on any device, anywhere - so you'll never miss conversations about student progress and welfare. Everything happens in the cloud, so upfront hardware investments are minimised and there's less kit to look after.



Trust us to support your 1:1 programme at every step

When it comes to your device-per-pupil roll-out, we're here to support you at every step of your journey.

Create your digital learning plan in eight steps with our education IT specialists.

1. Create your milestone plan

A strategy workshop will help you create a milestone plan to turn your 1:1 vision into reality.

2. Choose the right platform and apps

From Microsoft 365 to Google G Suite, we'll help you decide what's right for you and your learners.

3. Select the right devices and Operating System

Windows, Apple or Chrome? We work with the world's leading device manufacturers to bring you quality and choice. There's options for every need and budget.

4. Add the right services and accessories

From rugged cases and warranties, to headsets and charging solutions. We offer it all.

5. Fund your 1:1 programme

Buy outright, lease or fund through parental contributions. You could also offset costs with device trade-in.

6. Get your underlying connectivity right

You'll need Wi-Fi and internet connectivity that's fast, reliable and secure. We'll help you get it right.

7. Deploy and manage devices

We'll help you set up devices ready to go for students and teachers, straight from the box. And we'll help with in-life device management too.

8. Training to realise the full potential of 1:1

Improving learning outcomes depends on true user adoption. We'll help embed use with teacher training and CPD.

What's hot in 1:1?

Surface has always offered premium student experiences and security.

Now it offers unbelievable value too

With a range of versatile form factors and a model to suit all ages and curriculum choices, Surface devices drive positive learning outcomes with touchscreen³, digital inking³ and purpose-built education apps and software.



We'll help you choose the right Surface

Our education IT specialists will help you decide on the right Surface model for your staff and students. They can even arrange a "virtual immersive demo" where you can compare models – all via a video call.

Loan a Surface⁴ to try it out in your school or college

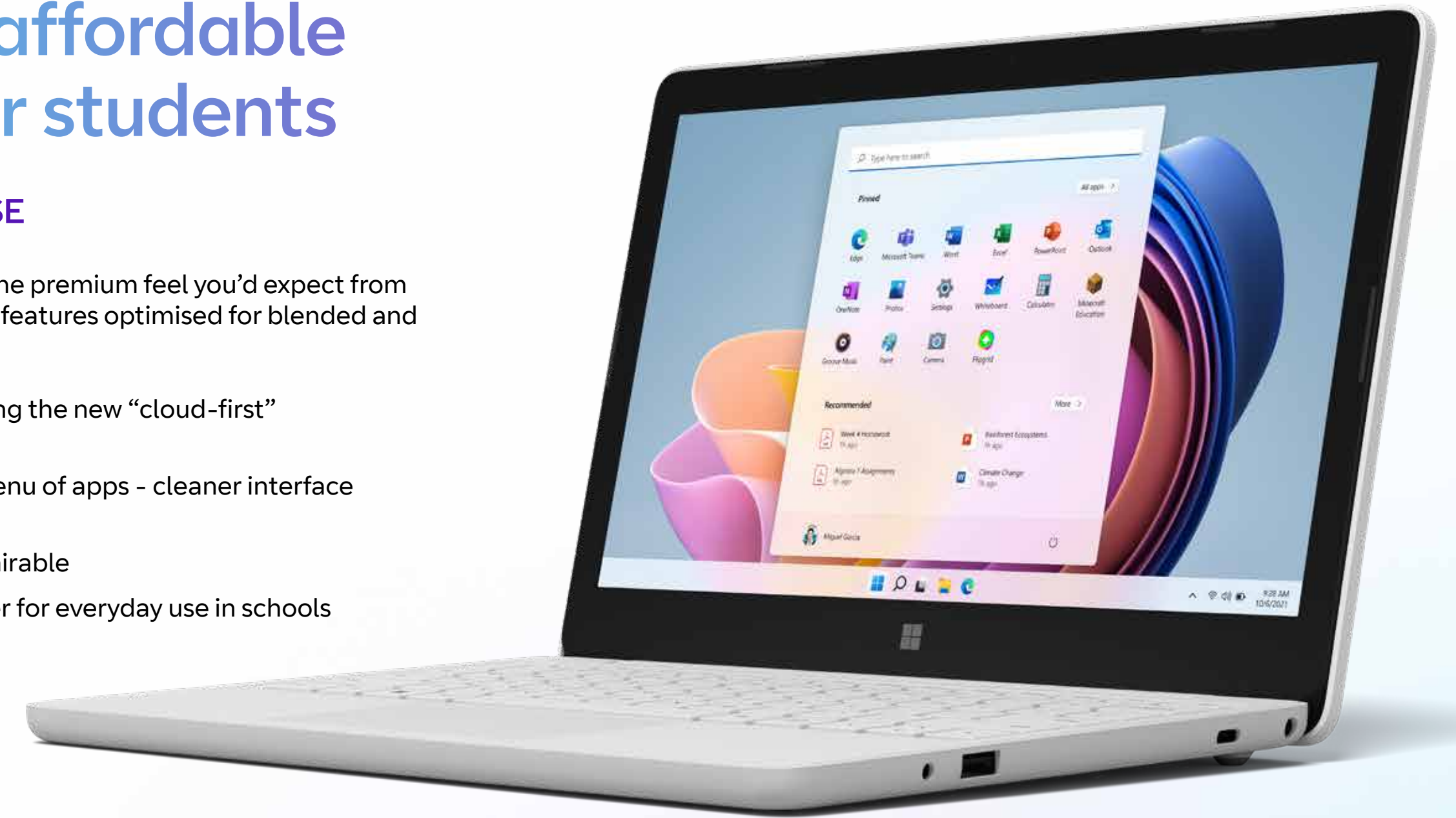
If you're planning a deployment of 30 units or more, ask us about loaning a Surface device. It's a great way to test real-world performance and see how Surface would fit in your school or college environment.

The most affordable Surface for students

New Surface Laptop SE

With stylish good looks and the premium feel you'd expect from Surface, it's packed with cool features optimised for blended and hybrid learning.

- Built just for education using the new "cloud-first" Windows 11 SE
- Education-first curated menu of apps - cleaner interface and fewer distractions
- Designed to be highly repairable
- The best value Surface ever for everyday use in schools



Intel® Celeron® Processor



Work online or offline



Vibrant 11.6" display



All-day battery life⁵

Why choose Surface for education?

Better learning outcomes for all

Inclusive, student-centred classrooms increase overall student success and improve learning outcomes. Surface provides a personalised, engaging experience that can adapt to each student's needs using video, image, touch³ and voice features.

Affordable and easy-to-manage

Run your school or college with confidence. Support personalised learning at scale with affordable, easy-to-manage technology like Autopilot and Endpoint Manager. There's also rigorous security and privacy protection.

Transform classroom time

Keep students focused on learning, increase collaboration and find more time to teach by saving time on everything from lesson planning to tracking grades.

With us, you'll **get more** than just a technology supplier

We're trusted by UK public sector

We draw on 170 years of innovation and heritage to help the UK thrive in a digital world. Right now, we're keeping over 14,000 schools, colleges, Multi Academy Trusts and universities connected. We help 18,000 public sector organisations to get more done and we run the UK's 999 network.

Complete education solutions you can rely on

Our always on, always secure network provides the rock solid connectivity that educators can rely on. Whilst our huge range of applications, devices and services create dependable education solutions that bring learning to life. And all from one single, education focused partner.

Committed to helping the next generation thrive

Through our Skills for Tomorrow initiative, we're providing access to a whole host of free courses and resources. From learning to code, to digital wellbeing and online safety, we're committed to helping children build their digital skills. And we're helping prepare older students to thrive in a digital world through our Work Ready programme.



BT

Book a free consultation⁶ session to learn how we can help you meet the digital standards

[Book a consultation](#)

1). UK's Number 1 leased line service: as ranked by Netcraft since December 2009. Minimum period of service applies. All connections are subject to survey. Full terms and conditions and Service Level Agreements (SLAs) can be found under the BTnet Leased Line heading at business.bt.com/terms, under the Broadband and Internet dropdown. 2). 30 day trial is available for Smoothwall Monitor only and is available to schools and colleges in the UK. The 30 day trial will be delivered directly by Smoothwall and you'll need to agree to their terms and conditions for the trial which apply. This includes agreeing that at least one member of staff will attend a short training session (delivered free of charge) so they know how to use the tool. The 30 day trial requires no contract to sign and you pay ONLY if you decide to continue the service once the 30 days are up. Trial may be withdrawn at any time without notice. 3). Selected models only. Software licence required for some features. Sold separately. Apps available through the Microsoft Store. 4). Loan units available to UK schools and colleges who are considering a deployment of 30 units or more. Subject to availability. 5). Battery life varies depending on product model, configuration, power settings and usage, among other factors. 6). Free phone or video consultation available to UK schools and colleges and is offered subject to availability. The services described in this publication are subject to availability and may be modified from time to time. Services and equipment are provided subject to British Telecommunications plc's respective standard conditions of contract. Nothing in this publication forms any part of any contract.

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