The Next Generation Digital Learning Environment & A Framework for Change

Renee Patton
Global Director, Education
Industry Solutions Group

October 16, 2018
Presentation Agenda

1. Major Trends
2. Education Disrupted
3. Next Generation Learning Environments
4. Solutions for Higher Education
5. A Framework for Change
Major Trends
Technology Trends in Higher Ed

Campus-Wide IT Strategy

Digital Learning
- Immersive Video
- Active Learning
- Support Services
- Student-Centered

Data-Driven Campus
- Connected Campus
- Network Analytics
- Troubleshooting
- Space Utilization

Artificial Intelligence
- Gap identification
- Digital assistants
- Friendly robots
- Faculty as facilitators

Campus & Cyber Security
- Network security
- Physical safety
- Student data and info
- Security policy
Education Disrupted
The Number of A-G Graduates has Increased by 28%

California has a higher college attendance rate than all but ten states

3% higher than the national average of 43%

50% increase in enrollments at UC campuses this fall
Prices have increased for Eight Straight Years

Total outstanding student loan debt in the US is $1.52 Trillion

Second largest form of consumer debt, only behind mortgages

California is ranked at #4 – 50% of graduates have debt
Fewer than 50% of Students Complete their Degrees within Six Years

1/3 students drop out entirely and never finish their degrees

Students want interactive and self-guided approaches

Challenging to integrate new technologies into established practices
From 2001 to 2014, arrests for weapons possession ranged from 1,000 to 1,400 annually.

60% of Higher Ed institutions reported at least one breach (55% for other industries).

One university paid $28K in Bitcoin to hackers who took control of campus email and network.
The cost of attacks

Any security breach at a college or university can have serious implications; these may include legal ramifications for violations to FERPA or CIPA, damage to an institution’s reputation, lost productivity, and significant financial costs. Time away from teaching and learning—as well as limits to college or university operations—is a critical concern.

49%
Of respondents that say that their systems were down for nine hours or more as a result of a recent security breach.

32%
Of respondents say that more than half of their systems were impacted.

51%
Number of attacks that resulted in financial damages of more than $500,000.

23%
Number of attacks that resulted in losses of between $100,000–$499,000.
Next Generation Learning Environments
Creating Greater Capacity at Utah State University

- 70% more classrooms equipped with video
- 49% increase in new programs
- 22% increase in student growth while minimizing cost
Creating Cost Savings at Northampton University

Consolidated two buildings into one based on space utilization analysis

Using intent-based networking to personalize, provision, manage network as a single fabric

Students can work across campus...enrollment now increasing
Improving Completion Rates and Saving Money with 4-VA

26,594 students impacted

19 courses redesigned with OER, $1.4M in textbook savings

Flexibility helps non-traditional students complete courses
Better Supporting Faculty at U of Wisconsin Whitewater

Took advantage of strategic partners

Paid stipends for technology explorer programs
Creating **Safer, More Secure Campuses**

Uses core network and facial recognition to ID non-residents

- 100% accuracy

Fraction of cost of optical turnstiles

Better student experience

University of San Francisco
Securing Patient and Research Data at University of Kansas Hospital

- Decreased threats by +/- 99%
- Shortened investigation time by 75%
- Increased visibility and automation while decreasing exposure to ransomware
Solutions for Higher Education
Serve as a Strategic Partner: Focus on the Problems to be Solved

Digital Learning
- Virtual Learning & eLearning Spaces
- Student Services
- Teaching & Research Collaboration

Digital Campus
- DNA for Education
- Secure Education Cloud
- Student Engage - Mobility

Secure, Intelligent Platform for Education and Research

Security Everywhere

Cisco Services + Partner Ecosystem
A Framework for Change
Framework

1. Vision & Leadership
2. Culture
3. Methodology
4. Technology

Digitizing Education
Framework

Phase 1: Vision and Leadership
- What is the what? The BIG idea
- Priority investments and business case
- Communications and processes
- Stakeholder engagement

Phase 2: Culture
- Buy-in
- Engagement
- Adoption of technology
- Champions to drive scale

Phase 3: Methodology
- Teaching pedagogy
- Use cases
- Best practice collaboration
- Student engagement and experience

Phase 4: Technology
- Core foundation – integrated platform
- Ubiquitous wireless access
- Security everywhere
- Video and collaboration
- Data center and analytics
- Ecosystem partners