

# CONNECTED LEARNING IS THE FUTURE OF HIGHER EDUCATION

Higher education is undergoing tremendous change. Online learning, the IoT, 5G, and a new generation of hyper-connected students are making always-on-everywhere connectivity increasingly mission-critical.

## SIGNIFICANT CHALLENGES IMPAIR FULL MOBILE COVERAGE

- Heritage and LEED building materials
- Unusual architecture
- Geographically dispersed buildings
- Surges in demand during events
- Competing signals
- Wi-Fi capacity limitations
- Surrounding physical features

*"While digital technology enhances the student's education and experiences, the IT infrastructure at higher education institutions is in distress."<sup>1</sup>*

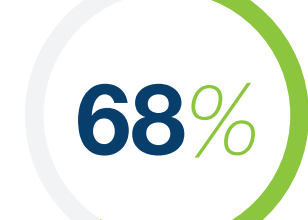
## GEN-Z STUDENTS THINK MOBILE FIRST

The incoming student population knows only a digital, connected world. They expect speed and reliability, and schools must respond to attract students.

### GEN-Z

- Prefers mobile delivery over desktops or laptops
- Expects native, built-in collaboration
- Requires anytime, anywhere connectivity
- Wants easy and seamless BYOD

*"In today's competitive academic environment, students look for fast, secure wireless connectivity when deciding on their college of choice."<sup>2</sup>*

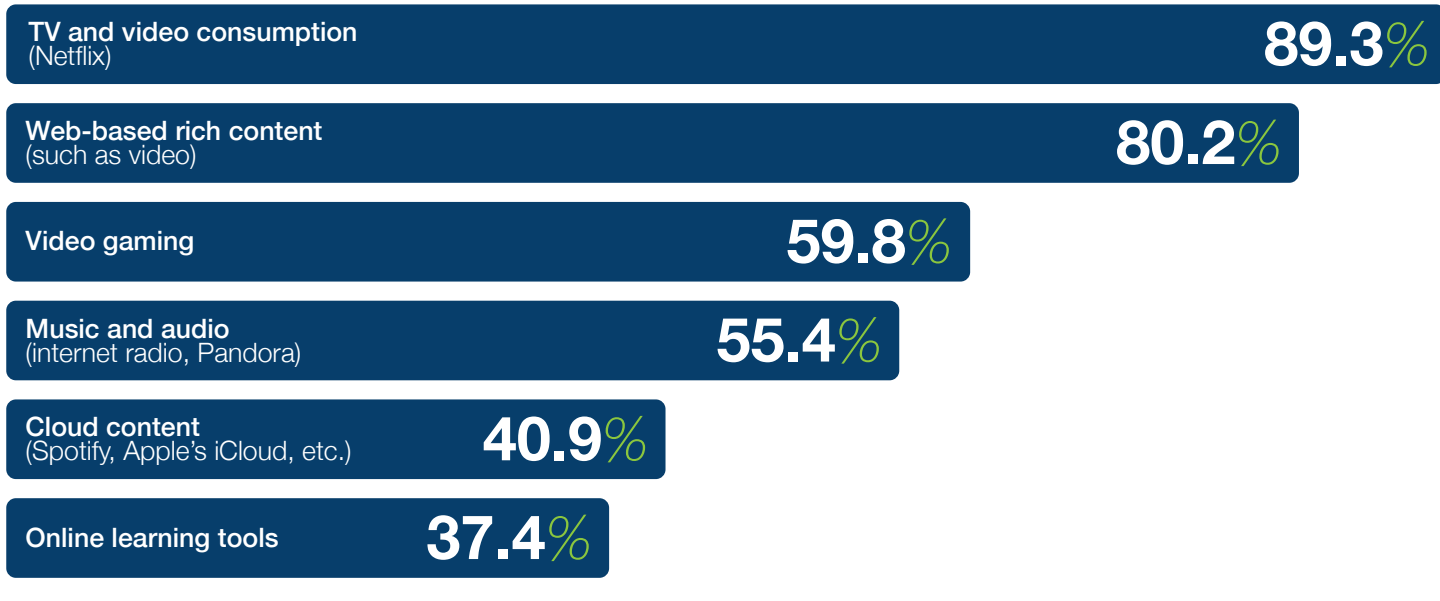


of students say technologies and infrastructure are factors in college choice.

## TECHNOLOGY IS AN INTEGRAL PART OF THE GEN Z EXPERIENCE

- 80% feel distressed if they're away from their phones
- 72% spend at least two hours daily on YouTube
- 66% use more than one device at a time
- 62% won't use a website that is hard to navigate or slow to load
- 40% say they're phone-addicted (but it's not a problem)

## SCHOOLS RATE THESE THE TOP SIX BANDWIDTH-CONSUMING APPLICATIONS



## STUDENTS LEARN DIFFERENTLY IN A DIGITALLY-CONNECTED WORLD

Online course enrollment has more than quadrupled in the U.S. in the last 15 years.

Digital access enables students to get information faster and more independently

The digital classroom is the new paradigm in teaching and learning

New digital tools enrich instructional approaches, disciplines and learning goals



## LEAD THE WAY TO A CONNECTED FUTURE

Campus leaders have a huge challenge ahead. A new generation of learners is embracing emerging technologies, and it is all connected.

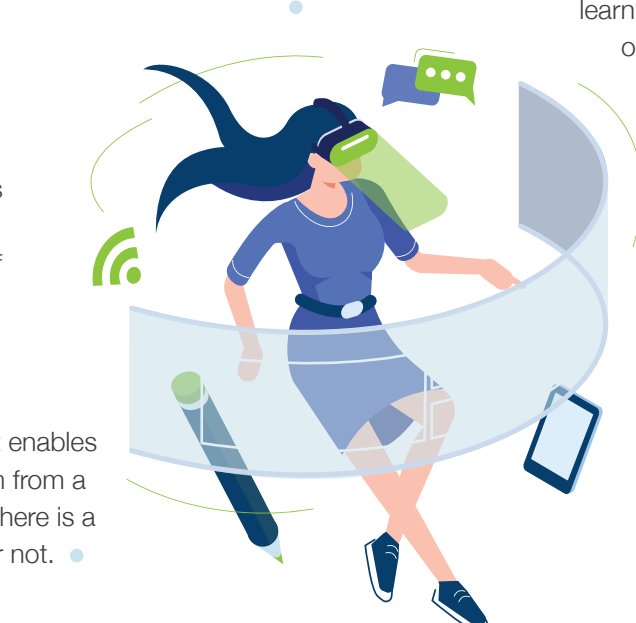
*"With the upsurge in connected devices, and their insatiable appetite for bandwidth, universities must boost, manage and optimize bandwidth usage in order to maintain network efficiency and cost-effectiveness."<sup>3</sup>*

## SCHOOLS SEE THE NEED FOR CONNECTIVITY

- 45% of schools are considering technology to enhance network capacity
- 23% of schools are considering in-building DAS
- 18% of schools are considering outdoor cellular sites or towers
- 8% of schools have deployed DAS

## 5G'S SPEED SETS THE STAGE FOR MORE SOPHISTICATED APPLICATIONS

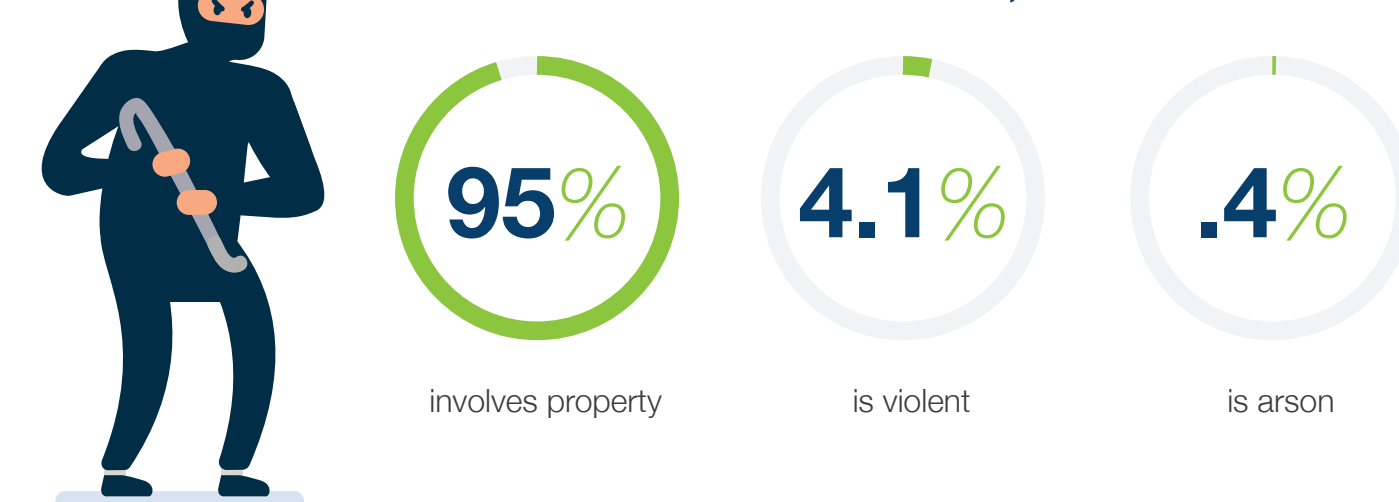
- 5G enables augmented reality and virtual reality
- The front of the classroom is becoming a digital canvas that can support any type of content from any device
- Cloud-based content enables instructors to stream from a classroom, whether there is a PC in the room or not.
- Increased speed creates a seamless video experience
- Video is the preferred learning platform for 60% of Gen Z students
- At 10 gigabits per second, 5G is 100 times faster than 4G
- The campus community expects a speedy, ubiquitous, (including residential) network with seamless roaming.



## CONNECTIVITY NEEDS SPAN THE ENTIRE CAMPUS

Campus Grounds	Hospital	Stadiums
Cloud services	Electronic health records	Phone calls and texts
Video conferencing	Digital x-ray imaging	Social media
Online data storage	HIPAA-compliance	Security
BYOD	Pagers	Staff
	Wireless medical devices	Media
	Smartphones	
	Tablets	

## CAMPUSES ARE GENERALLY SAFE, BUT CRIME HAPPENS



## SAFETY SYSTEMS AND PROTOCOLS ARE INCREASINGLY SOPHISTICATED AND CONNECTED

- Complex security systems
- Digital training for security personnel and students
- Push alerts
- Security for off-campus students
- Fire protection
- Video surveillance and processing
- Remote building locking
- Multiple notification systems to reach all populations
- Sophisticated access control systems, including the use of smartphones
- Accurate records for Clery reporting
- Private two-way radios Reference

## VENDORS AND VISITORS PUT ADDITIONAL DEMANDS ON MOBILE NETWORKS

- Vendors require POS services
- Vending machines connect to report inventory
- Large groups of event attendees put extreme demands on mobile networks
- Visitors connect to get directions, contact family, and find parking

**SOLID** In-Building Mobile Solutions Are the Answer  
 SOLiD in-building mobile solutions provide consistent, on-demand mobile capacity. Students, staff, and visitors have immediate access to information and communication, a safe campus, and the connectivity to embrace emerging technologies.

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## SOURCES

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