

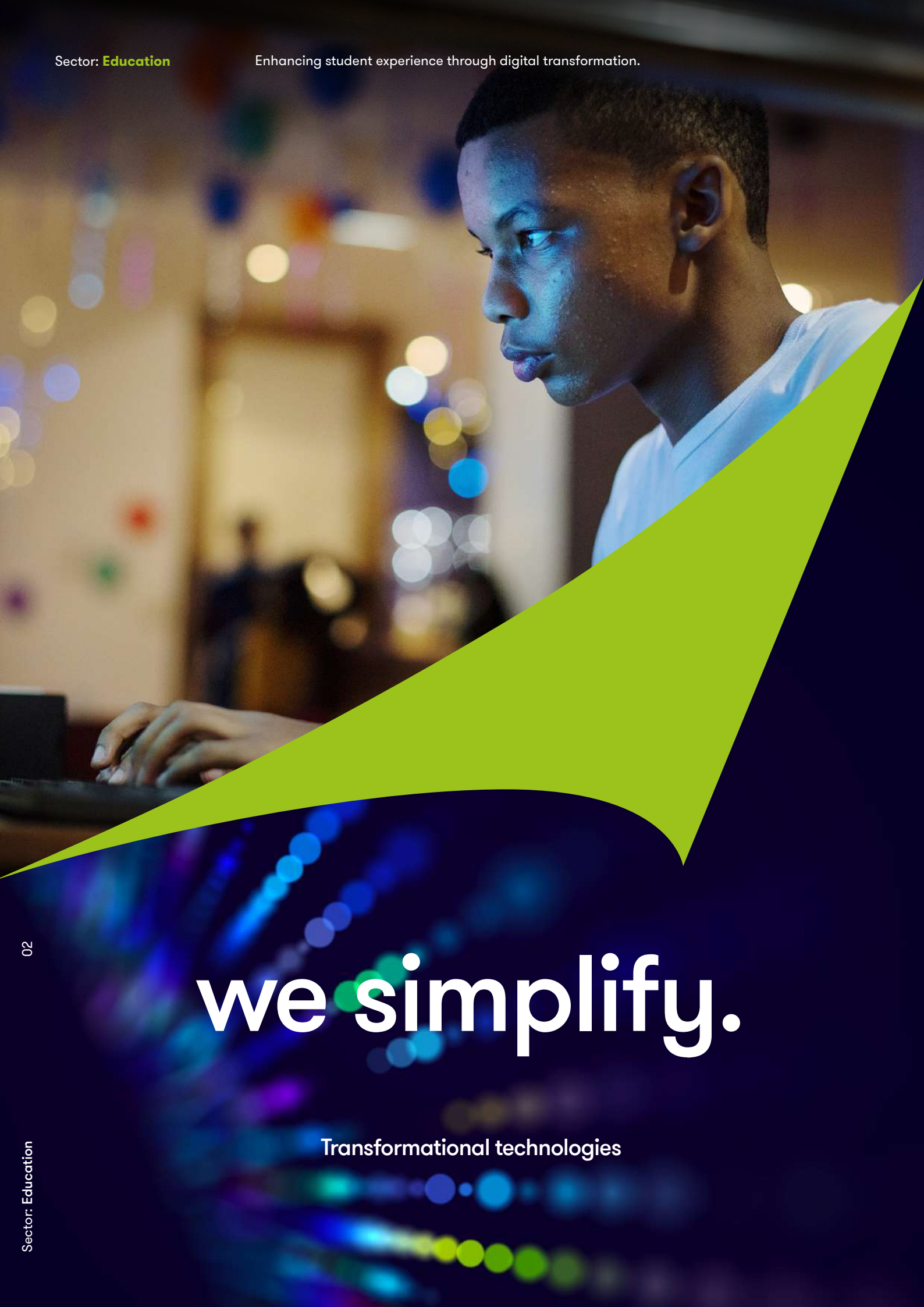
A woman with dark hair is wearing large white headphones and holding a green mug. She is looking down at a laptop screen. The background is blurred. There are decorative green and blue lines and shapes overlaid on the image.

SCC

Education

enable.

Enhancing student experience
through digital transformation



we simplify.

Transformational technologies

Introduction



Rebecca Tyler,
Sales Manager, Education

At SCC, our dedication has enabled us to become one of the leading UK suppliers of technology to the education sector. We work closely with our customers across all areas of education from Universities, Colleges, Multi-Academy Trusts and Independent Schools to assist them in creating compelling student experiences and providing them with a competitive edge through ongoing innovation and technical evolution.

Esports is an example of one proposition we have developed for the ever-changing world of education. We have our own fully managed end to end Esports solution – where we can create a complete Esports gaming environment which includes kitting out your campus, supporting it and keeping it up to date with all the latest technologies.

Further Education

The pressures on education institutions are mounting; Universities and Colleges are challenged by competing globally for students, funding and academics, and how best to deliver a greater digital learning program post COVID-19. Staying relevant in this era of digital transformation has never been more important. At the same time, delivering a world-class student experience that puts students first is paramount. SCC enable further education institutions to deliver the best digital experience, attract the best and brightest students through the creation of optimum learning environment which are financially viable.

Students are now paying customers with a huge choice of where and when to study. Working in partnership with Universities, SCC can help to exceed student expectations for a “digitally connected”

university experience, with easy 24/7 access to education, key student applications and collaboration opportunities across campus. Digital transformation is required to continue delivering a leading student-focused experience which harnesses ever-changing technologies. Transforming the digital workspace, into a Smart Campus and by building a secure, agile and scalable environment, education institutions can create robust, efficient and modernised IT infrastructures that deliver greatly improved outcomes.

Multi-Academy Trusts (MAT)

SCC understands the multi-faceted landscape within MATs and the diverse requirement from the schools they encompass. With challenges such as insufficient funding and teacher shortages as well as the pressures of increasing pupil numbers and performance rates, Trusts are shifting towards the ‘modern classroom’. SCC has gained a place on the enFrame frameworks specifically for MAT’s, with our knowledge and partnerships this enables us to support this shift through the provision of connected devices, AV equipment and an efficient IT infrastructure to support the technology.

Independent Schools

Independent Schools face their own challenges in keeping pace with new developments and ensuring the necessary level of ICT investment meets the growing expectations that makes a tangible difference to teaching and learning outcomes. For example, SCC offers a Device as a Service scheme for Parents to ensure that their child has access to the latest technology.

At SCC, our focus is to support all education organisations in making the most of new innovative and emerging technologies, providing a responsive and international service which supports education and research. Through our wide range of customers, we can demonstrate where our transformation skills and expertise have provided benefit. We believe that maintaining relationships at all levels within organisations is key to the success of making partnerships work and to help achieve excellence across students, academia and research.

Our experience and dedication, teamed with our partnerships enables us empowers our customers by providing the tools to deliver enhanced learning experiences and save time for teaching staff.

Key Challenges in the Education Sector

Ongoing funding and staffing issues

Schools have been experiencing a funding crisis for some time, school spending per pupil in England fell by 9% in real terms between 2009-10 and 2019-20, according to the Institute for Fiscal Studies, the largest cut in over 40 years. Underfunding has been an ongoing issue in education for years and this impacts on children's outcomes. Many headteachers in primary and secondary schools in England are having to cut staff, IT equipment, trips and more.

A survey of London headteachers and senior school leaders (Talking Heads), showed that increased costs due to a range of pressures, such as growing pupil numbers, additional pensions and national insurance contributions are making it difficult for schools to balance the budget. Schools with budget deficits are left to decide what to keep and what to discard given the limited resources.

Added to this, UK schools and colleges are facing a severe staffing crisis. There is an estimated shortage of nearly 11,000 graduate Early Years teachers in England, according to Save the Children. Subjects such as mathematics, sciences and languages have seen the worst shortages of qualified teachers, as graduates of these subjects are often drawn to jobs other than teaching that offer higher pay.

Catch up and assessment challenges

The pandemic exacerbated financial pressures, income from leasing out school facilities and venues was lost and additional expenditures were incurred on Covid essentials including personal protective equipment, cleaning supplies, signage and digital equipment. The government's Covid catch up budget of £1.4 billion was only one tenth of the £15 billion recommended by the education recovery commissioner for England.

Despite funding challenges, it is clear that many schools have been working hard to help pupils to catch up academically. During the pandemic gaps in pupil's learning were exacerbated either because content had not been taught during lockdowns or because pupils did not learn well remotely. Assessment information was needed in order to adapt the curriculum and help identify knowledge gaps and pupils who needed extra support to catch up.

This assessment information has been critical in monitoring where curriculum adaptations were having an impact and gaps in learning were closing. Understanding the different student approaches to learning is considered to be one of the top challenges faced by teachers. A diverse set of learning abilities and learning

styles make it difficult to use a 'one size fits all' approach.

Despite the success of online learning for some schools during the period of closures, nothing substitutes being in school to learn. Many children felt isolated and detached from school life and missed the additional enrichment activities. Building up the school community and regaining excellence in sport, performing and creative arts has been a big challenge for heads.

Added to this schools faced delays in accessing external services in relation to mental health. Addressing mental health needs in school is important because 1 in 5 children and youth have a diagnosable emotional, behavioural or mental health disorder. Many schools are now training teachers in mental health first aid and a general proficiency is forming in this area among staff.

Falling demand for Education in the UK

The falling birth rate is set to have a serious impact on the finances and even the survival prospects of schools. The 2020 fertility rate was 1.58 children per woman in England and Wales, and even lower in Scotland at 1.29. These figures have decreased every year since 2012. The impact of this falling birth rate are schools being financially stretched, redundancies, bigger class sizes and school closures.


As the coronavirus pandemic roils the job market, millennials are increasingly deciding that their college experience isn't worth the student debt they took out for it.

In the past students have been very accepting of large amounts of debt. However, as the economic issues associated with unpayable loans begin to manifest, it's possible that new students will take an adverse stance on student debt. If that's the case, it could reduce the numbers of students in English universities.

Levelling up the digital divide

Lack of access to technology is affecting children's learning and many schools are behind in preparing children for a future driven by technology. A 2020 survey conducted for Lenovo on teachers across the UK found that 65% of teachers want more training to utilise existing technology, and nearly 70% believe more computers are needed for students.

Many low-income families cannot afford laptops and Wi-Fi connection for their children. A survey published by Microsoft in 2020 found that just 1% of primary state schools provide devices that their pupils can take home, compared with 38% of private primary schools. As such, the digital divide is contributing to the attainment gap between rich and poor children in the UK.



The government, in an attempt to address this is providing funding for 'levelling up' their technology as well as a £150 million fund to support schools most in need to upgrade their WiFi connections. The money provided will include those in the department's priority areas where school outcomes are the weakest.

Social Value and educational inequality

Social Value is the overall value that schools, MATs, colleges and universities can gain from money that is spent on procurement. This can be from providing improvements through economic, environmental or social areas. Social Value is now often a 5-10% weighting on educational tenders.

Institutions receive a lot of public money and the government has set itself some ambitious sustainability targets. It is likely to make that funding increasingly dependent on the ability of institutions to deliver on sustainability measures. Many universities have of course signed up to being net zero by 2030.

Arguably the most pressing challenge in education today is educational inequality. This is the unequal distribution of academic resources, including school funding, qualified and experienced teachers, books, and technologies. Schools in deprived areas face more difficulty in recruiting

qualified teachers and have smaller budgets for electronic equipment. Children in lower-income households tend to fare less well in school than their better-off peers.

SCC's Services for the Education Sector

SCC has worked with the Education sector for many years, during this time we have developed and continue to evolve our experience, knowledge and understanding of the key challenges faced by our customers in the sector. Our full portfolio applies to many areas that can support our Education customers dependent upon the specific natures of their business, however we consider the following to be critical as the sector continues to evolve.

Esports

SCC offers an end-to-end Esports solution which is fully installed, integrated, supported and scalable.

End User Compute

Maximise student experience and learning through SCC's full end user compute portfolio, covering product supply, support and collaboration solutions.

Network Managed Service

Modernising the underlying infrastructure of an organisation is key to enable access to technology innovation which drive real business insight, opportunity and cost savings.

Managed Endpoint Solution

Prepare for the modern workplace with enterprise end-point management solutions.

SCC Collaboration and Ring Central

Enhance engagement and collaboration through instant messaging, online presence, file sharing and annotations, as well as audio calls and video conference calling functionality.

Esports

Esports is competitive video gaming usually with an engaging spectator element and a cash prize. Players may play one-on-one against one another or in teams. Matches are watched by spectators at a live physical event or online in real time. Used within the curriculum and as a next-generation leisure offering, the benefits are vast in a future driven by technology.

Some Further Education and Higher Education establishments have already realised that Esports offers a broad and diverse range of careers to students. Esports in Colleges and Universities is creating next-generation careers and attracting global talent. With the three-year degree course running, the demand for state-of-the-art Esports Hubs will have a huge impact on education organisations, helping attract students to all courses and creating new revenue streams through the ability to host Esports events and professional competitions.

It is worth noting that Esports is one of the only truly non-discriminatory sports, in that it is open to everyone regardless of gender (including non-binary) and physical or mental ability. This is key to encouraging a diverse culture which offers equal opportunities for all.

SCC Esports Solution

SCC offers an end-to-end Esports solution which is fully installed, integrated, supported and scalable. This can range from creating a curriculum-based environment for students to a high-end competitive gaming environment, with audience capabilities according to requirements.

Specialist audio visual and Education teams supply and manage cutting edge technology that supports the delivery of holistic Esports learning and leisure to attract students to all courses from around the world. SCC will scope the environment and recommend the right solution, with our low, mid and high range offerings tailored to each establishment and solutions can be tailored to meet an Education institution's exact requirements.

SCC has based the solution on 16 seats which can be scalable from a small classroom to an auditorium. Each station will have a state-of-the-art PC, dual monitors, gaming keyboard, mouse, webcams and headsets. We also can provide the gaming tables, chairs and lighting to create the environment. Each package provides the following set of features:

- Scoping, installation, integration and support.
- Supply of all the kit required including audio visual, gaming workstations, monitors, speakers, keyboards, mice and headsets (peripherals required).
- Options for gaming tables, chairs and ambient lighting.
- Pre-staging and building of the devices including asset tagging.
- Secure data deletion and recycling.
- Delivery and installation.
- Next business day onsite support.
- Asset management.

- Pay monthly options with Flex Options to upgrade hardware throughout the term.

SCC's all-in-one solution is available at three levels – entry, mid and high-end – and comes pre-packaged with all the gaming technology, peripherals and audio visual equipment that are needed to create a next-generation Esports Hub. Our bundles are flexible and can be purchased outright or delivered as a service with regular upgrades.

High-end

Video distributed over fibre cable using range extenders. This solution is focused on a solution where the highest quality is required. The solution allows for high resolution and frame rates, can be run over long distances and is suited to larger setups.

Mid-range

Video over network cable using range extenders. This package also allows for longer cable runs for larger setups but is more limited in terms of latency and maximum resolution and frame rates.

Entry-Level

Direct cabled (HDMI) solution. This solution provides a direct cabled connection. This provides a lower cost option for smaller setups, where cable runs are typically limited to short distances.

Why Esports for Education?

Universities and Colleges, competing for students, funding and academics are looking to stay relevant in this era of digital transformation. Esports offers a huge opportunity to create new revenue streams by capturing new audiences and attracting students from around the world. Esports is one of the world's fastest growing industries, estimated to be worth £1.6 billion and contributing more than £110 million in Gross Value Added to the UK economy.

Wherever they are on their Esports journey, SCC is ready to enable Higher Education providers to deliver an exceptional student experience with a fully flexible and scalable Esports solution. SCC's Esports packages can include a Device as a Service payment and support model, with built in Flex options to enable Colleges and Universities to seamlessly upgrade their hardware and stay at the forefront of technology.

End User Compute (EUC)

The COVID-19 pandemic has changed the face of education in the UK forever. Many educational organisations had to quickly swap to home learning solutions, which their legacy infrastructure was not equipped to manage. This caused numerous challenges, especially when combined with IT shortages stemming from the sudden demand for IT services and technology across the country. Universities and higher education organisations are also being challenged by students to deliver a seamless education experience from any location and on any device, with distance learning becoming increasingly popular. Our user first approach will help customers evolve from a device-centric strategy to a user, security, data and applications focused modern workplace.

Our EUC teams ensure our Education customers are secure, productive, connected, maintained and managed, delivering seamless collaboration and student mobility to help Education organisations achieve exponential growth by aligning IT and business strategy. SCC will align people, process and technology to the following solution areas:

Collaboration and Communication

Ensuring learning spaces inspire and create an engaging experience is key for learning success be this a virtual classroom or a physical one. Our solutions combine high quality display technology, professional grade audio

products with collaboration enhancing cloud software, to ensure all students can access content and collaborate with their peers and teachers flexibly. Our solutions range from equipping lecture halls with presentation and audio equipment to display screens which can be used around campus as digital message boards, interactive maps and for public events – all with the aim of maximising the student experience. We are unique in our ability to discuss, consult, supply, deploy and support cross-discipline collaboration solutions as part of digital transformation in enhancing workplace productivity.

Unified Endpoint Management

As the technology profile of Education organisations grows inline with student expectation as does their endpoint estate. Many education organisations are managing thousands of endpoints across distributed, hybrid networks and identifying all of these devices, servers and cloud connections is essential to manage their risk of a cyber threat.

Unifying endpoint management centrally, provides a single administrative console for managing device security policies, asset inventory and compliance reporting. It enables IT to remotely manage corporate devices, including identity and access management, patch management, endpoint experience monitoring and technology adoption requirements.

Application Modernisation

SCC's application modernisation services help Education organisations to understand their application estate, how these are currently used and how they might be upgraded, which is key to any transformational project. To support our Education customers SCC can remotely manage the upgrades of applications and can deliver containerisation services for legacy applications which are needed for transformation projects but not currently fit for the cloud.

Technology Adoption

To ensure teachers, students and support staff maximise the benefit of any technology implementation, our Technology Adoption team offers training, end user adoption and learning management services. This combines on-site training options with detailed guides and manuals, as well as a train the trainer option so a 'super user' can always be on hand to support.

Product Supply

Partnering with SCC will help education organisations to mitigate supply risks as we have over 1000 vendor partners and suppliers and a massive stock holding, stored across the UK – making access to IT Technologies quick and easy. Our vendor partnerships help us to reduce the cost of end-to-end IT procurement and associated services for Education organisations.

We are able to offer support throughout the whole process of the product lifecycle, from initial procurement to storage and logistics, certified data erasure, configuration and repair and recycling and disposal.


SCC are extending our reach into the Education marketplace as a named reseller for Dynabook and Asus on the NDNA Framework.

Device as a Service (DVaaS)

Students expect their education provider to utilise the latest in technology to enhance their experience and learning outcomes. SCC's DVaaS service allows Education organisations to refresh their technology on a regular basis without the large upfront investment. Benefitting from consumption-based pricing, DVaaS combines the cost of hardware, software, support and services into one solution which is charged on a monthly basis over a fixed contract period. The solution has technology refresh dates built in to ensure Education organisations are utilising the best IT for their students.

Service Desk

Our Service Desk blends modern technology with standards-based, proven service management practice to ensure that our services align to an Education organisation's objectives, culture and infrastructure. Modern day users expect access to online self-service portals, messaging platforms and applications that can provide support without the

A photograph of a person's hand holding a glass of water on a desk. A desk lamp is visible in the background, and a bright green diagonal line runs across the bottom right of the page.

need to interact directly with a human unless it is absolutely necessary. With many younger generations deferring a call to an IT department when suffering an issue, to avoid productivity drops more accessible options need to be provided.

Why SCC's End User Compute solutions for Education?

Colleges and universities around the world are now concerned with how to implement reliable computing for mobile students and staff in a cost-effective manner. A robust EUC solution set up allows teachers to add new dimensions to learning experiences, provide new ways of sharing information and interacting with students.

Using SCC's services, educational organisations will have exactly what they need to bring out the very best in students, teachers and administrators. SCC's DVaaS offering quantifies the total cost of running an asset from procurement to disposal and everything is covered under one monthly cost. This simplifies budgeting for the future and enables educational organisations to get a handle on their IT costs, while also saving money and keeping money back to invest in other growth areas. It's an effective way to procure, maintain and securely manage the lifecycle of mobile IT equipment.



we adapt.

Transformational technologies

Network Managed Service

Educational organisations depend on their networks being able to handle emerging requirements. They are expected to provide reliable, high-speed connectivity across their sites and remotely. The increasingly complex nature of the access points and technology across organisations means that when networks are not optimal, there is a risk of disruption to educational processes, potentially limiting students from obtaining learning resources or even from attending online classes. The recovery costs to Education organisations when faced with network outages and performance issues are high. This is in addition to complaints from students and staff and the associated reputational damage.

SCC's Network Managed Service provides effective management of the infrastructure of Education organisations, including monitoring and alerting, updates and on-going support to ensure the infrastructure is flexible and reliable. This allows teachers to access high-speed data and an array of capabilities to keep students engaged. Students and staff can take advantage of improved bandwidth reliability across facilities and sites. Administrators will finally have confidence that their organisation's infrastructure meets the growing demands for flexibility, scalability and performance.

Connect the Classroom

SCC runs a Connect the Classroom program funded by the Department for Education that aims to help schools

across the country to access an effective and comprehensive, education-focused wireless networking solution. This funding enables Education organisations to obtain a modern and robust network architecture to enable connectivity for staff, students and visitors, delivering the right learning experience. SCC can guide organisations through every step of the process including obtaining funding.

Network Health Checks

Educational organisations need a detailed understanding of network infrastructure before any future planning and investment. SCC's Network Health Checks provide them with a complete assessment of their network to provide a number of reports, which give insight into the network devices across their infrastructure. Historical data can also be used to understand expected wireless traffic and with a view of live connections, organisations can build a full picture of their network. A detailed set of recommendations on the future direction of the network will be provided. This allows organisations to see where they need to invest to bring their network up to date.

The vast amount of data that Education facilities hold, in addition to remote learning and increasing the number of connected devices, makes them vulnerable to cyber-hacking. A risk to the Education Sector relates to business continuity after theft of data or damage to a network. Network security is a fundamental part of any network service and needs careful consideration. It is key to ensure that access to

the network is controlled and secured in terms of who has access to the organisation's resources. SCC's security approach begins with an effective program to understand the maturity of the organisation's security strategy. This will lead to the implementation of the right tools and security controls for provision of continuous monitoring and incident response.

Why Network Managed Service for Education?

Schools, universities and other learning establishments are more dependent on their network infrastructures than ever before. Now is the time for Education providers to evaluate the solutions available to ensure that they're able to take advantage of digital transformation and meet increasing demands from teachers and students.

SCC has been providing network solutions for over 20 years. In that time, we have amassed a huge array of experience in the industry providing a wide range of solutions to Education organisations to meet their needs and requirements. We have carefully defined our approach and endeavour to understand a requirement in detail, before we propose a solution that not only meets the requirements of today, but for those of the future as well.

SCC are experts in a range of technologies from market leading vendors including Cisco, Meraki, Aruba and Juniper.

In essence, SCC's solutions and services in this sector are specially crafted to provide a vital helping hand. Organisations can rely on SCC as an expert partner helping them to meet the challenges of the future and put in place a technological estate fit for a rapidly changing Education landscape.

SCC Managed Endpoint Solutions

Education organisations must embrace strategies that enable online, bring-your-own-device and 24/7 learning environments, while protecting sensitive Education and student data. Remote and hybrid learning have become the norm and with these changes to learning, it is critical for IT staff to be able to provide a secure environment. Departmental lack of resources can result in gaps in IT and security, leaving Education organisations open to disruption, including being a target for cybercriminals. Due to a distributed workforce, student population and an increasing number of endpoints, new security threats are increasing exponentially.

Modern security breaches are growing in sophistication, making it increasingly difficult to protect the changing profile of endpoint estates using traditional security defence systems alone. From hardware breaches and privilege escalations to supply chain hacks and data theft, Education organisations need to have a robust endpoint security platform to prevent attacks and reduce the scope of vulnerabilities. Effective endpoint security requires a comprehensive view of every device on the network. The SCC Managed Endpoint service allows for the rapid identification of and response to threats across disparate estates, regardless of the number of endpoints.

The SCC Endpoint Managed Service allows Education organisations to consolidate their usage of multiple point products that deliver Patch, Vulnerability and Asset Management etc. into a single

agent, with a single service cost per month, that helps guarantee the management and security of the user base.

Discover

It is difficult for an Education organisation's IT team to detect and secure each endpoint when managing potentially 500,000 separate endpoints. Whether it be PCs, laptops, servers, tablets or smartphones, these can be hard to track in entirety. Our core discovery service can provide a complete endpoint inventory in seconds. This includes identifying assets and providing Education organisations comprehensive visibility of their hardware estate, along with the software and versions operating on the devices. Once discovered, the SCC managed service can help secure and take control of the hardware and software assets, to minimise risk and ensure license compliancy across the estate.

Manage

The SCC Vulnerability service monitors and assesses endpoints in real-time for operational and security risks, advising on remedial action where required. Vulnerability Management allows education organisations to identify, understand and react at speed to any endpoint device vulnerabilities and threats across the complete user estate. SCC provide monthly reports that provide recommendations to address any identified risks and vulnerability on a prioritisation scale for the execution of remedial work. Using the reports, we can help organisations facilitate a risk-based approach, to prioritise

remediation efforts across the estate and with incident responses to address security threats. This is inclusive of both security and operational responses.

The SCC Patch Management service ensures that all endpoints operate at the most current patching levels. Capable of deploying patches across a range of Windows, Unix and Linux operating systems within seconds, the patching service enables a consistent, fast and scalable solution, which helps to enhance the compliancy and security of the Education organisations endpoint devices.

Why Managed Endpoint Solution for Education?

SCC's Managed Endpoint Solution enables education providers to identify and confidently manage their complex endpoint estates, prevent and respond to ransomware and cyberattacks, and protect student and research Intellectual Property data. As a managed service benefiting from SCC's security analysts, the Education organisation's IT resource are able to focus on delivering business value while being confident that the organisation is protected. The aim to create a safer, more secure learning environment by gaining visibility, control and the ability to respond to threats quickly can be realised.

SCC Collaboration and RingCentral

Cloud computing in Education is on the rise, many Education institutions have already moved to a blended learning model. For others that intend to do so, a key focus is to find a solution that can truly support Education organisations in helping students achieve success as they study remotely.

SCC Collaboration offers a comprehensive range of solutions, services and cutting-edge technologies from leading vendors to meet every aspect of your audio-visual needs. SCC are unique in our ability to discuss, consult, supply, deploy and support cross-discipline collaboration solutions as part of digital transformation and cloud-based services.

We are a strategic partner of RingCentral who are recognised as a global leader and provider of cloud telephony and contact centre solutions. Working with RingCentral we offer an all-in-one cloud solution, especially suited to the Education Sector. It gives students the means to learn from anywhere at any time. With students increasingly relying on new digital technologies and using multiple devices, the chosen cloud platform must be able to deliver a comprehensive virtual school environment. Our service offers a way of building a cloud infrastructure that helps lower costs and improve learning experiences for the new technically savvy generation.

Security is paramount to educators and RingCentral through SCC helps Education organisations to stay secure, protect sensitive data and keep students safe in the virtual environment. The encrypted networks and multiple layers

of authentication safeguard communications, meaning online security is assured.

The RingCentral through SCC proposition provides a single multi-cloud solution, which not only helps early years and Higher Education organisations to reduce costs, it also improves the efficiency of the organisation's communications with parents, students and internally with a seamless user experience. The daily resources students need are available from any location and they can be stored and shared at a click of a button, all within the dedicated cloud platform. Instant access to all the tasks, briefs and files needed, as well as being able to instantly connect with teachers, means students are free to work at their own pace, whether they are at home or in class.

This efficient management system reduces strain on staff in terms of time management and time spent travelling to and from meetings. Quick, efficient and engaging collaboration is made easier by RingCentral through SCC with features including, instant messaging, online presence, file sharing and annotations, as well as audio calls and video conference calling functionality. The video recording feature means you can rehearse and record lessons so students can watch, engage and repeat.

This dedicated Education communications solution has the power to improve student-teacher communications, in terms of the efficiency of collaborations and in encouraging real-time contact between pupils and staff. Students can more easily speak up when they are unsure

of something, via sending messages and sharing files on the online chat function. This could be something they might not have the confidence to do in a traditional classroom environment. RingCentral Video through SCC allows teachers to connect with students face-to-face. This could be a virtual classroom with high student numbers or a more relaxed briefing or tutorial.

Teachers can continue to check in regularly and get invaluable face time with students via high-definition video. This is helped by the online presence feature which shows when students or teachers are available. Either party can connect quickly to discuss a task or assignment in more detail, all in real-time and at the click of a button.

Why SCC Collaboration and RingCentral for Education?

The SCC Collaboration and RingCentral solution is backed up by SCC's wider organisation enabling us to build bespoke solutions which help Education organisations to provide better learning environments and outcomes, which are reliant, secure and flexible in line with changing student requirements. Enhancing collaboration across Education organisation stakeholders including students, teachers and parents via one classroom collaboration tool, results in a more efficient, well-rounded virtual workplace, which will enhance productivity for teachers and increase support availability for students. We have the expertise, experience and an enviable track record of bringing together top tier technologies, services,

applications and devices to connect networks, Education organisations and their people anywhere, anytime.

Our Experience in the Education Sector



UNIVERSITY OF
BIRMINGHAM

SCC has been a strategic partner to the University of Birmingham (UoB) since 2017 for compute technologies. During this time, SCC have run consultative workshops to identify the correct solution for the University's needs across central IT and their College projects. This approach helped SCC win the first HPE Synergy order into any university in the country. SCC delivered a solution of Core IT Services Database and general-purpose VMware server platform using Synergy BL460 Gen10 and ProLiant DL Gen10.

SCC used a Service Oriented approach for the solution design to understand the business needs and outcomes first and then map the characteristics of the University's platform for resilience, performance and availability to design in the functional elements to meet and exceed those University's requirements.

With the introduction of HPE Synergy, a deeper understanding of the network design was required to map the consolidation of cabling and VLAN functions. Additional design assistance was required from HPE experts for this.

UoB set out the initial test plan and collaborated with SCC on the final version for both functional and non-functional tests, key to acceptance was continuity of service for host and network failure – moving workloads to surviving local nodes and full-service fail-over for a data centre outage.

The solution also included HPE Complete Care support as part of a Greenlake as a Service model. This service is designed to help improve the stability and operation of converged infrastructure platforms such as HPE Synergy, to achieve better business outcomes. This was pivotal to the implementation at the University as the many components of the complex converged and virtualised environment needed to work effectively together. This approach significantly reduces support issues and calls that arise from both platform issues and multi-vendor integration issues.

The HPE Complete Care service was a critical part of the solution having been specifically selected to support devices in this environment, providing the enhanced support to cover servers, operating systems, hypervisors, storage, storage area networks (SANs), and networks. In addition, the Complete Care service also provides regular proactive scans of the environment and quarterly incident reporting to help identify problem trends, prevent repeat configuration problems and identify and resolve issues sooner.

The Greenlake as a Service wrap allows the customers to extend and expand their service with a "change order" avoiding the need to Tender, and reduce the Capex burden, topping up the service as and when required.

SCC used a Strategic Account Management approach to providing value add support, which leveraged the following strategic advantages such as holding the highest partnership with Tier 1 vendors. Being vendor agnostic, SCC were able to better assess UoB's requirements against the most appropriate technology solutions.

With its Operational Account Management, SCC provided regular engagement and communication including scheduled service review meetings, customer updates for new technology and sector developments, and other requirements for Strategic Account Management.

Unlike Public Cloud as a Service models, UoB also avoided expensive Egress charges, as the service is delivered On-prem in their data centre, and there were no penalties for terminating on the contract at the end of the pre-agreed term, thus avoiding Vendor lock-in.



SCC worked with SCCB to replace their aging HPE server blades and NetApp storage across two of their campus sites. The aim of this solution was to not only consolidate server hosts, but also to increase storage capacity, reduce the server footprint and power consumption, protect against ransomware attacks and increase network bandwidth, with the second site offering a full Disaster Recovery capability.

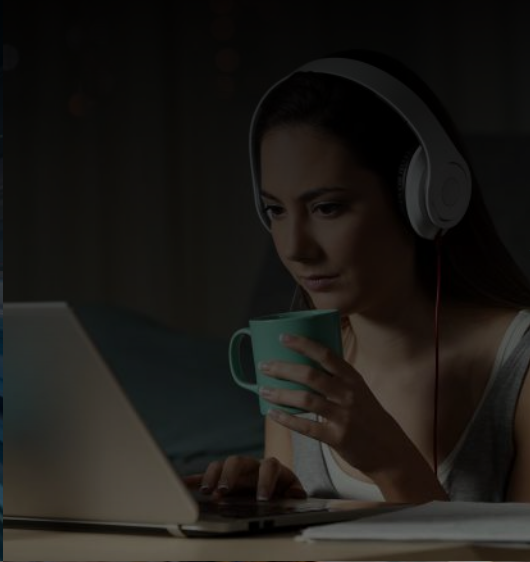
SCC worked with SCCB to perform analysis on the current server and storage at the Bournville and Fordrough campus. The analysis captured real-time data from the current storage and servers over a few weeks. From this data SCC were able to size the new storage and server infrastructure accurately.

SCC worked with SCCB to generate a solution to replace primary block storage and file storage currently hosted on the NetApp storage arrays in both data centres with new NetApp storage. The aging HPE blades and servers were replaced in both locations with new DL ProLiant servers. Additional technologies were deployed from a mix of vendors including HPE and Cisco. The NetApp servers were designed to have as much redundancy built in as possible to avoid single-point-of-failures. These included dual CPU, dual power, multiple network cards, RAID 1 boot disks for the Hypervisor and remote management interface. The servers implemented use the latest Intel CPUs for faster processing, also providing support for higher memory capacities, protecting the assets by providing future scalability.

The NetApp design allowed for replicated data between sites supporting business continuity within Recovery Point Objectives and Recovery Time Objectives requirements. In addition, the NetApp allows for online upgrades, increasing availability and provides multiple Snapshots of the data to mitigate against ransomware attacks.

SCC provide five years support from the vendors, with SCC providing a support desk to co-ordinate the vendor calls. On the NetApp storage, we provide parts and engineers to site on a four hour Service Level Agreement. The HPE compute comes with a four hour response and the Cisco is an eight hour fix.

SCC has worked closely with SCCB on several projects over recent years, using the experience gained on these projects, we included resource to provide Technical Project Governance along-side the SCC and SCCB technical IT teams. This ensured the project was successful and completed within the agreed timescales and to the correct quality and deliverables.



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