How AI is Accelerating the Uptake of Next Generation Hybrid Learning

Synthesis of Hybrid Learning Roundtable with University Leaders
Delivered in Collaboration with Curtin University

Foreword

The impact of technology – and AI specifically - on learning is profound. It is allowing universities to deliver what has long been seen as the holy grail of education; delivering personalised learning at scale. AI is allowing universities to create curriculum, assessments and student services that are truly responsive to individual preferences and learning styles.

One of the most important impacts of AI is on the classroom experience. AI is now allowing universities to remove background noise for remote participants, adjust cameras to focus on whose speaking, provide transcription and translation as standard and even take summary notes at the end of classes for students on secure large language models.

One of the major changes that has occurred in education in recent years is the number of students that work while they learn. The ability for students to attend classes from remote locations is becoming an expectation not a luxury. Students also expect that the remote experience will be the equivalent of being in class. I'm personally excited about what AI can do for learning and teaching and feel like we have only scratched the surface.

Prof Paul Brunton

Curtin University Deputy Vice Chancellor, Academic

Delivered in collaboration with:

Curtin University

CAUDIT

University participants in the roundtable:

CQUniversity Australia

UWA Perth Australia

University of Canberra

James Cook University Australia

Western Sydney University

Opportunities Created by Next Generation AI-Enabled Hybrid Learning

Bringing the university to the student, not the other way around

In a world where most students are working, universities have to be more flexible. Next generation AI-driven hybrid learning spaces create great experiences for those in the classroom and joining remotely.

Teaching led approach to IT; innovation that's led by faculty

With AI-enabled spaces the focus is learning, not technology. Spaces that adapt to their context put the teacher – not the technology - in control.

Meeting the expectations of the TikTok generation

Technology rich spaces create dynamic learning environments, allowing students to absorb bursts of curriculum content with powerful form factors. AI tools support just in time (not just in case) presentation of content and make it interactive with functions like gesture control.

Understanding what students need and how they engage with spaces

AI-enabled spaces collect analyse data about utilisation, room conditions, students' interaction with content, behaviour and productivity. These insights help universities make more informed decisions about room and learning design.

"The real power of AI and next generation hybrid learning is that it shrinks the classroom experience to a 1:1 engagement with their education. Cisco is enabling this shift by building open, interoperable platforms, embedding AI agents directly into learning environments, and replacing legacy AV systems with smarter, more connected spaces. Our strategic partnerships with Microsoft and NVIDIA, and innovations like Zero Distance learning, ensure institutions are future-ready."

Carl Solder, CTO Cisco ANZ

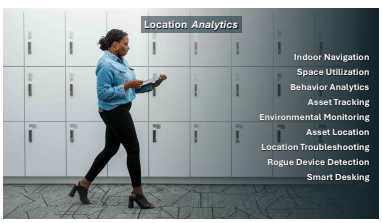
Specific use cases involving AI in education

AI assistants

AI assistants are reshaping the student experience by helping learners write, summarise, translate, and find answers in real time. These tools support individualised learning at scale, enabling students to engage more deeply with content and progress at their own pace.

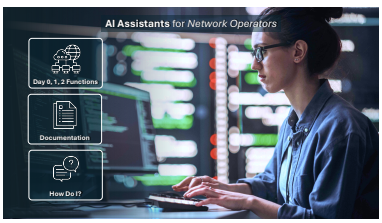
Agentic AI

Agentic AI brings contextual awareness into classrooms and campuses. By rapidly understanding intent, content, and conversation, these tools enable more responsive, personalised student support and real-time engagement in both physical and virtual settings.



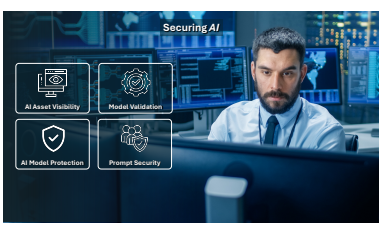
AI-driven Location Analytics

AI-enabled location data helps universities better understand how spaces are used, supporting smart timetabling, efficient resource allocation, and safer, more responsive campuses. This includes indoor navigation, asset tracking, and behavioural analytics.



AI assistants for network operators

Beyond teaching and learning, AI is streamlining IT operations. AI assistants help automate documentation, diagnostics and support, making core university systems more efficient, scalable, and resilient. This transforms critical back-end functions and reduces operational burden.



AI security

As AI becomes embedded across all aspects of university life, so too does the need for robust data protection. AI security tools help institutions secure sensitive data, monitor model integrity, and ensure responsible use of generative technologies.

AI lets classrooms take on human characteristics

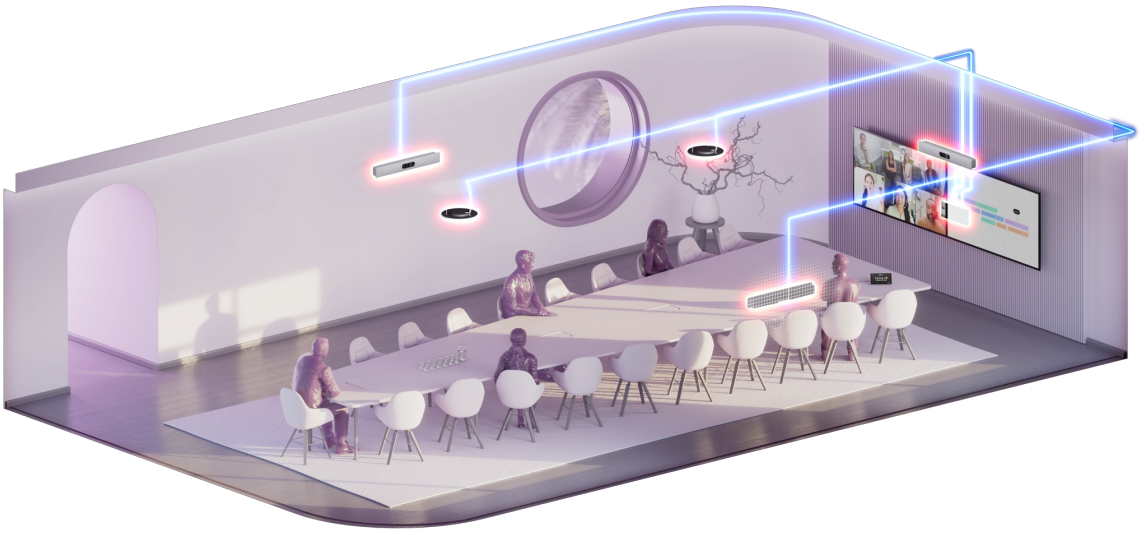
The transformative potential of AI is redefining physical learning environments. Classrooms are now equipped with intelligent systems that give them the ability to see, hear and think—just like humans. Cameras act as eyes, microphones as ears, and advanced processors as the brain, enabling spaces to perceive their occupants and respond accordingly.

This sensory infrastructure allows classrooms to make real-time decisions. Whether adjusting framing based on head detection, removing background noise, or creating immersive cinematic meeting experiences, AI ensures that technology fades into the background. The result is a more natural, intuitive and engaging hybrid learning experience.

Eyes
Camera

Ears
Microphone

Brain
Video



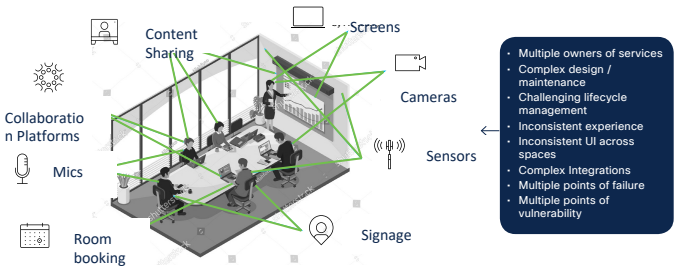
AI helps spaces make real-time decisions and ensures technology disappears into the background with advanced functionality such as:

- Head Detection
- Noise Removal
- People Frames
- Meeting Zones
- Cinematic Meetings

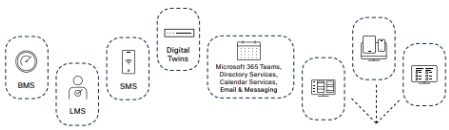
Architecting for an AI-enabled classroom

Current hybrid work and learning environments are struggling to keep pace with the demands of AI. Most setups rely on fragmented platforms, disconnected point solutions and siloed datasets, making it difficult to integrate, analyse and act on information in real time. AI use cases—such as intelligent video, real-time transcription and space optimisation—require more than just connectivity. They demand a unified digital architecture. Yet today, many universities face duplication across IT, AV, facilities and education services, adding complexity and inefficiency.

Typical Current State Workplace

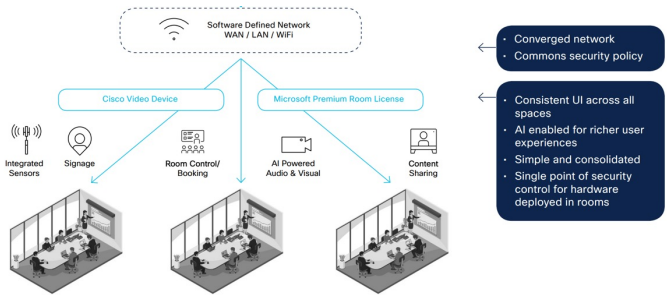


Data layer: Disparate datasets and dashboards with little to no integration



The AI-enabled classroom of the future depends on integrated next generation hybrid solutions. Secure connectivity, consistent user interfaces, and intelligent systems work together to support AI-powered features at scale. A unified data layer provides real-time visibility across spaces, enabling richer analytics and automation. This foundational shift allows AI to operate seamlessly across the entire campus—delivering better learning experiences while simplifying technology operations behind the scenes.

Future State AI-enabled Workplace



Data layer: A single pane of glass with end-to-end visibility and insights across all facilities, network, workspaces and classrooms

	Unified security	Consistent UI across all spaces	Immersive collaboration capabilities	AI collaboration features	APIs / integrations	Rich data gathering capabilities	Simplified management / end-to-end visibility	Ongoing feature updates
Traditional AV	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Next Generation Hybrid	✓	✓	✓	✓	✓	✓	✓	✓

Calculating the TCO and ROI of next generation hybrid learning

AI is transforming the learning experience—but its impact depends on the right infrastructure. Before universities can fully realise the benefits of AI, they need a stable, scalable hybrid learning environment that supports secure connectivity, seamless integration, and consistent user experiences. This foundation is what makes AI usable, valuable, and sustainable at scale.

Cisco's Total Cost of Ownership (TCO) tool is designed to help institutions plan and invest in that foundation. It provides a structured way to assess the financial and strategic impacts of transitioning to a next generation hybrid work and learning model model—optimising technology deployments, reducing costs, and improving student outcomes. By building the infrastructure needed for next generation hybrid learning, institutions position themselves to unlock future value from AI.

Key benefits of the Cisco TCO tool:

- **Validating Customer Value:** Provides CIOs and other decision-makers with clear financial and strategic value metrics that justify investment in next generation hybrid learning environments.
- **Building a Business Case:** Helps secure internal funding by offering evidence to support proposals and increase executive confidence.
- **Scenario Modelling:** Allows universities to simulate different implementation pathways and understand the cost-benefit trade-offs across various hybrid learning configurations.

Book your Next Generation Hybrid Learning Assessment

Cisco's TCO tool, developed with higher education experts, helps your institution identify cost savings, productivity gains, and efficiencies in moving to a next generation hybrid learning model. Contact your Cisco representative to get started.