





# A new way to work for students, faculty and administrative staff

More than a quarter of a billion students globally, will be enrolled at institutions of higher learning by 2025<sup>1</sup>. With growing tuition fees making higher education unaffordable for many families, colleges and universities are being pressed to embrace innovative, cost effective learning tools that can make earning a degree far less expensive.

Millennials, also referred to as Generation Y, are classified as the population born between 1980-2000's, in an era of technological advancement that includes the Internet, smart phones, tablets, and multiple social media websites. "By 2025, millenials will account for 75 percent of the global workforce<sup>2</sup>..."



Accommodating a growing volume of students necessitates transformation of the traditional campus delivery, adapting to the millennial lifestyle, and harnessing new technology. Although many institutions of higher learning have addressed the diverse challenges that come with a modern or legacy technological infrastructure, many campuses use disparate communication technologies that do not interact well.

This paper discusses the opportunities for higher education institutions to alleviate growing student, faculty, and administrative demands, such as adopting digital fluency among faculty staff, boosting productivity in the physical and virtual classroom, remaining competitive to attract prospective students, and ultimately offering insight that will help unify the future of higher education.

Growing uptake of new collaborative technologies among students

The typical student today owns between two and five personal devices consisting of laptops, smart phones, and tablets.

"Students today are coming onto campus with three IP addresses each and those are mobile devices. The way they want to communicate is anytime, anywhere and whatever modality they want to use."

John Isenhour, Associate CIO & CTO, Kennesaw State University

#### Pervasive Wi-Fi

Currently, many universities do not offer Wi-Fi in some spots on campus, or where they do - the connection is slower than dial-up Internet connection - making it impossible to service just one of the student's many devices. Institutions of higher learning need to ensure leading edge information and communications technology is available, both for students and their staff.

Universities need to support communication anywhere, anytime, on any and multiple devices by implementing a ubiquitous Wi-Fi network that covers the entire campus, is available to all users, supports all devices, and performs like a wired connection.

## Accessing a library of student information

Millennials want the capability to access everything they need for class such as email or instant messages with classmates and professors, lecture presentations, class notes, e-textbooks, Pearson Education applications such as "MyMathLab, Connect, Mastering Physics," Microsoft applications such as Word, PowerPoint, Excel, Photoshop software, etc. through one application that can be easily and seamlessly accessed and transferred from multiple devices.

Typically, students have to log into separate platforms within the university website to access information such as school email, personal account information, and course content.

Students' ideal state is to eliminate complexity, by unifying separate applications – for example, to find appropriate documents, work on projects and assignments, access email, and manage personal account information such as course registration.



New era of operational and service demands

Students and faculty alike demand immediate response from advisors. admissions, bursar, registrar, financial aid, public safety and all other departments. Currently, students can spend days and even weeks without receiving a response from an administration member on vital issues such as a tuition payment and class enrollment, and it can take employees weeks without seeing other coworkers face to face, relying on email and voicemail as their main form of communication. This leads to frustration and a break in the chain that connects the campus.

Students have increasingly busy lifestyles composed of class, schoolwork, studying, working, interning, and keeping up with social and family life. Universities of the future need to offer a solution where learning is no longer confined within campus boundaries. A good number of institutions are already offering MOOCS (Massively Open Online Courses).

Of over 1,345 students, 50 percent believe they dont need a physical classroom to learn. In addition, 53 percent think that online colleges are reputable and 39 percent view the future of higher educations as being virtual.



This entails an IT infrastructure that can adequately support students anywhere and anytime regardless of their location, ensuring that online students enjoy the same quality learning experience as their campus cohorts. According to a study conducted by Internship.com current college students believe it is easier to learn in a traditional classroom as opposed to an online class. This is because students believe the technology isn't fully developed yet, but this will change as the right technology breaks more barriers and creates better user experiences that seamlessly connects students and their professors3.

After interviewing students from various universities, we found they had a below par experience when it came to online classes and distant learning.

The structure of most online classes is as follows:

Online classes have "limited" to no interaction between professor and students except via email.

Communication through one channel, especially email, can be very frustrating for students who are confused with course content and need clarification. For example, a confused student who lives in New Jersey for the summer and attends school in California will have a difficult time obtaining further clarification through email on an in-depth accounting concept. A limited number of professors have prerecorded lectures that are uploaded to the university portal, but still, the method for interaction doesn't exist. The only vehicle for students to ask questions to either professors or fellow classmates is through email rather than instant messaging or another form of communication. Since there are no lectures, the majority of online classes are composed of the students teaching themselves the course curriculum by reading the textbook and reviewing course presentations.

Another component of online classes is made up of discussions where students are required to read a posted article, post a brief reaction to the article, and respond to other students' responses. Professors can also assign group papers or other assignments. Again, interaction between fellow students is completed through email. Most university portals don't offer any collaborative tools to accommodate this group work.

1.

#### Professor emails students

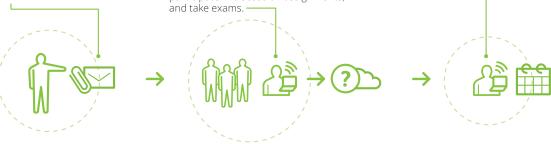
syllabus containing information such as course description, textbook name, and important due dates/exam dates. 2.

#### Students access course content

by logging into some type of university portal or Learning Management System (LMS) where they access presentations and lecture notes, view the class roster, participate in discussion assignments, 3.

#### Students work on their own schedule

to complete assignments by the set due date, read selected textbook chapters, review presentations and complete the scheduled exams.



The final component of online classes is the exams. The exams are distributed through the university portal and are mostly composed of true/false, multiple choice, and short answer questions derived from the course textbook. The exams are typically open book/note and have a set time limit.



What's missing? Among the students interviewed, there were three conclusive themes. First, students enroll in online classes because they need the flexibility of location and time to obtain credits rather than a physical classroom on campus at a specific time. The second unanimous theme was that the current state of online classes did not provide professor reinforcement for retention purposes. Finally, the students insist there must be a viable alternative to interact with the professors besides email.

# Fostering productivity with the emergence of new technology

Most college coursework involves team projects and assignments. The challenge is that most students do not have the same availability to meet face-to-face to work on a project, and many universities don't offer students the proper collaborative tools necessary to amplify team efforts.

Students demand collaborative tools, such as web collaboration (screen sharing) and unified communications, that allow them to amplify collective efforts for projects and assignments, even when they are not physically together. These tools will allow students to be productive virtually, similar to working on a project face-to-face from the comfort of their own home, on their own schedule.

Universities of the future should also look into video recording classroom lectures, so students can have the ability to watch the lecture on demand and retain any lost information that was not understood from the initial listening or to review how to solve a particular problem.

Professors could also upload additional practice problems, add notes, and share documents instantaneously. Nothing compares to one-on-one "in person" tutoring or help from a professor, but what if there was a solution that allowed students and professors to have the same in-person tutoring experience using video, web collaboration, and unified communications in the virtual classroom?

# Spiraling study costs for students in an economic downturn

One of the biggest pain points for all students is the cost and utilization of textbooks and course material. According to the College Board's Latest Trends In College Pricing report, in 2011-2012, books and supplies cost students at four-year public colleges an average of \$1,168<sup>5</sup>. Many students end up spending vast amounts of money on a textbook that they may open and read one time or sometimes not at all. Many of these textbooks are also outdated.

The Connected
Campus
fundamentally
transforms the way
professors teach,
students learn, and
administration
work-delivering
operational
excellence,
unprecedented
engagement, and
and campus safety<sup>4</sup>.

Consider a student taking a class in 2014 and their course textbook may be from the early 2000s or late 1990s. Students don't want to learn outdated material that was relevant 14 plus years ago; they want to learn about current events and then relate that current thinking to the essential topics of the course curriculum and how learning the material will positively impact their careers.

The future of higher education needs to do something to fix this problem. The solution starts with the reduction of textbook and course material costs, and the transfer to current event teaching and learning through unified communications, video applications, and customized electronic textbooks based on relevant and engaging information.



#### The connected campus

The Connected Campus fundamentally transforms the way professors teach, students learn, and administration work-delivering operational excellence, unprecedented engagement, and campus safety<sup>3</sup>. It unifies all aspects of the physical and virtual campus by supporting all forms of communication between students, professors, administration, and all departments, through multiple devices regardless of location, seamlessly and instantaneously by amplifying collective efforts and dramatically improving academic performance.

Typically, students interact with professors during scheduled class times, through email, or during the professor's designated office hours - a fixed time and date when students may come to ask questions and get extra help or further clarification. Some professors can be very flexible with their office hours and others can be almost impossible to contact. Students and professors alike want a way to aggregate conversations across multiple channels, platforms and devices to alleviate frustration, elongated emails, and increase overall productivity.

Imagine a future where:

- Learning is no longer confined within campus boundaries
- Outside courses exist side by side with those from the host university
- Traditional onsite learning is augmented by immersive video, social collaboration, mobile technologies, wireless, cloud, social media, and unified communications
- There is no such thing as snow days or cancelled classes – the virtual classroom is always in session
- Students have instant access to all the resources they need on any and multiple devices, anytime, anywhere through one application
- The pain points of current students and faculty are alleviated
- All aspects of the physical and virtual campus are truly unified and connected

#### **TRADITIONAL CLASSROOM**

from textbooks and chalkboards to new learning methods



### **DISTANCE/VIRTUAL CLASSROOM**

anywhere students, on-demand 24x7, remote learning.



Students say:

75%



Students say:

19%



50%





outcomes<sup>a</sup>

technology helps achieve academic



use computer in the classroom<sup>a</sup>



use social media to engage in the



virtual learning they don't need a provides more flexibility to take classes<sup>a</sup> physical classroom education will be to learn<sup>b</sup> more virtual<sup>b</sup>



# THE A A B

Amplify productivity and collaboration through communication tools such as web collaboration, video conferencing, and instant messaging to connect traditional and virtual students, professors, and administrative staff with departments- anywhere, anytime, on any device.

#### **CAMPUS MOBILIT**

Students access services through mobile or tablet devices to learn and interact while on the move.







#### Higher Education CIOs say:



tablets play a significant role in institutions' future technology plans<sup>c</sup>



75%

mobility and BYOD (Bring Your Own Device) has increased in importance<sup>c</sup> Unify proved that the OpenScape Portfolio would provide our staff and students with the rich user experience they are demanding. At the same time, Unify demonstrated that it understood the education and commercial environment we operate in. Ultimately, improved communication technology that enables our staff and students to fully embrace BYOD, new ways of working and collaborating, whilst still remaining reliable and scalable, is a core component of our future success.

Dr Darrell Sturley, Deputy CIO, The University of Oxford

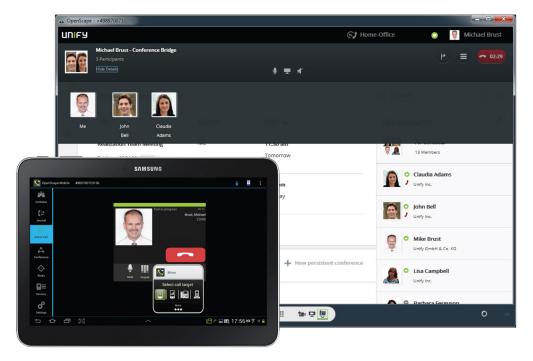
# Discover OpenScape - today's path to a connected campus.

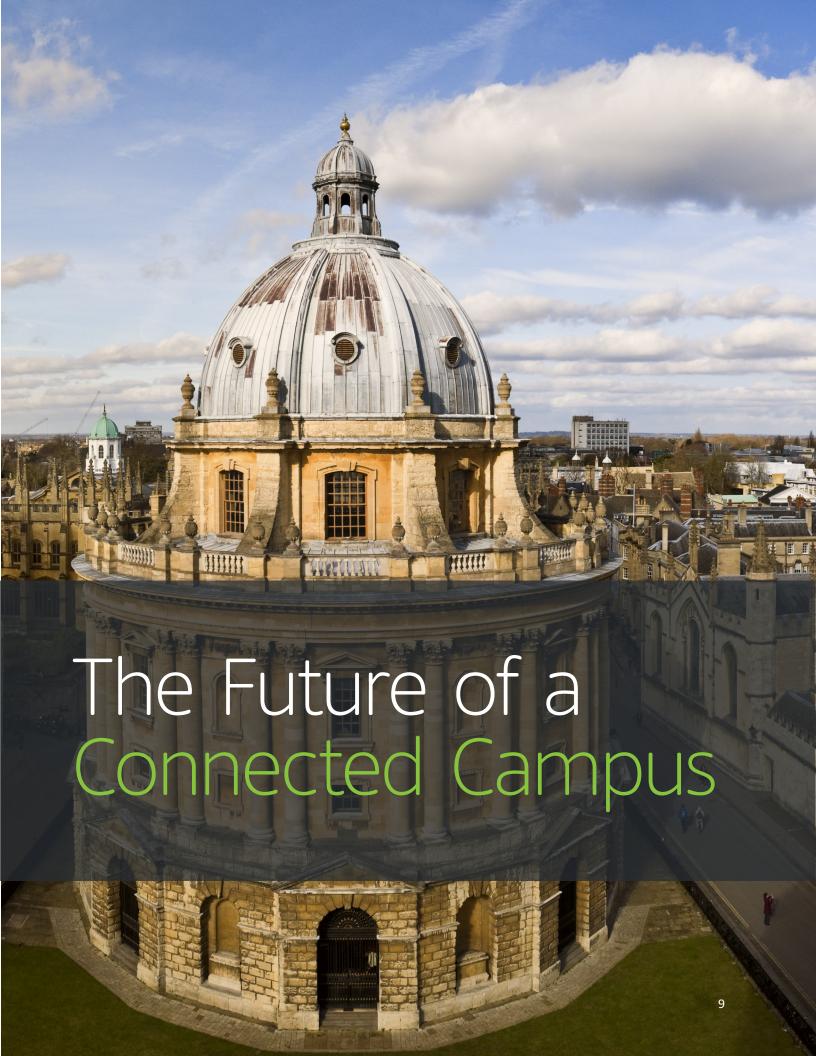
Unify's OpenScape portfolio helps institutions dramatically improve collaboration by unlocking collective potential of faculty staff and students. There are so many different communications technologies available that faculty and students may often feel frustrated and overwhelmed, and at the same time many still rely on traditional methods like email, office hours and voice mail.

For today's world of mobile and distributed users, Unify's solutions are designed to close that distance gap by providing integrated communication and collaboration tools that make education more relevant.

Unlike fragmented 'point' solutions that all operate differently, OpenScape provides a unified set of tools for audio and video conferencing, web-based collaboration and content sharing.

Anyone can easily be reached via onenumber services whether on or off campus, and the tools can be built-into the applications students and faculty staff use today, on their preferred devices.





Circuit is an experience designed to support the fluid workflow expected by millennials.



# Circuit – The future of a connected campus

Circuit - the next generation collaboration platform from Unify coincides with the connected campus philosophy and OpenScape portfolio to enrich the education and teaching experience in Higher Education.

With Circuit students, professors and administration will be able to harness higher education trends such as: virtual and distance learning, campus mobility, expansion of engaging relevant teaching, improving communication and collaboration, and implementing technology in the classroom. Students will be able to see everything they need such as contacts, files, social media applications, learning management systems, important documents, and course material through a "single-pane-of-glass" view across desktops and mobile devices.

Professors will be able to host review sessions and office hours off campus. Online classes will be able to operate alike to the physical classroom - allowing students and professors to interact through multiple channels via instant messaging, social media, voice, text, and email. Snow days and canceled classes will become extinct. All aspects of the virtual and physical campus will be fully connected.

Students and faculty will be up to date on conversations on or off campus regardless of how the conversation started- whether through instant messaging, social media, email, or phone- as well as progress via any channel even if they are on the move. Circuit will redefine how today's and tomorrow's student, faculty, and administration communicates and collaborates by combining the ability to aggregate communications across multiple channels.

Circuit is composed of a plethora of groundbreaking features and applications, carefully integrated into a single interface to heighten the student experience and encourage universitywide adoption, and seamless integration into the education process. With a consistent and reliable communications experience- more time can be focused on studying, learning, and providing relevant education. Conversations become vibrant regardless of the channel selected-video, audio, screen and document sharing, chat, links or attachments-uniting students and content into a single communication space. Students, faculty, and administration will be able to obtain information when it is needed, find peers and academic staff, as well as course content instantaneously.

Unify's goal in designing Circuit was to create a solution that is as intuitive, simple, and joyful as the applications students use in their social and personal life, while integrating the experience and applications within higher education institutions.

To learn more, please visit unify.com.



#### **About Unify**

Unify is one of the world's leading communications software and services firms, providing integrated communications solutions for approximately 75 percent of the Fortune Global 500. Our solutions unify multiple networks, devices and applications into one easy-to-use platform that allows teams to engage in rich and meaningful conversations. The result is a transformation of how the enterprise communicates and collaborates that amplifies collective effort, energizes the business, and enhances business performance. Unify has a strong heritage of product reliability, innovation, open standards and security.

unify.com









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