

SOLUTIONS

ENHANCING
THE STUDENT
EXPERIENCE

WE GET HIGHER EDUCATION



IMPROVING LEARNING THROUGH INTELLIGENT IT

The UK's higher education institutions have long been admired around the world. But with academic standards rising in many other countries, only those able to meet new demands will retain their reputation as beacons of best practice.

Competition to attract UK students and protect revenue streams has never been fiercer. Meanwhile, Britain's withdrawal from the EU has thrown future participation in student exchange programmes such as Erasmus into doubt, making it harder to attract foreign students at a time when higher education institutions are looking expand their appeal.

Leading universities and colleges are looking to respond to this changing environment in a positive manner, harnessing new technology to deliver more engaging living and studying experiences. This is exemplified by the introduction of exciting new concepts such as e-Sports, which requires investment in gaming technology solutions that deliver the CPU and GPU performance to allow students to participate in what has become an extremely popular activity.

Increasingly, then, universities and colleges are deploying technology as a differentiator in an ever-more competitive market. The creation of smarter campuses is underpinned by a drive towards efficient management of expanding data sets, reliable services for students, lecturers and researchers, protection from cyber-attacks and the acceleration of innovation.

20% of overall IT spending in higher education
is now devoted to innovationⁱⁱ

CDW is helping universities and colleges drive modernisation programmes across the IT solution continuum. CDW's long-established presence in higher education, based upon our end-to-end capabilities spanning solution design, consultancy, project management, logistics and support services – all delivered on a truly international scale – enable us to offer complete orchestration of IT across multiple sites, wherever they are located.

TOP THREE BUSINESS PRIORITIESⁱ

50%

1. Improving student
experience

50%

2. Improving detection
resilience against
cyber-attacks

37%

3. Increasing campus
productivity and
asset yield



Managing big data

From on-campus research operations to student records, universities and colleges handle ever increasing volumes of data. Safe and efficient data management enables next-generation analytics, improving insight, decision-making and performance.



Simpler cloud migration

Complex workloads are driving many institutions to consider cloud services. CDW's comprehensive cloud services portfolio simplifies the journey, helping institutions establish the most cost-effective and easy-to-manage environments according to their needs.



Smart campus set-up

Digital advances such as voice assistance, mobile learning and intelligent navigation represent the evolution of the smart campus, which will be key in meeting future expectations. CDW provides a platform for such innovations with advanced infrastructure and networking.



Strengthening cyber security

Higher education is being targeted by hackers with growing regularity. To protect data from costly losses, optimised security, governance and compliance must be woven into every element of IT solutions and usage. CDW's holistic approach ensures protection.



Connectivity everywhere

Consistent access to 5G data services and super-fast broadband empower both students and staff to achieve seamless productivity. CDW's WiFi and networking expertise delivers the dependable access that has become an expectation in learning environments.



Enabling innovation

As digital transformation gathers pace, leading institutions are developing capabilities in AI, ML, RPA and IoT applications that increase the efficiency of operations, improve resource allocation, provide unprecedented insight and enhance the experiences of students.

Why CDW?

EXPERTISE IN EDUCATION

Over a quarter of global revenues are derived from delivering solutions to the education sector.

GLOBAL SCALE

Serving 160 countries around the world from a central account team, we simplify the set-up of new international sites.

PROCUREMENT FRIENDLY

Procurement processes are simplified, leveraging our award-winning supply chain management portal, ServiceTrack.

NATIONAL DISTRIBUTION CENTRE

Delivery to 98% of UK within 4.5 hours via 130,000sqft facility, shipping over 3m items each year.

CONFIGURATION CENTRE

Over 1,000 workstations in a 30,000sqft facility staffed by >40 vendor certified technicians providing consultancy, device imaging, asset tagging and pre-staging services.

UNRIVALLED PARTNERSHIPS

Opening doors to CDW's network of best-of-breed vendors, developers and solution partners.

ROBUST INFRASTRUCTURE

3 UK data centres offering co-located, fully managed private and hybrid cloud services.

ROUND-THE-CLOCK SUPPORT

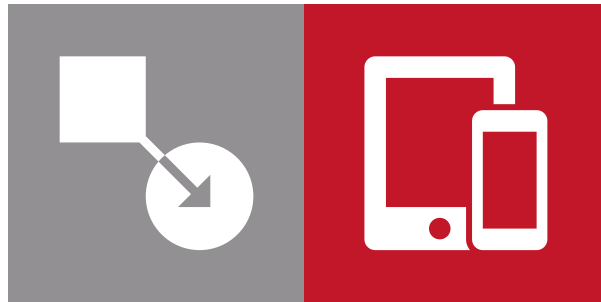
24x7x365 Service Desk support staffed by over 350 professionals, with over 100 field engineers and Service Operations Centre.

SUPPORT SERVICES

For every stage, including enterprise solution design, managed services, integrated planning, consultancy and device management.

DEPENDABLE ENGINEERING

Break-Fix solutions via over 100 field service and on-site engineers, contactable through a single helpdesk and backed up by flexible and agile services, fully measurable through SLAs.



PARTNERING TO MEET STUDENTS' DIGITAL EXPECTATIONS

Today's students are digital natives, expecting flexible, agile and easy-to-use technologies that deliver immediate results.

CDW helps universities and colleges respond to the expectations of students through the creation of smarter and more interactive campus environments, supported by powerful and reliable digital infrastructure.

We understand that no two educational institutions are the same in terms of how they engage and inspire students. That's why CDW partners with an unparalleled range of vendors to bring the best technological solutions to market, from hardware and software, through to data centre infrastructure.

Our partners include:

- Apple
- Citrix
- Packard
- NetApp
- Cisco
- Hewlett
- Lenovo
- VMware

...to name but a few.



Support throughout your journey

INFRASTRUCTURE MANAGEMENT

CDW can manage your existing estate while helping integrate new technologies.

FINANCE

From purchase to leasing, CDW can help you affordably expand your IT infrastructure and device fleet, providing better visibility of Capex and Opex.

INSURANCE

Accidental loss and damage are always a risk; CDW ensure you can keep devices in the hands of your staff and students.

SUPPORT SERVICES

Throughout your technology journey, CDW's team can be available 24/7, 365 days a year to solve problems and provide support, delivering customer satisfaction.

WIFI AND SECURITY

CDW can help you build a safe a secure wireless environment for your users .

DEVICE PLANNING

Knowing how to select, deploy and use your devices is key to improving learning and returning value.

MOBILE DEVICE MANAGEMENT (MDM)

Just like a corporate environment, you need to manage your device fleet throughout its lifecycle. CDW can offer the guidance and tools you need to keep control.

APPLICATION PLANNING AND MANAGEMENT

Knowing which applications will work best for your students and staff requires experience, CDW aims to get you up and running with the right tools from day 1.

VIRTUAL LEARNING ENVIRONMENTS (VLE)

Collaboration is one of the great benefits of bringing technology into schools. VLEs bring teachers and pupils together to reinforce relationships and improve learning.

PUTTING ESPORTS AT THE HEART OF EDUCATION

The concept of electronic sports (esports) has emerged as a phenomenally popular digital pastime, with competitive multiplayer video games often played out at organised events in front of hundreds of spectators. According to recent research¹, the global esports market will reach a staggering \$1.8 billion by 2022, as it continues to gain wider acceptance.

Increasingly, esports presents education institutions with an excellent opportunity to deploy technology as a means of providing students with a modern and stimulating learning environment. Not only do students enjoy watching and participating in esports competitions, but many also see it as a means of learning transferable skills that can offer a route into careers in areas such as broadcasting, event management, digital marketing, and more. No wonder a growing number of universities and colleges are installing esports infrastructure to help students meet their ambitions.

That's where CDW comes in. Our experts can help education institutions build their vision for esports, whether it is installing a small number of gaming stations or constructing arenas that can seat a large number of spectators. We also offer a full range of consultancy services, helping universities and colleges understand their esports requirements and partnering with best-in-class vendors to deliver the solutions they need.



Technologies needed to support esports

Compared to most traditional sports, an esports program requires relatively little investment by higher education institutions in the way of facilities and equipment. While it is certainly possible to spend a large amount by building out a state-of-the-art gaming arena, the barriers to simply enter the esports space – especially for a small trial – are relatively low. At a minimum, though, esports participants need the basic gaming equipment that allows them to compete on a level playing field with players from other schools.

This includes:

COMPUTERS

Different video games require different levels of processing power. Some can be played on a regular consumer grade laptop connected to WiFi, while others need powerful desktops with a hardwired Ethernet connection. CDW works with a broad range of best-in-class suppliers who produce computers specifically designed to accommodate gaming.

MONITORS

Different types of hardware are best suited to different types of games. Historically, gamers have been forced to choose between the speed of 144-hertz twisted nematic displays and the outstanding picture quality of (generally slower) in-plane switching screens. Now, though, some monitors combine an IPS screen with a 144-hertz refresh rate, giving students the best of both worlds.

GRAPHICS CARDS

An upgraded graphics card can sometimes turn an existing computer into an esports machine or extend the life of a gaming computer that has aged its way toward obsolescence. The fastest graphics cards retail for several hundred pounds but a number of cards costing far less than that offer performance levels that will meet the needs of most gamers. Education institutions that aim to update their gaming computers with graphics card upgrades should make sure that the machines' power supplies can support the new GPUs.

GAMING PERIPHERALS

Successful esports play relies on precision, timing and communication – all of which are enabled by gaming peripherals such as mice, keyboards and headsets. Even if participants are playing on standard PCs, teams should be outfitted with peripherals that will help them to be competitive. Gaming keyboards are typically more durable than regular keyboards and have mechanical keys that respond more quickly to a player's input. Gaming mice are designed to be more sensitive, reliable and comfortable than regular mice while gaming headsets come with microphones and surround sound to improve communications.

FURNITURE

Gaming furniture has come a long way since the video rockers that sat in front of seemingly every dorm room television in the early 2000s. Today's gaming chairs typically resemble something of a cross between a professional office chair and a race car seat, with adjustable headrests and ergonomic pillows, reclining capabilities and sharp designs.

NETWORK INFRASTRUCTURE

Often, an education institution's existing network infrastructure is enough to support esports play. Some colleges and universities, however, have built out practice spaces with their own dedicated internet pipes.

CASE STUDY

Cranfield University save 80% on time management with IT Orchestration by CDW™

CHALLENGE

With two ageing on-site data centres, housing traditional three-tier server architecture, Cranfield University wanted to modernise its IT infrastructure, reducing its physical footprint to allow for site redevelopment. It also needed to address the amount of time and resource dedicated to managing the data centres, with the need for daily operational oversight dominating the task lists of the university's IT team. However, close alignment with government bodies and private sector partners required the university to have robust, compliant and secure storage arrangements, with large volumes of research data being generated, processed and analysed across the campuses by staff and students. While greater public cloud adoption was identified as a long-term ambition, the university recognised this would not be suitable for all workloads. A more multi-faceted approach to infrastructure was needed, not only to meet current needs but to enable greater adoption of as-a-service solutions in the future.

SOLUTION

CDW's Integrated Technology Solutions Team organised a series of workshops to discuss the available options with Cranfield's IT leaders. This consultancy phase was crucial to the development of a solution which best met the university's needs and provided a foundation for the strong relationship that followed. The proposed hyperconverged infrastructure solution had the ability to run workloads on-premise or in the cloud, depending on the specific need. This reduced reliance on operational expenditure and encouraged a more efficient spending model. Cranfield chose to run two sites, one being a large primary data centre and the other a smaller secondary facility. Nutanix was selected as the hyperconverged platform because it offered the flexibility to incorporate VMware along with futureproofing to allow for future changes. Improving data centre security was an imperative, with CDW orchestrating the wider deployment of virtualised networking and security to promote a more responsive software-defined data centre environment.

OUTCOME

The implementation of the modern infrastructure solution by CDW has generated numerous benefits. The on-site data centre footprint was dramatically reduced, and infrastructure management time has decreased by 80%, enabling the IT team to pursue further modernisation projects. Further adoption of cloud-based services and SaaS products are being explored. The security of the data centres was stepped up and disaster recovery capabilities have been strengthened, with the ability to restore core services covering finance and student records with a speed and simplicity that was not possible previously. Cranfield University paid tribute to the strong relationship that CDW developed with its internal IT team, with the close collaboration instilling confidence and ensuring smooth deployment.

