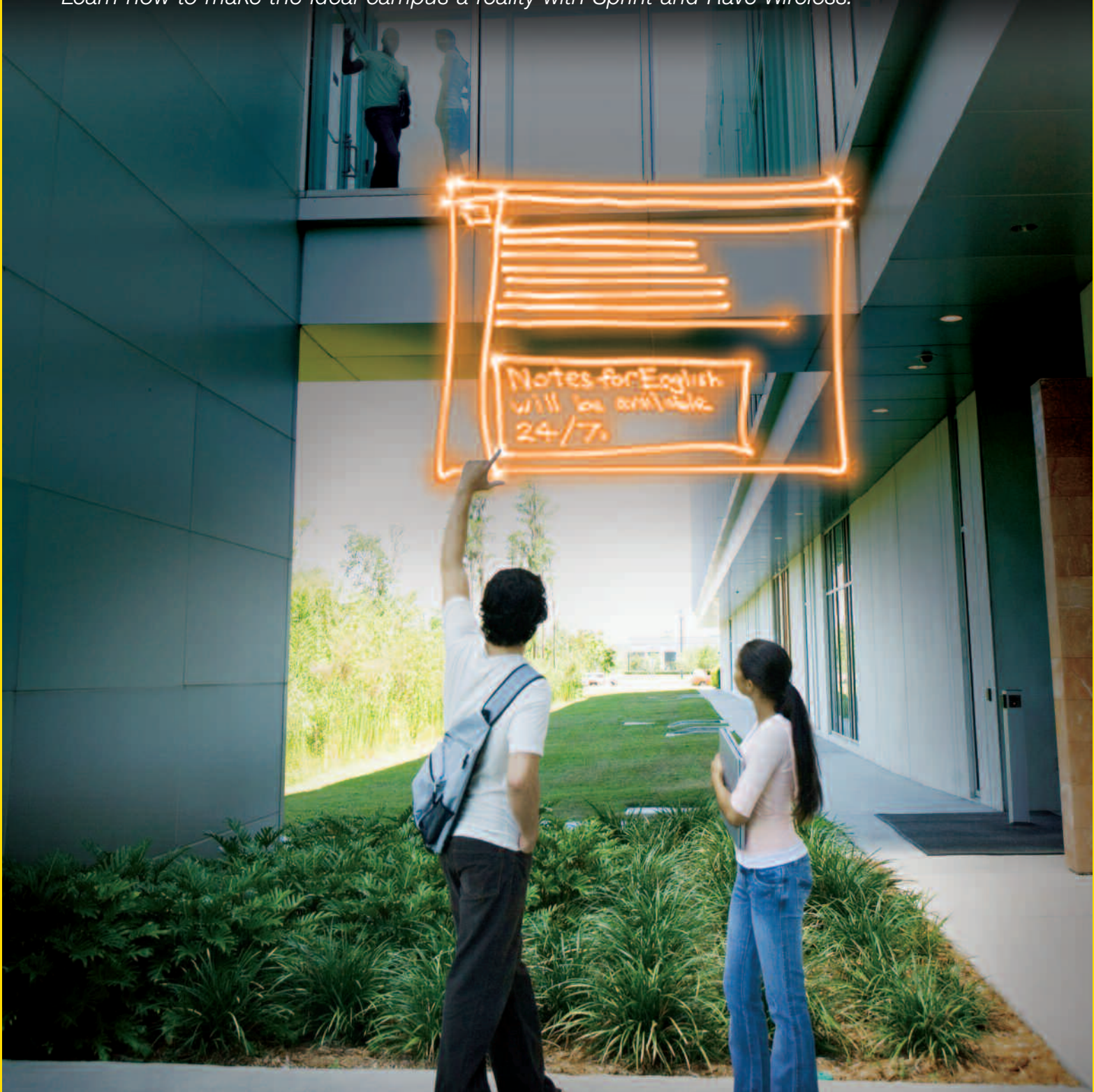



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Cell Phones on the University Campus: Adversary or Ally?

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Today's university students have adopted their mobile phones as their main communication gateway to the world, creating a spectrum of new challenges for university telecommunications professionals. Instead of taking advantage of the mobile phone as a learning tool and campuswide communication device, many universities and colleges are spending time and money maintaining and installing outdated landline and voicemail technology to communicate with students. The result is time-delayed, inefficient, and even failed communications with the student body. Universities and colleges need to take advantage of the proliferation of the mobile device in order to effectively communicate with their students, instead of fighting a technology trend that is here to stay.

Campus Technology Trends

Today, more and more colleges and universities are combining their telecommunications departments and information technology departments to tackle a broader set of issues. In years past, campus telecommunications managers directed their efforts toward installing and maintaining high-end landline systems for communicating critical and noncritical campus information. Personnel were concerned about ensuring reliable and profit-generating long-distance contracts and creating group and remote mailboxes. Telecommunications has become a broader discipline focused on integrating and leveraging technology investments and advancements across the campus. Tasked with solving the problem of tailoring communications technology to meet and advance the

university's mission while meeting the new demands of today's always-connected student, the higher-education telecommunications manager's job is even more challenging.

The availability and maturity of today's wireless technologies will evolve continually over the next five years, enabling universities to steadily improve real-time accessibility to information and student communications. Eventually, mobile devices, wireless fidelity (WiFi), voice over Internet protocol (VoIP), radio frequency ID (RFID), and supporting software will mature and converge, and universities will be able to tap the mobile phone as a one-stop shop for student communications and commerce.

The Modern Student Mindset

In just half a decade, the university student mindset has changed dramatically. The proliferation of communications devices and their universal availability to teens and preteens is a phenomenon unique to this generation. These students are always connected multitaskers who perceive their cell phones as their lifeline to the world. Students carry their cell phones with them at all times and have chosen them as their main communication device, making traditional landline usage a thing of the past.

Cell phone adoption rates are extremely high. Based on surveys conducted on campuses in the fall of 2005, the *Student Monitor Report* estimated that 91 percent of college students had cell phones. Adoption rates among younger consumers are

high as well, with the rate expected to rise most sharply among 5 to 9 year olds. This signifies that mobile device adoption is not a blip on the technology adoption curve. Wireless devices and communication are here to stay. As a result of high cell phone adoption, landline use on college campuses is low, posing a severe problem of timely communications with students in both emergency and nonemergency situations.

Higher-education telecommunications managers must not be frustrated by the rapid and high adoption rate of cell phone use. Rather, in order to be successful in their missions, they must view today's cell phone proliferation as an opportunity to seize. When deployed effectively, mobile access to groups, e-mail, and academic communications allows the university to maintain a lifeline with the student and to implement revolutionary academic applications that promote the well-being of the student and provide timely access to available resources. This results in increased academic participation, improved student retention rates, and stronger student participation in a more well-defined campus culture.

Today's students grew up with the Internet. For them, online communication and information has always existed and is heavily integrated into the way they see and approach the world. They are used to the unique paradigm of online group communication that successful electronic communities like Facebook.com and MySpace.com pioneered. This type of online group networking has changed how students communicate, interact, and socialize. The popularity of online group communities poses another challenge for higher-education institutions. Since the majority of college students are very heavily involved with their

individual online communities, campuses often find it difficult to reach out and effectively integrate and assimilate themselves into the student mindset.

A Case Study: The University of Maryland Eastern Shore

The University of Maryland Eastern Shore (UMES) decided to explore options for taking advantage of high student cell phone adoption rates to see if it could alleviate the challenges that cell phone technology posed to its communications efforts. In August 2006, UMES's Information Technology Department paired with Rave Wireless, a higher-education mobile solutions provider, to implement a variety of academic- and campus-based communication applications to enable UMES to improve timely communications with students.

UMES is a traditionally African American university, with approximately 4,000 students who come from socioeconomic backgrounds different from most other campuses within the university system of Maryland. The demographic of the UMES student body poses unique challenges. Student retention is one of the university's highest priorities. The university implemented numerous retention programs, including one-on-one academic advisement and tutoring, to ensure that students receive every opportunity to excel in their studies and remain enrolled to complete their degree program successfully. UMES found that the ability to communicate in a timely manner is essential to its ability to retain students and ensure that they have every opportunity to take advantage of the resources available.

UMES selected a set of mobile applications and services from Rave Wireless. The applications combine Web and mobile form factors for ease

of use. The applications are accessible and configured in a manner that is very familiar to students through their use of Facebook.com and MySpace.com. Depending on the group, students are either automatically enrolled in a group or have the option of subscribing to an online group. The student is empowered with two-way communications with teachers, advisers, peers, and the university. Individual classes, as well as most campus organizations, participate in the program, including fraternities, athletics, and clubs. Students can receive communications through mobile e-mail, campus e-mail, and the most popular—text messaging. Faculty, group members, and group moderators also have the option of online polling. The survey capability is being used for campuswide surveys and voting, and in pilot classrooms for in-class quizzing.

In fall 2006, the optional UMES HawkTalk program was made available to incoming freshmen and upperclassmen. However, marketing and publicity efforts were focused solely on freshmen. Students who signed up for the program received a cell phone, with hardware upgrade options, a choice of plans, and unlimited text messaging. The carrier of choice, Sprint, was able to offer UMES a discounted bulk plan. Rather than collecting additional revenue from the student, the university chose to pass the cost savings on to the student. Students with a previous carrier-commitment contract were able to port their number to Sprint and offset the cost of joining the UMES plan because of the affordable rate of the monthly plan offered.

The results and adoption rates to date demonstrate unprecedented success. UMES experienced a 65 percent adoption rate of the program among incoming freshmen and a 22.5 percent campuswide adoption rate.

Industrywide, typical adoption rates for optional programs of all kinds hover between 3 and 5 percent. The high adoption rates across the campus are a testament to the important and indispensable role the mobile phone plays in student life, as well as to the need for applications that transform implementations from simple cell phone discount plans to full-fledged, university-sponsored mobile communication programs.

At the forefront of critical student communications is emergency and safety. The current political and social climate makes emergency communication with students imperative to instilling confidence and creating a safe environment. Today's 18-year-old was only 12 when the events of September 11, 2001, occurred, and only 10 when the shootings at Colorado's Columbine High School transpired. Unfortunately, these violent acts occurred when today's college student was at an extremely impressionable age, placing security at top of mind for students and their parents. In addition, the University of Maryland Eastern Shore campus occasionally experiences extreme weather. Using Rave Wireless's application package, UMES deployed safety applications that enable remote broadcasts and student alerts for emergency closings and other important safety information.

Further, the campus mobilized all of its essential campus-based systems, including e-mail, WebCT, financial aid, and rooming programs. Students can check their campus-based e-mail on their phones. The UMES WebCT program allows students to check course calendars and assignments and check the status of grades as they are posted at midterm and end of the semester. Students can also receive reminders and check the status of deadlines for financial aid

requirements and dormitory assignments. The previous obstacles to timely communications with students often caused missed deadlines and occasionally unfulfilled paperwork for financial aid and boarding requirements. The ability to send reminders and ensure that students are aware of these critical deadlines leads to increased retention and ensures that students are able to tap all of the resources available.

The UMES Campus in 2012

In the near future, UMES plans a variety of additional applications to take full advantage of the cell phone as a learning and communication tool. In the coming semesters, it will put marketing efforts in place and continue to make its HawkTalk program available to all incoming and current students. Adoption of the program will enable a standardized communication platform and community for all its faculty and students. In addition, more academic applications are planned, including an escalation in the use of in-class polling, quizzing, and surveying; mobile flash cards as study aids; class collaboration groups; and the deployment of video playback for both in-person and online courses.

The UMES campus of 2012 looks markedly different from today. The dominant trends in education point to improved measurement of learning outcomes and teaching strategies. To this end, the university plans to take advantage of evolving technologies to implement a full campuswide wireless community that places the mobile phone at the center of student activity and academics. Students will be able to use voice recognition to search by keyword and playback modules of lectures in order to improve exam and class preparation, and maximize study time. Also planned is the rollout of more complete in-class response tools. As handset devices evolve to include

RFID standardization, the university will implement RFID-based key card access to dormitories and mobile commerce across the campus, including use in student dining halls and bookstores. The university also plans to deploy dual-mode cellular/VoIP handsets to curb network and cellular plan costs to the student.

The broad introduction of cellular technology, high adoption rates, new group networking paradigms, and the hundreds of mobile devices available to the consumer have changed the way today's university student communicates. This trend poses numerous challenges for the higher-education telecommunications professional, including the continued execution of timely and critical communications to students, tailoring communications technology to best suit the mindset of today's student generation, and implementing both academic and campus communications that solidify campus culture and maximize academic resources. Instead of fighting the cell phone, embrace it for what it is: a potentially invaluable tool for academic learning and effective group communications.

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Sprint and Montclair State University Embrace Transforming Technology

Almost every campus across the nation is facing the same challenge – how to communicate wirelessly with its students while cost-effectively transforming legacy communications systems into the totally wireless campuses of the not-too-distant future.

Montclair State University, a largely commuter campus in northern New Jersey, chose Sprint and Rave Wireless to implement a solution to better connect them with their students.

Using Sprint's GPS capabilities and Rave Wireless data applications, Montclair State is able to offer a comprehensive wireless program to its students to:

- Improve student safety
- Enhance student camaraderie
- Further integrate teacher and student learning experience
- Initiate mobile commerce

Improving Student Safety

"Because today's college students are far more mobile than ever before, their safety issues are different," says Catherine Bath, executive director, Security on Campus. "By leveraging the prevalent use of mobile phones among students, Rave Guardian, a security application, provides information needed to significantly increase the safety of college students anywhere they are."

Because Rave Guardian enables students to turn their phones into personal alarm devices, it is like having a police officer at every student's side.

Strengthening Campus Camaraderie

"It connects students effectively to the institution, and that is critical to their ability to learn and succeed," says Dr. Susan Cole, President of Montclair State University. Students who subscribe to Rave can receive a package of "community-based" applications customized specifically for the university. These applications allow students to share their GPS locations with friends, identify the GPS location of campus shuttles, check their class assignments, view cafeteria menus, obtain local merchant discounts, and conduct classroom polling with teachers.

Real-time connections to classrooms and professors – and campus community information – create a more integrated campus for students and a more productive workplace for faculty and staff.

> Situation:

Students interact with others through the phone and text messaging as naturally as face-to-face. Land lines are unused – even in emergencies. Information must be available "on the go."

> Solution:

Universities must adapt and learn to communicate with students through their preferred communication device – the mobile phone.

> Success:

Montclair State University, Sprint and Rave Wireless built a custom network solution that enhances student communications, facilitates student safety, and strengthens the campus community.

Mobile Integration at its Best

“It’s innovative and it fits the way students live,” declares Ed Chapel, CIO of Montclair State University. The university challenged the status quo by providing these cutting-edge communications tools for students. This meant integrating wireless directly into the applications that students and faculty use today, like blogging, text messaging, instant messaging, and access to course management systems such as Blackboard.

Reliable, Ongoing Support

Sprint Custom Network Solutions offers dual network solutions. Sprint will install one robust network that can include 800, 900, and 1900 Mhz. channels. Sprint Custom Network Solutions has an entire team of Project Certified Professionals to project manage the integration from initial planning through a dedicated post-sales delivery team providing ongoing customer care for the entire lifecycle of the relationship.

Campus Network Solutions

Sprint plans, designs, delivers, supports, and maintains wireless networks that enhance coverage on and off the campus. With Sprint Custom Network Solutions, you enjoy a simple, low cost, high-quality campus solution for your communication needs. Together we can develop a customized solution for your organization that can improve productivity, efficiency, and profitability through enhanced and expanded coverage.

For more information visit us at sprint.com/cns.

**Call your Sprint Representative
or Authorized Sales Agent at
1-877-700-8919.**

“It connects students effectively to the institution, and that is critical to their ability to learn and succeed.”

– Dr. Susan Cole,
President, Montclair State University.



Sprint Helps the University of Maryland Eastern Shore Connect with Students

CHALLENGE:

With over 4,000 students attending classes across a 747-acre campus, the faculty, staff and administration of University of Maryland Eastern Shore (UMES) wanted to improve communications with the student body. In past decades, UMES, like most universities, relied on a campuswide landline phone system to contact students. With such systems, students were assigned fixed phone numbers in their dorm rooms, which could then be listed in a university directory. When communicating important information about security issues, academics, or student support services, a university could be relatively certain that calls or messages would reach students through the landline system.

Things began to change at UMES as wireless phones became the communication method of choice for new students—with a phone in their pocket at all times, fewer and fewer saw the need to plug in to the university system. At one time, the university netted as much as \$150,000 a year by offering landline service to students. With declining usage, this number shrank and the university no longer generated enough long-distance minutes to be eligible for discounted landline service rates.

UMES faced challenges with wireless communications as well. For one thing, many students were reluctant to give their wireless numbers to the university. More importantly, there were coverage issues: the university's rural locale and old stone and steel buildings added up to an unfriendly atmosphere for wireless signals. Add to all this the fact that many students checked email less as text and instant messaging grew more popular, and it was no surprise that getting in touch with students was an increasingly difficult task. UMES knew it needed to find a new way to communicate with the student body.

SOLUTION:

Turning to Sprint and industry partner Rave Wireless, UMES adopted a three-part solution that allowed UMES to replace the revenue once garnered from the flagging landline system and greatly improve communications between and among faculty, staff, administrators, and students. The solution is comprised of a plan that allows the university to offer Sprint phones directly to its students, the adoption of the phone-based HawkTalk messaging and security application, and the wiring of the entire campus with Sprint wireless voice and data coverage.

First, Sprint worked with the university to create a wireless phone plan for students. Under this plan, students can purchase Sprint phones through the university at a special discount. All of the broad range of phones offered come with a service plan that includes unlimited text messaging, night and weekend rates starting at 7pm, unlimited mobile-to-mobile calling, and sufficient data access to use the HawkTalk application, developed by Rave Wireless.

The University of Maryland Eastern Shore, in Princess Anne, Maryland, is an 1890 Land-Grant institution and continues to advance its position toward becoming a Carnegie Doctoral and Research Intensive University.

The University's rural campus is in stark contrast to its global focus, with over 4,000 students enrolled from more than 35 states in the United States and over 65 countries.

For more on UMES, please visit: <http://www.umes.edu/>



HawkTalk, the second part of the Sprint solution, is a powerful tool that takes advantage of students' growing reliance on text messaging for communication. The application also leverages the Sprint phones' GPS capabilities to help UMES improve student safety. Now UMES faculty, staff and administrators can send text message alerts, such as weather warnings, using a web-based portal. Such messages can be directed to specific groups or the entire student body. Faculty and students can create their own text messaging groups, for class announcements or road trip planning, for example. The Rave Wireless application even lets students access university email through their phones. In addition, the GPS-capable phones offered by Sprint support the campus safety features of the HawkTalk application, allowing students to contact campus security with the push of a button, letting security personnel locate students instantly with GPS tracking. "This program provides parents a sense of comfort," said Lawrence Wright, Director of Public Safety for the University.

Finally, Sprint Custom Network Solutions (CNS) worked closely with UMES to solve their coverage issues. The CNS team scoured the campus, undertaking a complete signal survey before building out a system that created seamless wireless service indoors and out across the 747-acre campus. Sprint Mobile Broadband, the powerful, high-speed, wide-area wireless data service is a part of the CNS build-out. Not only does this complete voice and data coverage create seamless communications across campus, it also enables the phones and HawkTalk application that make up the rest of the Sprint solution.

BOTTOM LINE:

Already, over 900 students have enrolled in the Sprint program. UMES estimates it will benefit to the tune of \$103,000 per year just with these initial 900 students enrolled, and that number will increase as the rest of the student population comes on board. In addition, the university passed on \$250,000 in Sprint discounts to students in the program in the first semester alone. Plus, cost benefits will only increase as the program grows and allows UMES to deactivate phone ports in residence halls, since maintenance charges are based on active ports.

In addition to savings and revenue, Sprint and Rave Wireless helped UMES solve many of the communications challenges it faced. The university can now get important bulletins and announcements out to students quickly and reliably, using modes of communication students are comfortable with, such as text messaging. Also highly valuable was the addition of Mobile Broadband service, which means that the university no longer has to build extra infrastructure for providing data access in the exterior locations of the campus. In addition, the CNS build-out has nearly eliminated dropped calls. "We used to receive numerous complaints from faculty and students regarding 'blocked' and 'dropped' calls on campus— particularly when the popular nights and weekend plans kicked in," said Ronald Forsythe, VP for Planning, Assessment, Technology, and Commercialization at UMES, "I have not heard of a complaint from students using Sprint service since the CNS build-out."

"Sprint has helped us stay connected with those who matter most – our students."

– Ronald G. Forsythe,
VP for Planning, Assessment,
Technology, and Commercialization,
University of Maryland Eastern Shore

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