



# Supporting device needs in Higher Education

Empower every learner and educator in a blended  
(classroom and virtual) learning experience with  
**Microsoft Surface for Education**



# Modern device strategy for Higher Education

Students and faculty are adapting to a blended (classroom + virtual) learning experience. An increased dependency on technology for higher education has forced institutions to update hardware requirements and accelerated their device refresh plans and schedules.

To adhere to social distancing guidelines implemented due to the COVID-19 health crisis, [Washington State University \(WSU\)](#) pivoted its tutoring, academic support, and team building for nearly 600 student athletes from in-person to remote learning. As the academic year progressed and practices and competitions resumed, students adapted to using Microsoft Teams and the Microsoft Surface family of devices to uphold their academic commitments. Students are now using Surface Go devices to connect with tutors, instructors, and teammates, while coaches run practices and games using Surface Laptop, Surface Pro, or Surface Book devices. The integration of Microsoft technology and devices has helped WSU win both on and off the field.

Higher education institutions like Washington State University are using Surface and Microsoft 365 to realize additional benefits such as improvements in student engagement, reduced risk of security breaches, deployment cost reductions, and reduced support effort. In addition, Surface devices offer an optimal experience of the Microsoft platforms and tools many students will use in their careers.

“ Microsoft Teams and Surface devices have provided an integral environment for our student athletes. It’s been really interesting seeing how our program has adapted to the technology. ”

- Wanda Tennant: Director of Academic Services, [Washington State University](#)

“ Giving all our students Microsoft Surface Go devices has enabled us to really enhance our provision and move up to a more modern way of teaching. ”

- Dr. Sara Marsham:  
Acting Dean of Education, SAgE Faculty,  
[Newcastle University](#)



# The Surface family continues a tradition of Microsoft innovation

Microsoft Surface devices set the standard for premium devices in the PC industry. Microsoft has elevated product craftsmanship with beautiful designs and high-end components. Microsoft has also raised the bar on security with a chip-to-cloud security solution and seamless device management down to the firmware.

This leadership is built on a long history of Microsoft innovation in the technology industry. Microsoft's end-to-end, integrated portfolio of cloud solutions—Microsoft 365, Dynamics 365, and Azure, along with Microsoft Power Platform—is built on a foundation of security and privacy and helps organizations in every industry build resilience and achieve more.

Innovative technology engages and inspires students and professors, delivering opportunities with modern devices and tools that closely align with the new blended (classroom + virtual) learning experience.

## Portfolio Diversity

Microsoft has been creating new categories of hardware to support requirements of higher education. For example, lightweight 2-in-1 devices feature tablet-to-laptop flexibility, combining the power of a laptop with the portability and touch interactions of a tablet. Microsoft also innovates on traditional design such as laptops with fixed or detachable keyboards that offer the power required for education with the flexibility to bring the device home and power for the most demanding applications and beautiful graphics.

## Hardware and peripherals

Meet face-to-face through 1080p video using crisp PixelSense displays, Omnisonic speakers, and far-field mics that bring everyone together in realistic real-time detail, for more personal-feeling interactions and stronger collaboration. Searching beyond the keyboard and mouse inspire natural interactions such as touch, voice, ink, Surface Pen,\* and Surface Dial\* to capture creative ideas. Expanding beyond the PC to large-screen devices built for teams, the Surface Hub is another new category of device that can transform any space into a team learning space and interactive whiteboard.

\* Sold separately.

## 2-in-1 devices

**Go**  
The lightest  
Surface 2-in-1



**Pro**  
The iconic Surface 2-in-1



**Pro X**  
The largest Surface 2-in-1

## Laptops



**Laptop Go**  
An exceptional value  
laptop



**Laptop**  
The perfect everyday  
laptop

**Laptop Studio**  
Our most powerful laptop



## Desktops

**Studio**  
Our desktop with  
strikingly large 28"  
display and touchscreen



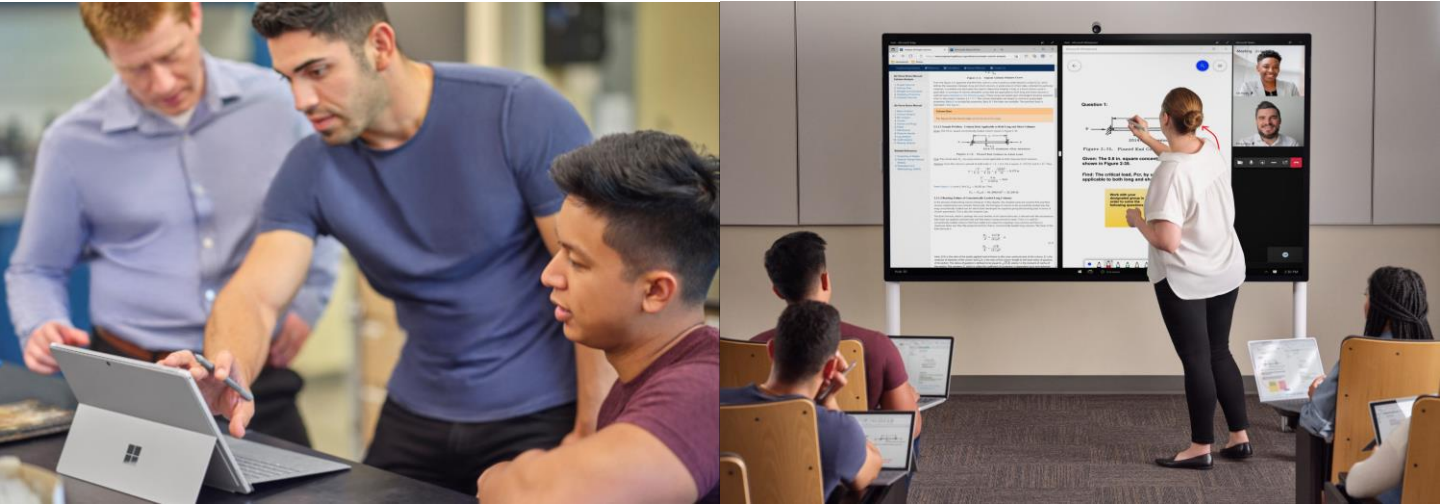
## Meeting devices



**Hub**  
Digital whiteboard, meetings platform, and collaborative  
computing device.

# Deliver engaging learning opportunities

## Faculty and staff



With an increased focus on the digital learning experience and blended (classroom + virtual) learning, professors, teaching assistants, and other faculty depend on technology and devices to create engaging learning opportunities and establish new ways of working and connecting with students.

### Faculty face challenges:

- Deliver learning that keeps students engaged in both classrooms and distance learning
- Optimize classroom time and improve the digital learning experience
- Protect students' and educators' personal data

### Surface helps professors:

- **Plan exciting, interactive lectures in less time.** Experiment with digital storytelling. Apps like Whiteboard and Flipgrid help push the boundaries of the digital classroom
- Surface ink- and touch-capable devices **free up professors' and teacher assistants' time** and create better student outcomes. Bring 3D subjects to life with the Surface HD PixelSense touchscreen and Paint 3D
- **Enable remote engagement** with HD cameras, Omnisonic speakers and Studio Mics to provide crystal-clear video and audio, helping every professor and student be seen and heard clearly during virtual class sessions
- **Provide highly secure** digital classroom experiences

## For faculty, we recommend:

### Mobile productivity



#### Choose Surface Pro 8

##### Ultra-light and versatile power

Work uninterrupted with tablet-to-laptop versatility, extended battery life,<sup>1</sup> and optional LTE Advanced.<sup>2</sup> Portable enough to take anywhere starting at just 1.96 pounds,<sup>3</sup> yet powerful enough to multitask with 11th Gen Intel® Core™ processors. Share in stunning detail with 11% larger PixelSense™ touchscreen than previous Pro. Write up reports fast and efficiently with a laptop-class keyboard and a pen<sup>4</sup> that's charged and always within reach.

[Learn More >](#)

### Do it all



#### Choose Surface Laptop 4

##### Style, speed, and performance

Get more multitasking power and enable better graphics to run the professional-grade apps you depend on, fueled by your choice of 11<sup>th</sup> Gen Intel® Core™ or AMD Ryzen™ Microsoft Surface Edition processors. Immersive sound, and longer battery life<sup>5</sup> keep you in the flow—all within our signature ultra-slim design and 13.5" and 15" touchscreens. Perfect for people who want to get it all done in a thin, light, and elegant design.

[Learn More >](#)

### Cutting-edge design



#### Choose Surface Laptop Studio

##### Super light and portable

Set your imagination free on the most powerful Surface Laptop yet with quad-core powered 11th-Gen Intel® Core™ H Series processors. Flex your creative muscle on the sleek 14.4" PixelSense touchscreen, making seamless transitions from laptop to entertainment-ready stage to portable creative canvas, complete with built-in Slim Pen storage and charging. Enjoy uniform, true-to-life color and contrast and the best sound of any Surface Laptop.

[Learn More >](#)

### State-of-the-art collaboration



#### Choose Surface Hub 2S

##### Teamwork without boundaries

Enable remote learning with a modern, all-in-one collaborative canvas and Microsoft Teams-certified meetings platform. Make any space a learning space with a device that is mobile\* and lightweight. Teach onsite and virtual students simultaneously with 4K Camera<sup>6</sup> and front-facing speakers. Brainstorm teaching plans with peers using the Surface Hub 2S Pen<sup>6</sup> and Whiteboard in Microsoft Teams.\*

[Learn More >](#)

<sup>1</sup> Battery life varies significantly based on usage, network and feature configuration, signal strength, settings and other factors. See [aka.ms/SurfaceBatteryPerformance](https://aka.ms/SurfaceBatteryPerformance) for details.

<sup>2</sup> Surface Pro 8 with LTE Advanced is coming in 2022. Visit [Surface.com](https://Surface.com) for updates on availability in your market. Availability may vary by market and configuration. Service availability and performance subject to service provider's network. Contact your service provider for details, compatibility, pricing, SIM card, and activation.

<sup>3</sup> Weight not including Surface Pro Signature Keyboard or Surface Pro Keyboard.

<sup>4</sup> Surface Pro Signature Keyboard and Slim Pen 2 are sold separately. Pen storage and charging available on select Keyboards.

<sup>5</sup> Surface Laptop 4 battery life: Up to 19 hours on Surface Laptop 4 13.5" AMD Ryzen™ 5 Microsoft Surface Edition; up to 17.5 hours on Surface Laptop 4 15" AMD Ryzen™ 7 Microsoft Surface Edition; up to 17 hours on Surface Laptop 4 13.5" Intel® Core™ i5; up to 16.5 hours on Surface Laptop 4 15" Intel® Core™ i7. Battery life based on typical Surface device usage. Testing conducted by Microsoft in February 2021 using preproduction software and preproduction devices. Battery life varies significantly with settings, usage and other factors. See [Surface.com](https://Surface.com).

<sup>6</sup> One (1) Surface Hub 2 Pen and one (1) Surface Hub 2 Camera included with Surface Hub 2S. Additional accessories sold separately.

\* Some accessories and software sold separately.

# Unlock every student's potential

## Students



Higher Education aims to enhance student learning outcomes and promote broader engagement among student communities. Students are adapting to a blended (classroom + virtual) learning experience and depend on devices and technology to be better prepared for the workforce.

### Supporting students has its challenges:

- Ensuring they are prepared for the future
- Increasing inclusion, equity, and accessibility
- Helping them stay engaged no matter their learning location
- Protect students' personal data

### Surface helps students:

- **Gain an early advantage** with the tools they will one day need in the modern workplace
- **Write and draw naturally** on select devices with Surface Pen\* or Microsoft Classroom Pen 2\*, aiding in fine motor control development
- **Enable remote engagement** with HD cameras, Omnisonic speakers and Studio Mics to provide crystal-clear video and audio, helping every teacher and student be seen and heard clearly during virtual class sessions
- Select Surface devices **give students the power** they need for computer science, graphic design, video editing, and other more compute-intensive courses and tasks
- Engage flexibly with versatile modes to **accommodate different learning styles** and information types. The new [Surface Adaptive Kit](#)\* is a new accessibility package that makes it easier to use and navigate Surface devices and supports inclusiveness.

\* Sold separately.

## For students, we recommend:

### Unlock learning



#### Choose Surface Go 3

##### Most affordable 2-in-1

Go faster than before with a choice of Intel® Pentium® or Core™ i3 Processor that can keep up with a full day of classes, providing up to 15% more speed than before.<sup>1</sup> Smallest, most portable Surface PC, starting at 1.2 lb.<sup>2</sup> Plus, 10.5" PixelSense™ display with 220 PPI resolution and 10-point multitouch, built for inking with digital pens. Seamless workflows with Windows 11 Pro, essential Microsoft 365\* productivity apps like Teams, OneNote, and PowerPoint.

[Learn More >](#)

### Ready, set, go anywhere



#### Choose Surface Laptop Go

##### The lightest Surface laptop

Balance performance, battery life, and beauty for simplicity without compromise and a seamless, secure computing experience. Run professional-grade software and essential apps with a 10th Gen Intel® Core™ Processor on a 12.4" PixelSense™ touchscreen display. Get back to work quickly with Fingerprint Power Button for biometric sign-in, plus fast, secure access to your files and data. Hear, be heard, and be seen in virtual meetings with radiant Omnisonic speakers, dual far-field Studio Mics, and a front-facing 720p HD camera.

[Learn More >](#)

### Need more power and larger screen?



#### Choose Surface Pro 8

##### Ultra-light and versatile power

Work uninterrupted with 2-in-1 versatility, extended battery life,<sup>3</sup> and optional LTE Advanced.<sup>4</sup> Portable enough to take anywhere starting at just 1.96 pounds,<sup>5</sup> yet powerful enough to multitask with 11th Gen Intel® Core™ processors. Share in stunning detail with 11% larger PixelSense™ touchscreen than previous Pro. Write up reports fast and efficiently with a laptop-class keyboard and a pen<sup>6</sup> that's charged and always within reach.

[Learn More >](#)

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[Learn More >](#)

\* Sold separately. Software license required for some features.

<sup>1</sup> Surface Go 3 with Intel Core i3 processor is 15% faster than Surface Go 2 with Pentium processor.

<sup>2</sup> Weight not including Surface Go Type Cover\*.

<sup>3</sup> Battery life varies significantly based on usage, network and feature configuration, signal strength, settings and other factors. See [aka.ms/SurfaceBatteryPerformance](https://aka.ms/SurfaceBatteryPerformance) for details.

<sup>4</sup> Surface Pro 8 with LTE Advanced is coming in 2022. Visit [Surface.com](https://Surface.com) for updates on availability in your market. Availability may vary by market and configuration. Service availability and performance subject to service provider's network. Contact your service provider for details, compatibility, pricing, SIM card, and activation.

<sup>5</sup> Weight not including Surface Pro Signature Keyboard or Surface Pro Keyboard.

<sup>6</sup> Surface Pro Signature Keyboard and Slim Pen 2 are sold separately. Pen storage and charging available on select Keyboards.

# Layered security with Microsoft Surface

Education organizations need to have secure devices, and Microsoft Surface devices provide advanced security out of the box with tightly integrated hardware, software, firmware and identity protection layers. Microsoft uses a layered security approach with chip-to-cloud security that includes chips and components designed and built by Microsoft, factory security protocols and inspections, Advanced Windows Security features enabled by default, and comprehensive remote management controls.

## Hardware

All Surface devices use TPM 2.0 chips to implement a secure and sandboxed environment for storing passwords, PIN numbers, and certificates. Most Surface devices are also designed to use Windows Hello enabling secure biometric authentication and BitLocker for device encryption.

## Firmware

Microsoft writes its own UEFI<sup>1</sup> and updates the UEFI through Windows Updates making the UEFI updates timely and easy to apply. The importance of quick UEFI updates became clear following a spate of speculative execution side-channel attack vulnerabilities, including Meltdown and Spectre.

Using Surface Enterprise Management Mode (SEMM) IT can enable or disable individual features as part of device setup.

This includes the cameras, Micro SD card, Bluetooth, LTE, and whether the computer can boot off a USB device. IT admins can also use SEMM to manage the device at the boot level with custom firmware controls. Using SEMM, Microsoft Intune for Education enables direct management of many Surface device settings, including Certificates, Update settings, Bitlocker, Device features, Email, VPN connections, Windows security baselines, and Wi-fi connections.

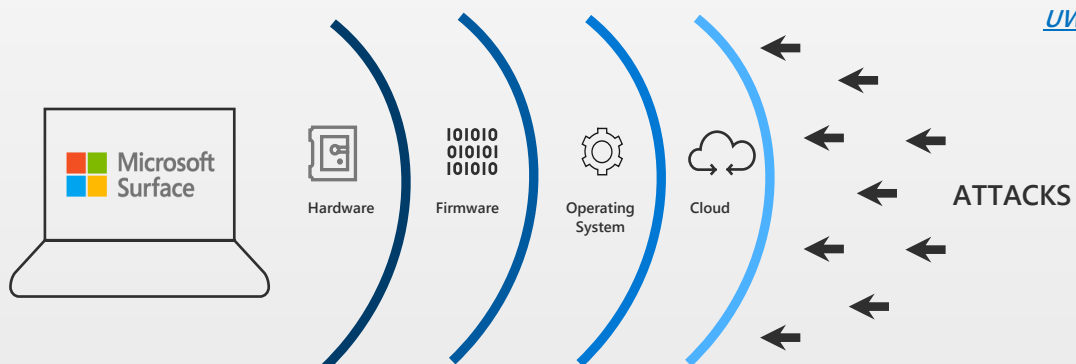
## Operating System

Surface devices ship with advanced Windows 11 security features like Memory integrity, a virtualization-based security, enabled by default. The devices also ship with Microsoft Defender for Endpoint, Windows Defender Credential Guard, and Windows Defender Application Control enabled.

“ The Microsoft Surface devices are robust and well-built. We’ve had no fundamental issues with the devices, and they’ve worked well. It will be the default device going forward. Microsoft Intune will be supporting that. And the cyber security elements we’ll keep moving forwards. It’s now a case of developing policies and standardising what we’ve developed so we can carry them forward. ”

- James Cale, Director of Digital Services,

[UWTSD](#)



<sup>1</sup> Surface Go and Surface Go 2 use a third-party UEFI and do not support DFCL. DFCL is currently available for Surface Laptop SE, Surface Laptop Studio, Surface Pro 8, Surface Go 3, Surface Laptop 4, Surface Laptop Go, Surface Book 3, Surface Laptop 3, Surface Pro 7+, Surface Pro 7, and Surface Pro X.

# Advanced Deployment and Management

IT teams need a modern approach to device management, one that seamlessly integrates all components, from the chip to the cloud. Surface has been designed with built-in support for simplified modern management of the entire device lifecycle.

## Zero-Touch Deployment

Windows Autopilot automates all stages of the device lifecycle, both for IT and users. A Surface device can go straight from Microsoft to the end-user completely configured. Surface devices are purpose-built for zero-touch deployment and optimized to provide the most straightforward, friction-free, and powerful interoperability with the diverse collection of Microsoft 365 capabilities.

“ We’ve been able to move away from just handing over the devices and the students then being responsible for them. Using Microsoft Intune allows us to stream a set of applications to the device before we hand them out. There’s no need to build, patch or manage them. It’s all policy driven. We’ve set fairly rigorous policies in Microsoft Intune and there’s little more for us to do; it’s largely fire and forget – which is what makes it so attractive. ”

- Dr. Mark Ferrar, CIO, [Newcastle University](#)

## Management during use and retirement

Every Surface component, from firmware to Windows 11 policy settings, can be managed by Microsoft Intune for Education and updated via Windows Update for Business. Using Intune, IT can also wipe a device clean, either because it was lost or stolen or assigned to a different user. After the wipe, it is reset to the out-of-box experience, at which point proper credentials are once more required for set-up if the device is redeployed.

In addition, Surface includes purpose-built tools for diagnostics and tuning that can automatically fix issues, assist with troubleshooting, and optimize functionality from brightness control to battery usage. The Surface Diagnostic Toolkit for Business (SDT), for example, enables IT administrators to quickly investigate, troubleshoot, and resolve hardware, software, and firmware issues with Surface devices.

Surface also integrates into the Microsoft 365 security stack to detect vulnerabilities across the globe and automatically protect devices—even while the device is asleep. Surface devices implement a Modern Standby low-power state that allows the device to appear asleep, drawing very little power, but also listening for updates via Windows Update for Business and application data streams like email. This allows a Surface on battery power to achieve a long standby battery life while also staying up-to-date on application data, and automatic pushes of security updates even down to the UEFI.



## Supporting environmental sustainability

Microsoft is deeply concerned about the impact of its operations on the environment and works hard to limit it. As a company, Microsoft has been carbon neutral since 2014. Education organizations looking to reduce their environmental impact can take advantage of Microsoft's environmental efforts to reduce the carbon footprint of its devices and services.

Surface products reflect the people that make them and that use them. That's why Microsoft continues to set higher standards and goals to further reduce the environmental footprint of Surface products.

When designing Microsoft Surface devices, Microsoft focuses on three key areas of sustainability: material efficiency, reducing hazardous materials, and extending product life. Toward these ends, in 2020, Surface products achieved a 21%<sup>1</sup> reduction in packaging weight and a 25%<sup>1</sup> reduction in greenhouse gas emissions. Microsoft also reduced packing emissions by 48%<sup>2</sup> with the use of glassine paper to replace plastic, which also resulted in 95%<sup>3</sup> packaging recyclability by material.



# 95%<sup>\*</sup>

recyclability of Surface devices packaging.<sup>3</sup> Plus, average carbon emissions reduced by 48%<sup>2</sup> on new commercial packaging.



# 25%

Reduction in greenhouse gas emissions in FY20.<sup>1</sup>



# 91%<sup>\*^</sup>

Improved recyclability of Surface Laptop 3 in FY20, making it one of the most recyclable devices on the market.<sup>1</sup>



# 21%

Reduction in packaging weight in FY20.<sup>1</sup>

<sup>1</sup> Microsoft Devices Sustainability Report 2020, page 21

<sup>2</sup> Microsoft Devices Sustainability Report 2020, page 26

<sup>3</sup> Microsoft Devices Sustainability Report 2020, page 66

<sup>\*</sup> (w/w)

<sup>^</sup> Measured using UL ECV 2789



# Designed with inclusiveness and accessibility in mind

## Accessible technology

There is no limit to what people can achieve when technology reflects the diversity of all who use it. Across Microsoft, we are dedicated to providing accessibility tools and features that help people achieve more at home, school, and work.

We believe that accessible technology is a fundamental building block that can unlock opportunities in every part of society. Our work starts by ensuring that Microsoft's own products are accessible by design, so that as we advance our features and functionality, we can help everyone across the spectrum of disability fully engage in learning and be more productive.

## Adaptable, mobile devices

With Surface, accessibility is built into both the software and the device itself. Since many Surface devices offer flexible form factors, students can use the device in the way that works best for their needs. Devices can be held, perched on a desk, attached to a wheelchair, or laid flat. The premium audio-visual experience helps all students feel included and represented. The [Surface Adaptive Kit](#)\* helps make the device even more accessible, with bump labels to identify keys and ports and opener support to make opening the lid and kickstand easier.



\* Sold separately.

## Built-in accessibility in Windows and Microsoft 365

At a software level, Windows and Microsoft 365 include a range of accessibility features, from Learning Tools like Immersive Reader to help improve comprehension for all students, to meeting features like live captions and translation, to other capabilities like screen reading, speech-to-text, Seeing AI, Magnifier, Ease of Access settings, and more.

### Accessibility features in Microsoft 365:

**Microsoft Teams Live Captions:** View live captions and subtitles in up to six languages

**Windows Ease of Access Center:** Enable students and faculty to configure devices to meet their specific needs

**Microsoft Editor:** Bring out a student's best writer in more than 20 languages with the help of AI

**Immersive Reader:** Improve reading for students regardless of age or ability to build comprehension and encourage independent learning

**Dictation:** Use dictation to convert spoken words into text anywhere on your PC with built-in speech recognition

**Math Assistant:** Solve any equation, or display the step-by-step instructions guiding students to reach the solution on their own

**Reflect:** Support social-emotional learning with weekly check-ins that help faculty get insight into students' wellbeing over time

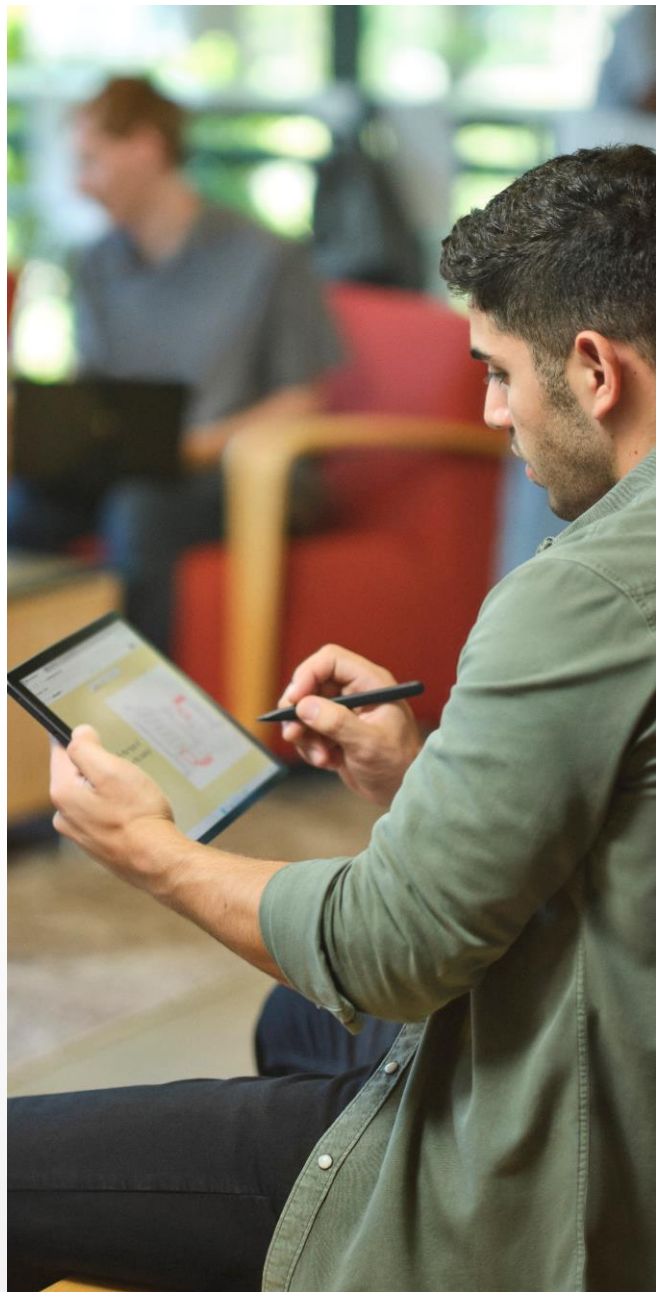
**Communications Compliance:** Detect offensive language, including potentially discriminating comments to foster a more inclusive environment

## Modern device strategy for Higher Education

By choosing Microsoft Surface, higher education institutions can implement a device strategy that works in blended (classroom + virtual) learning experiences. With a variety of devices and price points that meet the needs of students and faculty, institutions can standardize and provide a premium experience through beautiful and inclusive design, advanced security and management, and a commitment to sustainable business practices.

“ Microsoft Surface is at the core of our technology strategy. Together with Azure, Windows 10, and Microsoft 365, Surface gives us the ideal platform. ”

- James Crooks: Director of Learning & Information Services,  
[University of Central Lancashire](#)



See which Surface devices are best for your blended learning experience.

Visit [Surface for Higher Education](#) to learn more.