Education Now

Transforming Teaching in Times of Change

Dr. Lance Ford, Educator and Technical Systems Engineer
Fred King, Business Solutions Architect, Education
Brad Saffer, Business Development Manager, Education
Doug Walsten, Business Solutions Architect, Education
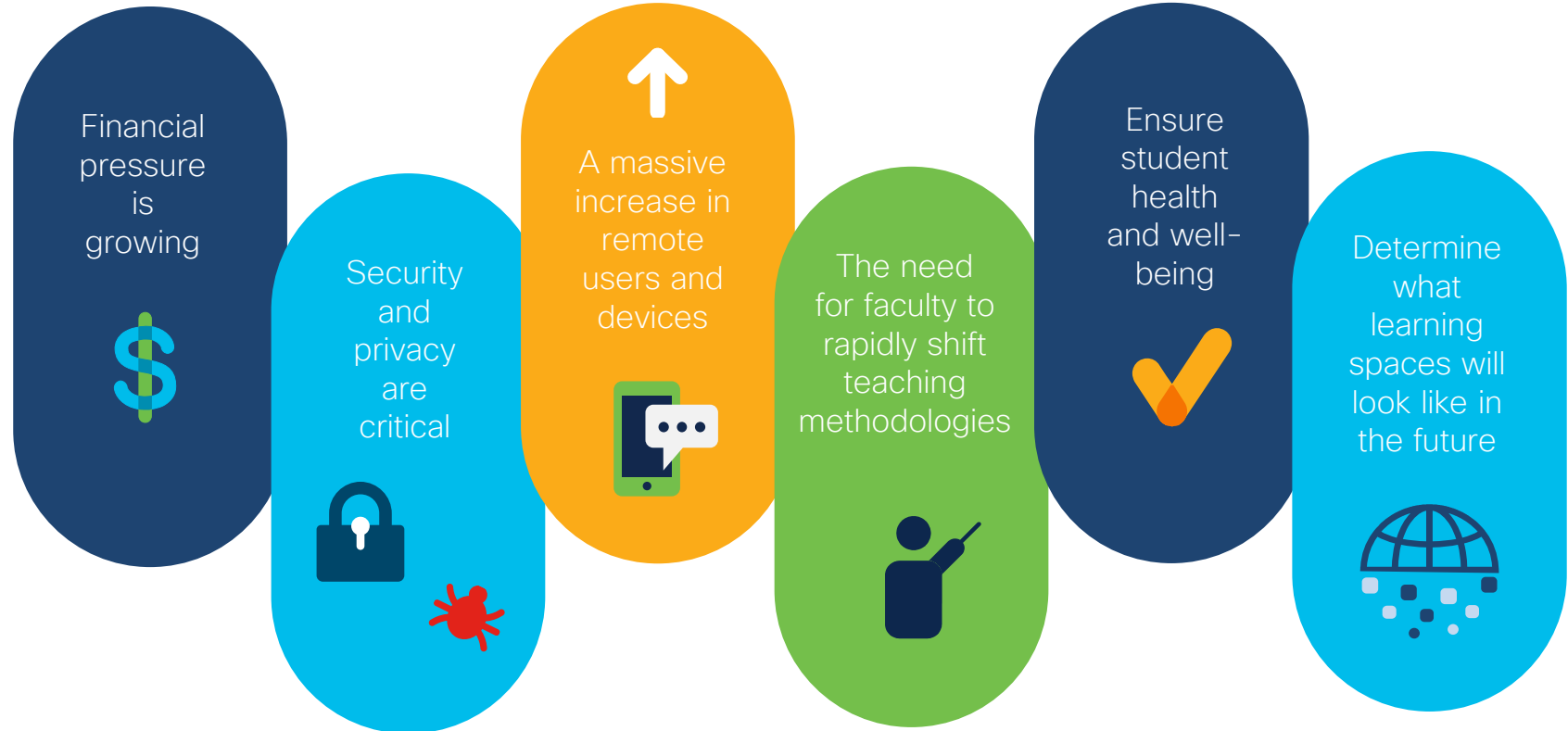
DGTL-PSOIND-1101

CISCO *Live!*

CISCO

Agenda

- Introduction

- Education challenges

- Administrative collaboration

- Distance learning

- Network, endpoint and web security
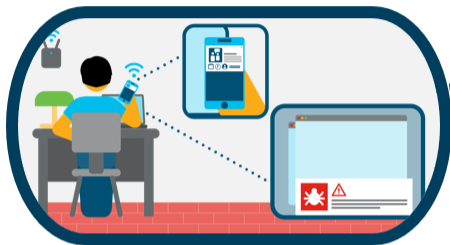
- Success in action

- Conclusion

Education challenges

Challenges in education today

Financial pressure is growing

Security and privacy are critical

A massive increase in remote users and devices

The need for faculty to rapidly shift teaching methodologies

Ensure student health and well-being
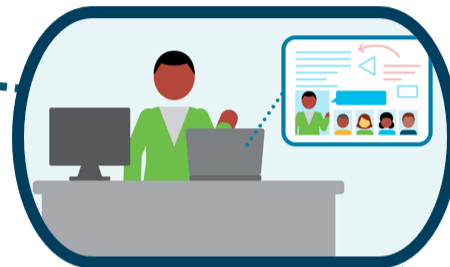
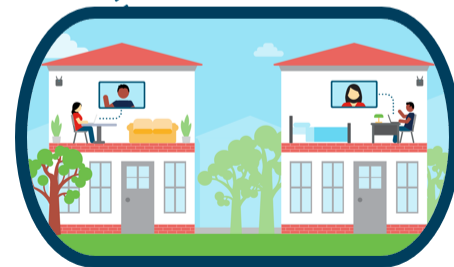Determine what learning spaces will look like in the future

What's needed?

Simple

Smart

Secure

A simple, secure, reliable platform for distance learning and administrative collaboration that is easy to deploy and easy to use.

Collaboration without compromise

Seamless

Supported

Higher education business drivers today

Connect with and **engage learners** in new and different ways

Securely collaborate with other researchers to drive the innovation required to address multiple waves of uncertainty

Give every faculty member and student **secure access to the resources** they need to teach and learn effectively to drive continuity of learning

Continue **learning** and **collaboration any time** and in **any location**

Provide infrastructure and technology to **securely enable distance learning, administrative decision-making, and innovation**

Faculty

Researcher

Provost

Student

Chief Information Officer

Schools business drivers today

Connect with and **engage learners** in new and different ways

Securely collaborate with teachers, parents, and staff to ensure a secure, effective learning environment

Give every teacher and every student **secure access to the resources** they need to teach and learn effectively and to drive continuity of learning

Continue **learning** and **collaboration any time** and in **any location**

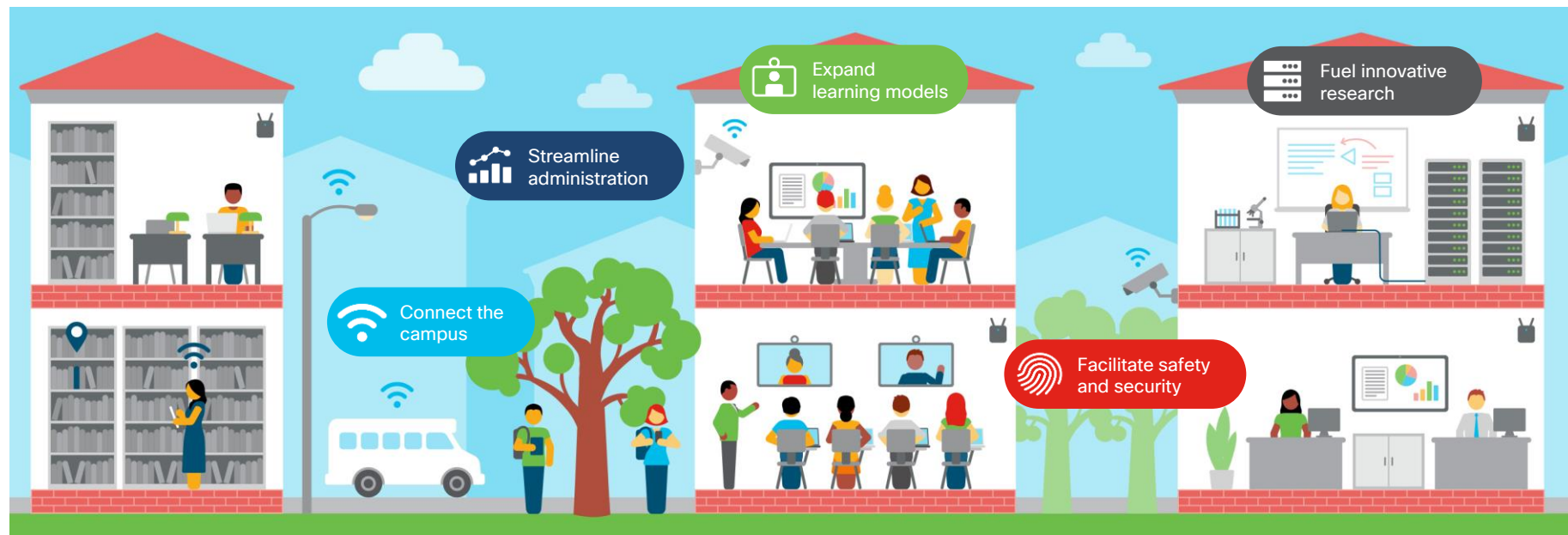Provide infrastructure and technology to **securely enable distance learning, administrative decision-making, and innovation**

Teacher

Principal

Superintendent

Student

Chief Information Officer

Cisco Education Portfolio Explorer

Connect the campus

Campus wireless and connectivity

Mobile experiences and location services

Smart campus and automation

Streamline administration

Data-informed operations

Administrative collaboration

Student engagement and retention services

Expand learning models

Active learning spaces

Distance learning

Faculty professional development

Facilitate safety and security

Network, endpoint, and web security

Identity and access control

Video surveillance and physical security

Fuel innovative research

Research collaboration

High-performance computing

Research cloud security

http://cisco.com/go/education
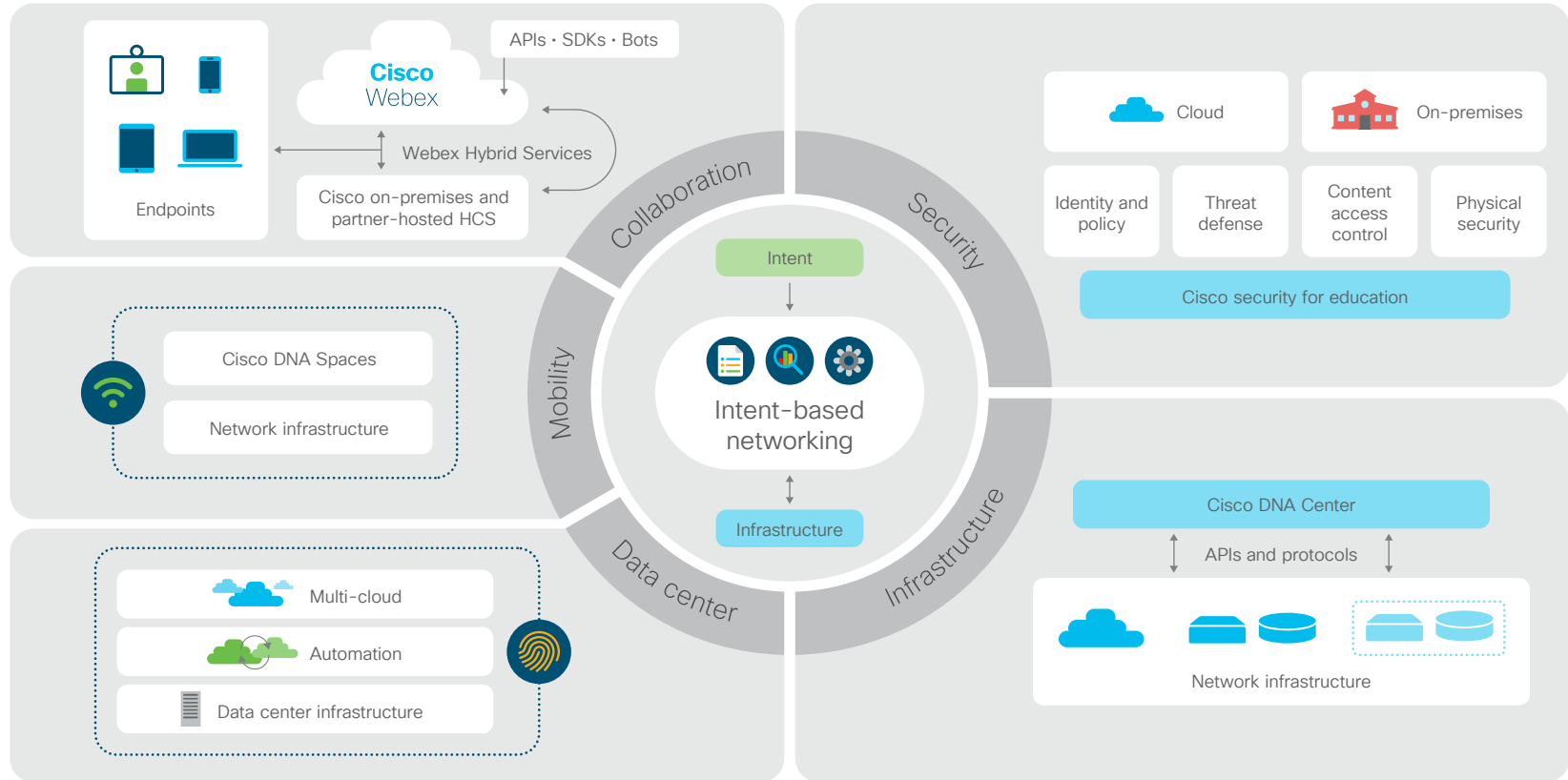
Education solution strategy

Endpoints

APIs · SDKs · Bots

Cisco Webex

Webex Hybrid Services

Cisco on-premises and partner-hosted HCS

Cisco DNA Spaces

Network infrastructure

Multi-cloud

Automation

Data center infrastructure

Collaboration

Security

Mobility

Intent

Intent-based networking

Infrastructure

Data center

Infrastructure

Cloud

On-premises

Identity and policy

Threat defense

Content access control

Physical security

Cisco security for education

Cisco DNA Center

APIs and protocols

Network infrastructure

Teach, learn, and collaborate anywhere and make sure you're secure

- Offer cloud-based online classes and cross-functional collaboration in any location
- Secure your connection through Cisco AnyConnect®.
- Block threats with Cisco Umbrella® as you scale cloud application use
- Integrate our cloud-based collaboration solutions with your learning management system with Cisco Webex® Education Connector

"No matter what is happening in the world, we believe that it is critical to continue educating the leaders, dreamers, scientists, clinical researches, caretakers, and doctors of tomorrow. That's why we are passionate about ensuring the continuity of learning through our Cisco education solutions portfolio."

Renee Patton
Director for Healthcare and Education,
Global Industries Solutions Group, Cisco

Helping educational institutions today
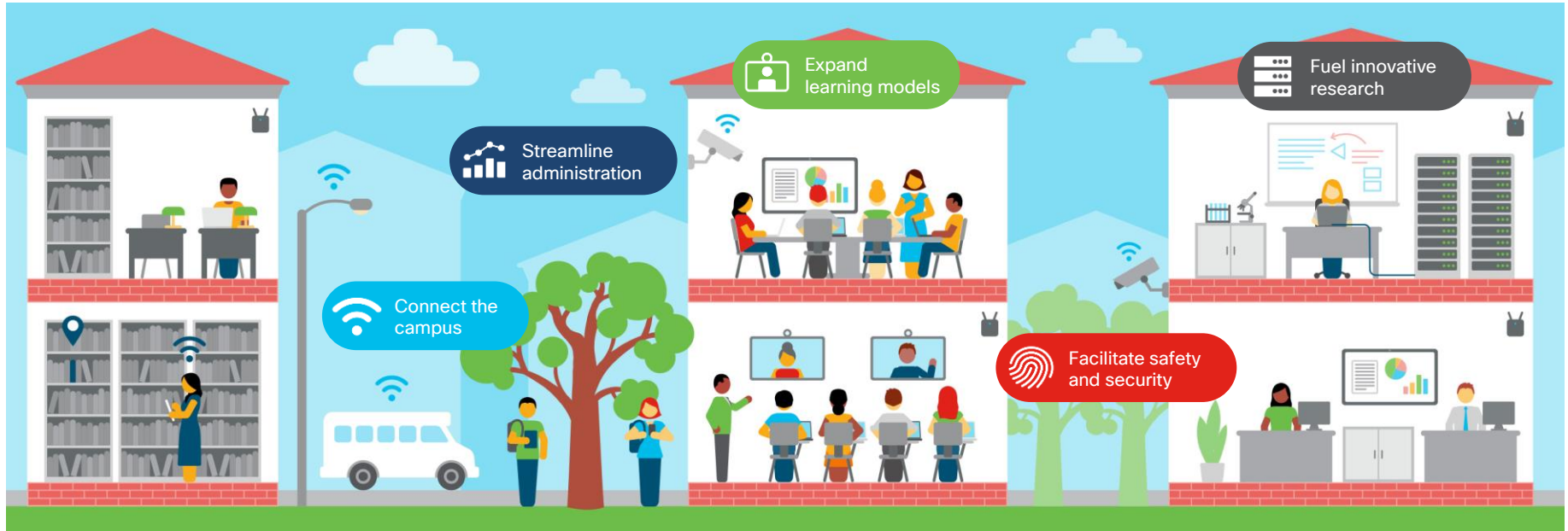
Icon	Category	Details
	Connect the campus	Campus wireless and connectivity
		Mobile experiences and location services
		Smart campus and automation
	Streamline administration	Data-informed operations
		Administrative collaboration
		Student engagement and retention services
	Expand learning models	Active learning spaces
		Distance learning
		Faculty professional development
	Facilitate safety and security	Network, endpoint, and web security
		Identity and access control
		Video surveillance and physical security
	Fuel innovative research	Research collaboration
		High-performance computing
		Research cloud security

Administrative collaboration

cisco *Live!*

Administrative Collaboration

Improve administrative processes, including more efficient staff collaboration with secure communication and retention programs.

Collaboration | Security

Challenges and drivers

Rapidly develop new business models to help stabilize financial pressure

Improve quality and efficiency of communication to speed alignment

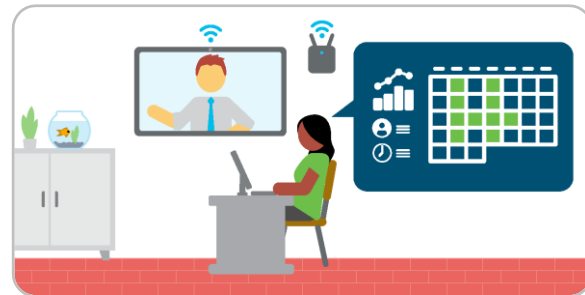Drive cross-departmental collaboration to improve decision-making

Drive continuity of learning and operations

Administrative collaboration

Boost your administrators' productivity with collaborative, digital workspaces.

| Industry drivers	Business needs	Capabilities	Business outcomes	Stakeholders
• Administrative expectations of campus staff • Need for consensus-building across campus leadership • Crisis situational management • Compliance requirements • Need for staff training, video broadcasts, and use of technology in teaching and learning • Time constraints around travel between campuses	• Make meetings more efficient and valuable, less time-consuming • Improve attendance and engagement at meetings • Reduce wasted time spent traveling to meetings • Reduce meetings on same topic • Improve cross-departmental collaboration • Improve compliance metrics through better tracking	• Conduct live video calls with any number of participants from any device • Record meetings for review and missed participants • Continue discussion after meeting in secure, private messaging space • Conduct large-scale video broadcasts (including global) • Broadcast messages across customized digital signage	• Better administrative decision making across teams • Streamlined staff training • Improved meeting attendance • Elimination of travel time to meetings • Validated compliance metrics	• Chancellor • President • Provosts • CIO • CBO • CFO

Administrative collaboration
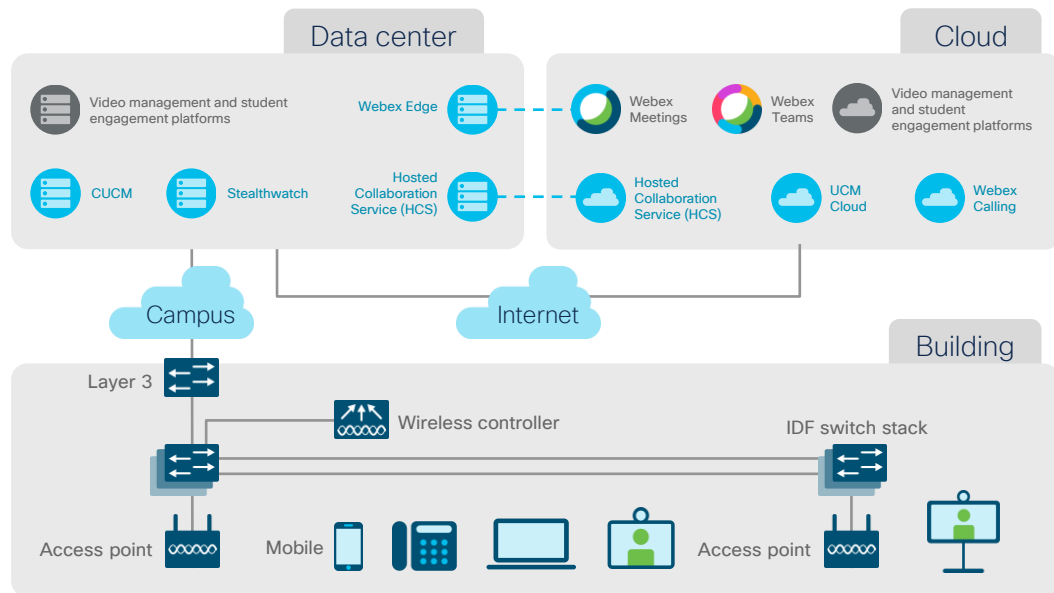
Cisco products

| Component |
| --- |
| Webex Meetings |
| Webex Teams |
| Webex Room Kit, Room Kit Plus, Room Kit Pro |
| Webex Room Series |
| Webex Board |
| Webex Share |
| Meeting Server |
| Webex DX80 |
| 7800/8800 Series IP Phones |
| Webex Edge (optional) |
| Hosted Collaboration Service (HCS) |
| Webex Calling |
| Stealthwatch |

Distance learning

Distance learning

Give students unlimited access to educational resources, no matter where they are.

Collaboration | Security

Challenges and drivers
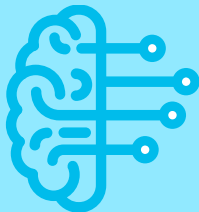
Implement new learning models to drive continuity of learning and flawless learning experiences

Deliver distance learning to reach new kinds of students both on and off campus

Engage virtual experts to enrich and expand learning and student services

Foster faculty collaboration and development to improve quality of learning for students

Distance learning

Give students unlimited access to educational resources, no matter where they are.

Industry drivers

- Revenue tied to student completion of degree(s)
- Reach students who may not be able to come to campus
- Some students not interested in frequent trips to campus for class
- Expand breadth of program and course offerings
- Reduce cost of delivering a course
- Serve a more diverse student body
- Improve institutional brand and reputation

Business needs

- Leverage existing professor expertise across more students
- Reduce student time/cost to travel to campus through remote students
- Expand potential pool of students–remote, continuing education, economically or physically challenged

Capabilities

- Scale live online courses from one to thousands
- Provide interactive chat, Q&A, and whiteboard during class
- View dozens of live students simultaneously
- Extend large lecture hall to remote lecture halls
- Record and archive course lectures
- Schedule professor office hours inside LMS
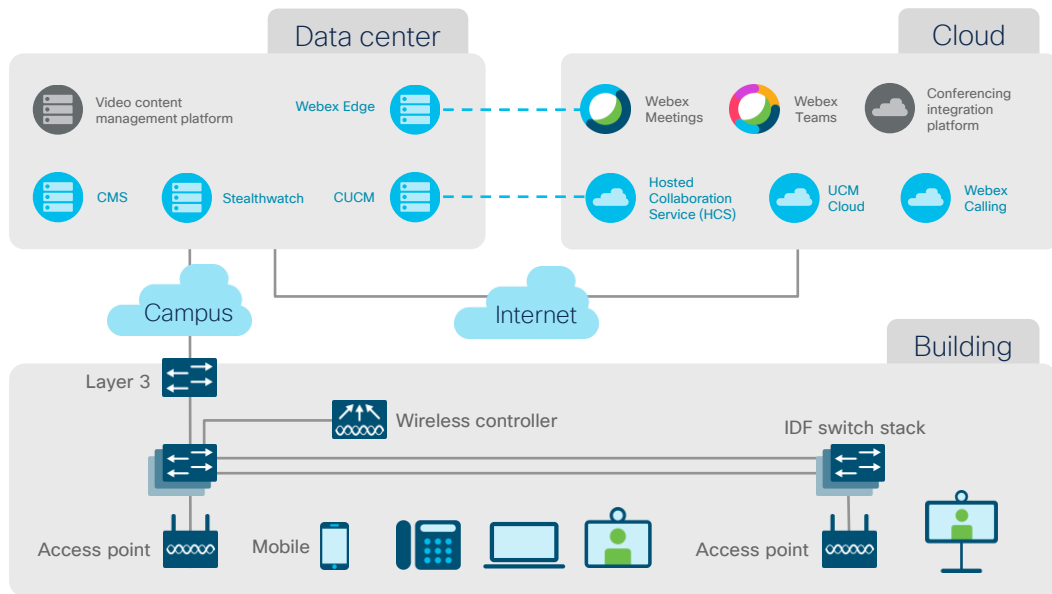- Archive recordings and online chat with files inside LMS

Business outcomes

- Higher student engagement and satisfaction
- Lower instruction cost per student
- Attract students from other institutions
- Reduced inter-campus transportation

Stakeholders

- Chancellor
- President
- Deans/provost
- Chief academic officer
- CFO
- CIO

Distance learning

Cisco products

| Component |
| --- |
| Webex Meetings |
| Webex Teams |
| Webex Education Connector (for LMS) |
| Webex Room Series |
| Webex Board |
| Webex DX80 |
| SpeakerTrack, PresenterTrack |
| Webex Edge (optional) |
| Stealthwatch |

Cisco Webex

Education Connector for Teachers

Classroom Collaboration

Meet where you teach with the Cisco Webex Education Connector integration.

Seamlessly integrate Webex Teams and Webex Meetings into your learning management system.
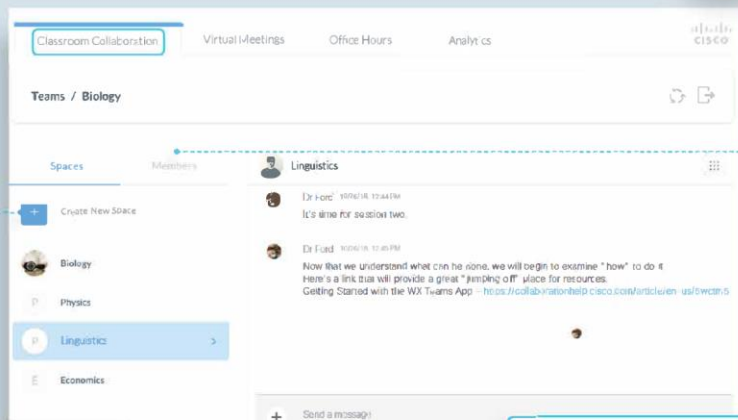
Invite students from the **Members** tab where they can message over desktop, tablet or phone

Learning Management System (LMS) Support:

- Canvas
- Moodle
- Blackboard Learn
- Blackboard SaaS
- D2L Brightspace
- Sakai
- Schoology (coming soon)

Connect your LMS:
https://www.educonnector.io

Learn more:
https://apphub.webex.com/meetings/applications/cisco-webex-education-connector-for-learning-management-systems

Network, endpoint, and web security

Network, endpoint, and web security

Create a safe and secure learning environment by blocking cyberthreats that try to access your network and disrupt learning —on campus or off.
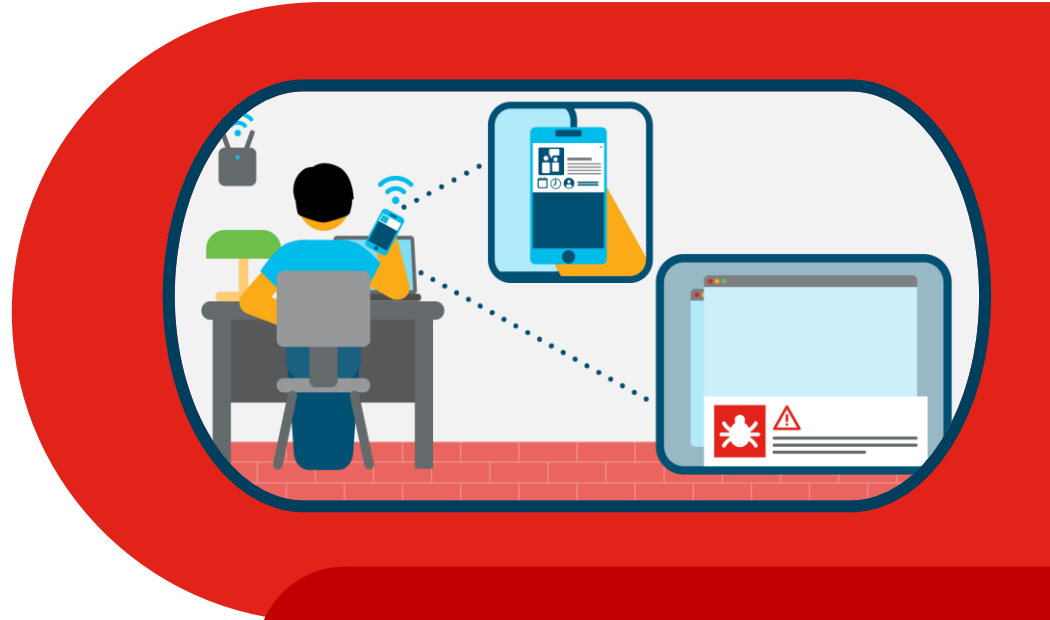
Collaboration | Security

Challenges and drivers

Protect data from cyber-attacks

Securely manage the multitude of faculty, staff, and administrative devices connecting to the network

Detect and remediate online threats to reduce harm to institutional reputation

Network, endpoint, and web security

Create a safe and secure learning environment by blocking cyberthreats that try to access your network—on campus or off.
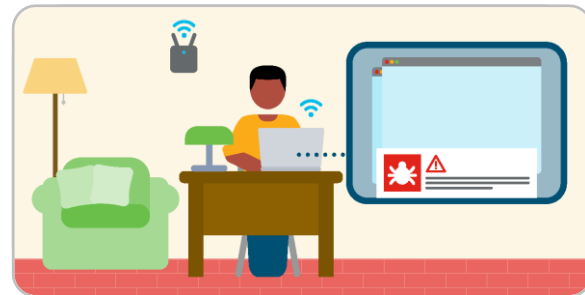
Industry drivers	Business needs	Capabilities	Business outcomes	Stakeholders
• Cyber crime is on the rise; universities are target-rich environments	• Effectively and efficiently deploy, manage, secure, and maintain a BYOD environment for students, and sometimes staff, as well as university-owned devices	• Allow student BYOD to be on-boarded effectively	• Reduce campus legal issues due to information theft, online crime, etc.	• Chancellor
• Nation actors steal university data with coordinated attacks	• Protect university research data while allowing inter-campus projects	• Detect network traffic anomalies	• Increased student availability and use of learning technology in the classroom	• President
• Colleges and universities required by law to protect student personal data	• Protect personal student data	• Detect malicious behavior from encrypted transmissions without compromising security	• Reduced institutional risk of loss	• Provost
• University research data highly valuable	• Protect core school or university administrative assets	• Defend highly sensitive administrative or research devices	• Reduced ransomware threat	• Deans
• Reputational damage caused by security breaches	• Reduce institutional risk of loss	• Enable new threat detection quickly	• Protected school or university reputation	• CIO
		• Extend data protections and monitoring to any campus services, anywhere	• Increased government/corporate research funding opportunities	• CFO
			• Reduced campus legal issues due to information theft	• CISO
			• Reduce risk of network downtime	

Network, endpoint, and web security
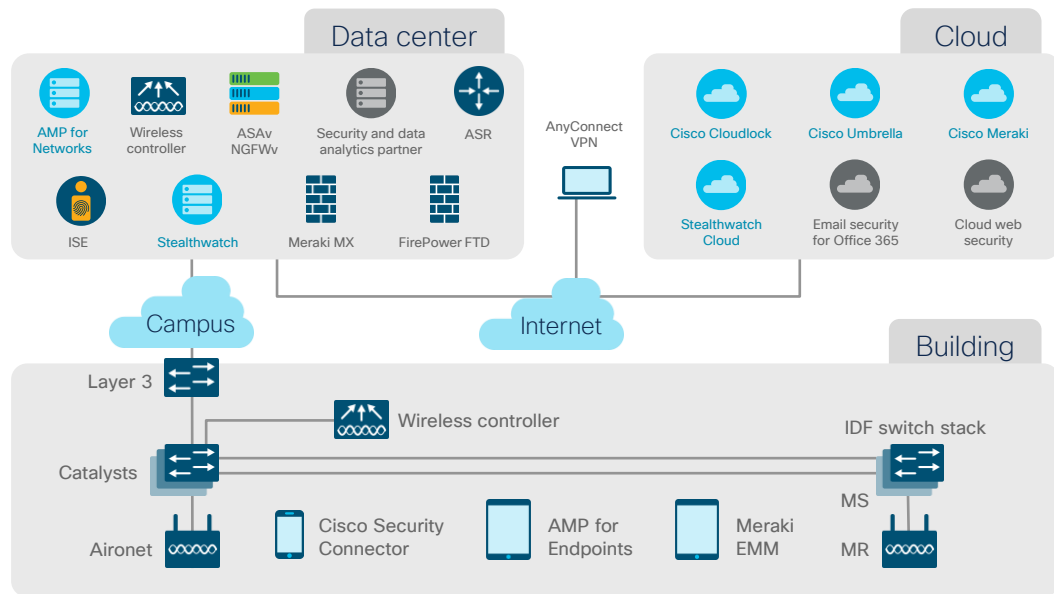
Cisco products

Component
Umbrella
Cloudlock
Adaptive Security Appliance (ASA) 5500-X Series with Firepower Services
Firepower Series
Firepower Threat Defense (FTD)
Firepower Management Center
AnyConnect VPN
Stealthwatch, Stealthwatch Cloud
Advanced Malware Protection (AMP) for Endpoints
Security Connector (CSC) for iOS
Email Security for Office 365
Virtual Solutions: Adaptive Security Virtual Appliance (ASAv), Next-Generation Firewall Virtual (NGFWv)
Meraki Security (MX) Series
Meraki Enterprise Mobility Management (EMM)

Success in action

Success in action

See how educational institutions securely enable distance learning, administrative collaboration, and cybersecurity

Shawnee Mission School District

📍 Johnson County, Kansas
🧑 31,800 students and instructors

Shawnee Mission School District is using collaboration technology to securely empower teachers, connect classrooms, engage parents, and enable the next generation to learn and think differently with digital experiences.

Use cases:
- Administrative collaboration
- Distance learning
- Network, endpoint, and web security

" *We want to provide students the opportunities they need to be the people they want to be. The Webex tools that we use provide them chances to see things that maybe they wouldn't see otherwise*"

– Drew Lane, Executive Director of Information & Communications Technologies, Shawnee Mission School District

Challenges
- Traditional, centralized IT model
- Lack of collaboration capabilities
- Inefficient meetings tools
- Limitations to learning caused by outdated technology

Solution
- Cisco Webex Meetings
- Cisco Webex Board
- Cisco Webex
- Cisco Unified Communications Manager
- Cisco IP Phone 8800

Outcomes
- Change management program facilitated for employees
- Maximized staff resources
- Personalized and individualized real-time learning
- Higher parent and student engagement inside and outside school hours
- New opportunities for teachers to expand the classroom and continue educating as distance learning grows in importance

Open Access College

📍 Australia
👤 200 staff and 2,500 students

Open Access College provides lessons remotely not only to cut costs, but also to create an agile, more connected learning environment.

Use cases:
- Administrative collaboration
- Distance learning

" *Though digitization, we're able to innovate and be more agile in the way we deliver education to remote areas.*"

– Julie Taylor, Principal, Open Access College

Challenges
- Improve access for students no matter where they are
- Enhance education delivery and improve the learning environment
- Better enable staff and administrative collaboration
- Need to lower costs

Solution
- Collaboration solutions enable distance learning and administrative collaboration
- Networking solutions to provide the foundation of the network securely

Outcomes
- Increased agility to meet future course enrollment needs
- Reduced annual phone costs by more 96% with connected network learning
- Achieved a tenfold increase in enrollment over five years for statewide language classes

CISCO *Live!*

Lewisville Independent School District

📍 Lewisville, Texas
👤 59,000 students and staff

Lewisville Independent School District worked to safeguard students and staff at scale.

Use cases:
- Network, endpoint, and web security

" The combination of Umbrella and Firepower NGFW enable us to proactively block threats we weren't blocking before, troubleshoot faster and easier, and know with unprecedented specificity how we're protecting our students against threats, so they can concentrate on acquiring the skills and knowledge they'll need after graduation."

 – Chris Langford, Director of Network, Infrastructure, and
   Cyber Security

Challenges
- Safeguard students and staff members from unsuitable content and threats
- Provide enterprise-level security on a school-friendly budget
- Improve security visibility and ratings

Solution
- Cisco Umbrella
- Cisco Firepower 4150 Security Appliances
- Cisco AMP for Endpoints
- Cisco Identity Services Engine (ISE)
- Cisco Cloud Email Security
- Cisco Stealthwatch

Outcomes
- Cut remediation time by 50 percent
- Improved BitSight score by 110 points
- Significantly decreased command-and-control and phishing traffic

Conclusion

Keep in touch

Cisco Education
Explore solutions, case studies, videos, and more

cisco.com/go/education

Education Portfolio Explorer
Discover how technology architectures work together to deliver use cases

cs.co/educationportfolio

Thank you