UK UNIVERSITIES
LEAD THE WAY ON STUDENT BYOD
BIOS

Phil Morgan was IT Services Manager at Lancaster University from 2010-2015 and led on the adoption of application virtualization technology for delivery of licensed software across campus and BYOD.

James Pickett is Senior Systems Analyst at the University of Surrey and led the project to develop a self-service virtualized application portal, delivering software on-demand for students to use on their own computers.
Bring Your Own Device has been one of the hot topics of computing for over a decade now, and every IT professional has a view on what BYOD really means for their organisation.

In business, BYOD is often seen as a way to save the company money by reducing the cost of new IT provision. However, that brings with it a new set of challenges around data security and reliability.

In higher education the situation is even more complex, with both staff and students to support and a growing trend for distance learning, accredited degree schemes and international partnerships. In fact, it doesn’t just cover devices that are physically brought to site - it’s also about extending IT services to the remote learner wherever they may be.

Meanwhile, students have been bringing their own devices to campus for years. They expect to be able to work flexibly with access to IT services, software and apps across multiple devices, choosing the device they are most comfortable with for the task at hand.

Over the past 10 years, that demand has driven a focus on mobile first development for VLE and online services, and the need for ubiquitous Wi-Fi in all teaching spaces and dormitories.

5 PRIORITIES FOR STUDENT BYOD
1. Ubiquitous Wi-Fi
2. Virtual Learning Spaces
3. Web based services
4. Mobile applications
5. Software delivery

More recently, Universities have released mobile apps - delivering timetabling information, maps, events, alerts and even grades to the student’s pocket device.
Yet there has been a general reluctance to extend software delivery to include student laptops and home computers.

5 **MYTHS OF SOFTWARE DELIVERY FOR STUDENT BYOD**

1. Support calls will increase
2. Software won’t work on any Windows OS
3. Software licenses don’t cover students
4. Students don’t want to carry laptops around
5. VDI is needed / offline use isn’t possible

**WHY?** Because IT departments are uncomfortable supporting software on devices that they don’t control. It’s not that the technology doesn’t exist. App virtualisation has been around for over 10 years.

It’s just that deploying software to student owned laptops seems alien, and for that reason a number of myths persist, even amongst the most enlightened IT professionals.

Yet in a 2015 survey across 50 Universities, 75% of students responded yes when asked “Did you expect to access the university software for your course, anytime, anywhere?”

Fortunately for the students, a number of UK Universities have been bucking the trend - and with spectacular results.

One of the leading institutions in student IT service delivery; the University of Surrey started delivering software to student laptops back in 2012. We asked James Pickett, Senior Systems Analyst and project lead, what led to that decision:

“We recognised that students were struggling to access specialist software which was only available in specific PC labs. Yet increasingly students were coming to University with either a laptop or a computer in their dorm room.

So we wanted to give students the option to work more flexibly, using the software away from campus, or on their own laptop in the library or other learning spaces.

In looking for a solution, we discovered that the latest generation of app virtualisation could deliver 100% of Windows applications on-demand, and under license control, meaning for the first time we could deliver software applications to non-University computers.”

But James and the team at the University of Surrey didn’t stop there...

“We wanted to make it easier for the students to access the applications in a way that would be familiar to them – so we developed Surrey Software – a University app store to provide on-demand access to almost 500 software titles.”

Other UK Universities started to follow suit, such as Lancaster University which launched its Application Jukebox service in 2013 – giving all staff and students access to specialist academic software on their personally owned laptops or PCs.

Yet there were still a few challenges around software licensing to overcome, as the project’s manager, Phil Morgan, explained:

“A surprisingly large number of University software licenses already covered student BYOD, and we soon found that with a little persuasion, software vendors were willing to flex license agreements to accommodate student home use too.

However, there were some titles where we needed to secure BYOD access to campus only, or in a minority of cases, restrict access to University owned computers – and the app virtualisation software didn’t have those features.”
Education partner Software2 were quick to take up the challenge and began development of the Software2 Hub, as Technical Director Ryan Heath explains:

“A growing number of our customers were creating store fronts to deliver their virtualised applications to student owned devices, but were finding it difficult to build in the necessary access controls.

So we worked with them to develop a holistic solution, taking in requirements from over 50 Universities and building in per-app access criteria - such as geo-location, on or off site, or University owned settings.

The result is a brand-able University app store; one location where staff and students can access all specialist University software on-demand, anywhere they want to work.

They can also use the software offline for a defined period before it is removed automatically.”

The Software2 Hub is now used at over a quarter of UK Universities and adoption is growing all the time, as more and more Universities begin projects to improve student software access.

This year will see student software delivery projects begin at a number of US Universities, all looking to offer value added IT services to their students, and to dispel the myths around software delivery and student BYOD.

Meanwhile, at the University of Surrey usage figures are skyrocketing. In the academic year 2014/15 staff and students registered a combined total of 225 years of virtualised application use.

Given that the software runs locally on the students’ own laptops, the cost savings compared with a traditional VDI or app streaming solution are staggering.

The only back-end requirements are the web portal and the control and delivery servers. So providing the service for all of the 14,000 students registered at the University is extremely cost effective.

**SURREY SOFTWARE USAGE**

**Academic Year 2015/16**

- Acrobat Pro – 26,000 launches
- MATLAB – 72 years
- Microsoft Lync – 48 years
- SPSS – 29 years
- Google Earth – 9,000 launches

See the full lifespan of application access infographic.
What’s more, the benefits are shared by University staff, and software delivery to the University’s estate of around 7,500 computers is more flexible and easier than ever before.

The University of Surrey and Lancaster University were both named in the top 10 UK Universities for 2016/17 in The Guardian University league tables.

The University of Surrey was also named both ‘University of the Year’ and ‘University of the Year for Student Experience’ in The Times and Sunday Times Good University Guide 2016.

We asked James what a difference the University app store ‘Surrey Software’ has made to the students, and what impact it has had on the IT department:

“Before Surrey Software, the only way we were able to provide specialist software applications to students was to burn CDs and hand them out. This involved hours of preparation and long queues at the IT Help Desk as students waited for discs or for help with installations.

Now we can provide a much wider range of applications to support their studies, and they can access them anytime, anywhere - simply by visiting our app store. Demand is now so great that if we were still handing out discs we would have needed to employ two new members of staff just to keep up!”

It’s a similar experience to the one at Lancaster University, where in the first 12 months of the self-service app store, the number of support calls relating to software installations fell by 35%.²

What’s more, because students are early adopters of Windows 10 – they have already tested compatibility – with an impressive 95% of Windows 7 applications working across both platforms.

Visit the Software2 web site for more information about how to deliver specialist software applications to student laptops with a University app store.

AppsAnywhere.

AppsAnywhere provides flexible controls to deploy apps to managed desktops, to existing VDI (for example as part of a migration plan, or to reduce costs) as well as directly to BYOD users. Apps are delivered from an institution-branded app store which is hosted on-site with local administration.

As you’d expect, the response from students is overwhelmingly positive. They can now run virtualized apps alongside installed apps, accessing data locally or from the cloud, and with the flexibility to work anywhere, including offline. At last, after 20 years, technology is finally freeing users from the shackles of a single desktop.

As one student put it ‘why would you install software when you can get it from the app store?’.