# HEIT NOW fall 2007



### Reaching UB's New Horizon Via Information Technology

#### From the Desk of the CIO

Welcome to the first issue of the UB IT NOW newsletter. It is an exciting time to be at the University at Buffalo as many UB2020 IT Transformation initiatives move into their implementation phases; mUB—our Mobile UB initiative to make communication tools, information access, and course lectures and other services and resources available from mobile devices—moves forward; and campus internal and external partnerships develop and flourish.

Highlights of this issue include:

- News about our campus mUB initiative with updates on:
  - The wireless network upgrade and expansion
  - The UB emergency text alerts system
  - Digital coursecasting for our multitasking Millennials who can stream or download course lectures (audio or video) to mobile devices, including laptops and iPods
  - UBclicks—the UB classroom response system that facilitates active learning in the classroom
- An update on the UB 2020 IT Transformation whose theme is "a collaborative future in progress."
   For the past two years, hundreds of campus IT staff have worked to design and implement a new vision of IT that will result in efficiencies and cost reductions while improving services.
- Other news including support for faculty research computing, an update on classroom technology upgrades, and the establishment of an Information Security Office.

We will be publishing UB IT NOW in October, January, April, and July. I know that information technology is integral to your academic and personal lives and I invite you to tell me how UB IT is doing. If you have any comments or suggestions about UB IT, please feel free to contact me at eldayrie@buffalo.edu .

Elias G. Eldayrie - Chief Information Officer

# **UB Emergency Text Alerts**

### Sign up to Receive UB Emergency Text Alerts on your Cell Phone

This fall, UB is providing a new textmessaging service designed to disseminate critical information in a timely manner to members of the university community who would like to receive emergency communications on their cell phones.

Through a contract with RAVE Wireless, UB faculty, staff and students—any university community member with a UBIT email address—can sign up to receive UB emergency notifications and campus alerts, such as closings, via text messages. Part of the mUB—mobile computing—initiative, the system will send text alerts to users' mobile phones, along with email to their chosen email address. Those who do not have a cell phone or do not



have a text messaging plan can receive emergency alerts via email. There is no registration or subscription fee associated with the service, although users may incur a "per text message" cost as determined by their individual cell phone plan.

UB community members who would like to register for the service or find out more about it, can point their Web browser to: <a href="mailto:emergency.buffalo.edu">emergency.buffalo.edu</a>. Those registering for UB emergency alerts must use their UBIT buffalo.edu email addresses when they supply their registration information.

### **Research Computing News**

Project & Grant Support Services
An Enterprise Research Computing Services
Group has been created to provide a portfolio
of IT services for researchers, including
coordination of site licensing for critical
software tools and provision of data storage
and management services. Matt Stock is the

manager of the group.

In April, 2007, a faculty research computing needs survey was conducted by the CIO office in partnership with the Center for Computational Research and the Office of the Vice President for Research. Key findings from the survey are available in the report: <a href="https://www.cio.buffalo.edu/res-comp-survey.pdf">www.cio.buffalo.edu/res-comp-survey.pdf</a>. Faculty completing the survey were invited to sign up for focus groups to talk about their research computing needs and to prioritize recommendations for investments to provide needed IT infrastructure and services for discovery. We will be contacting faculty who offered to participate in the focus groups. If you would like to join the focus group discussions which will be held this fall, please contact Matt Stock (stock@buffalo.edu).

On the administrative side of research support, UB is now hosting COEUS\* for all four SUNY University Centers. COEUS\* is an MIT-developed application for proposal development and management of sponsored program awards, providing pre-award and post-award information management modules for grants.gov proposal development and management of awards.

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### **Technology Classroom News**

It's been a very busy summer for Instructional Technology Services: investments of more than \$2M have been made in technology classrooms this year. This accelerated build-out has resulted in computer projection now being available in 75% of centrally-scheduled classrooms

Specific details of the investments are as follows:

- 17 Projection Ready classrooms with Computers (PR/C) were designed and built
- 47 new Dell computers were installed in classrooms on the North campus
- New wireless mice were added to all of the Dell and Mac computers
- New video projectors were installed in the 6 Knox lecture halls
- The classroom technology in Fillmore 170,
   Cooke 121, Hochstetter 114, Norton and 112
   (Woldman Theatre) was completely updated
- Finally, 10 classroom video projectors were installed and the control systems in 4 were upgraded

Total Technology classroom inventory for the Fall 2007:

- 61 Technology Classrooms (TC)
- 7 Projection Ready with Computer Classrooms (PR/C)
- 22 Projection Ready Classrooms (PR)
- 28 Video Equipped Classrooms (VC)
- 5 classrooms with no technology (other than a transparency projector)

For more information on technology-enabled classrooms, please visit: <a href="www.its.buffalo.edu/TechClass/">www.its.buffalo.edu/TechClass/</a>.

### **Trends Among the Millennials**

# The Always Connected but Unplugged Generation

Last April 2007 we invited a sample of 3000 UB freshmen and seniors to complete a national EDUCAUSE ECAR Survey of Students and IT. The 2007 survey was completed by 27,864 students at 103 colleges and universities. Below are some of the key findings from the responses of our UB students.

Our students arrive on campus with multiple mobile devices and high technological expectations of living and learning in a connected and collaborative environment. Approximately 95% of our UB students own cell phones, with 20% of our freshman owning "smart phones" rather than simple cell phones. More than 70% of UB freshmen and seniors have laptops (89% of freshmen) and large numbers—approximately 87% of freshmen—have electronic music/video devices (iPods, MP3 players).

There is an emerging trend toward less frequent email access and more frequent use of instant messaging by students, although most of our students still prefer that the University communicate with them via email, rather than via text or instant



messaging. UB freshmen use social networking (Web 2.0) software frequently, with 64% using sites such as facebook.com daily, and only 5% responding that they have never participated in an online social network. Freshmen are more likely than seniors to access and use wikis and blogs. A growing number of students prefer having Facebook profiles to developing personal Web pages.

For more information and to view key findings of the 2007 EDUCAUSE ECAR Students and IT Use study, see: <a href="www.educause.edu/ir/library/pdf/ERS0706/ekf0706.pdf">www.educause.edu/ir/library/pdf/ERS0706/ekf0706.pdf</a>.

### **Digital Coursecasting for the Millennials**

One of the pillars of the UB 2020 path to prominence is growth of the university—both enrollment and faculty growth. One of the strategies used by many universities experiencing rapid enrollment growth is blended learning, blending virtual and physical resources. Frequently, blended learning is described as learning facilitated by a combination of instructional delivery modes, for example, using both traditional classroom delivery and virtual/online delivery of a course or lecture.

In the School of Management in Spring 2007, blended learning strategies enabled more than 2600 students to complete one of six required undergraduate courses, using classroom spaces that accommodated only 300 of these students. Students

were invited to choose whether to attend course lectures in a specially designed classroom with digital course capture infrastructure or to download or stream the video-recorded lectures at their convenience to their personal computers or mobile devices (laptops, iPods) or in a UB computing lab.

UB is a leader in state-of-the-art digital course capture infrastructure and course-casting/streaming, and provides students with audio and video recordings of many lectures each semester that can be accessed from student mobile or non-portable computing devices. Recordings can be accessed through our course management system, UBlearns. A pilot project will enable students to access recordings via a UB-branded iTunes Web site.



#### **UBclicks**

#### Clickers for the Classroom

Classroom response systems (sometimes called "personal response systems" or "audience response systems") are now used to allow students to participate or engage in presentations or lectures by submitting responses to interactive questions via a keypad. UB selected the Turning Technologies classroom response system as its campus-wide standard this fall.

In general, classroom response systems are used as follow:

- A faculty member poses a question to students.
- · Each student submits his or her answer to the



- question using a handheld transmitter (a "clicker") that beams a radio-frequency signal to the receiver attached to the instructor's computer.
- Software on the instructor's computer collects the students' answers and produces a histogram showing student choices.

Basic information on UBclicks can be found at: <a href="mailto:ubit.buffalo.edu/ubclicks/">ubit.buffalo.edu/ubclicks/</a> and a list of the 17 "clicker-ready classrooms" on the North and South campuses can be viewed at: <a href="mailto:ubit.buffalo.edu/ubclicks/faculty/locations.php">ubit.buffalo.edu/ubclicks/faculty/locations.php</a> . UB plans to install Clicker technology in 30 additional classrooms in Spring 2008, with installations in 66 additional classrooms next Fall 2008.

Classroom response system receiver loans are available to instructors in smaller classrooms. Faculty may borrow the receivers for the semester. For more information, please contact Instructional Technology Support Services, 24 Capen Hall, (716) 645-2803, media@buffalo.edu.

### **UB 2020 IT Transformation**

# Workstation Standardization — Dell Partnership

The campus workstation volume discount purchase program is now providing deeply discounted desktop and laptop machines with a standardized base software image. A partnership with Dell has produced the discounted pricing: UB expects to realize equipment purchase cost reductions of approximately \$2 million this year. Other vendor partnership negotiations are underway. Deployment of standardized workstations across campus will also enable UB to reduce technical support costs.

For more information on the discounted machines and to view the configurations, please visit: <a href="https://www.ubmicro.buffalo.edu/ubm/ubitstconfigs.php">www.ubmicro.buffalo.edu/ubm/ubitstconfigs.php</a> .

Departmental orders can be placed online, via: <a href="https://www.ubmicro.buffalo.edu/deptorders.php">www.ubmicro.buffalo.edu/deptorders.php</a> .



# Telephone System — Voice Over IP (VoIP)

Consolidation of the 76 disparate telephone systems that existed prior to the IT Transformation is underway, in an effort to improve service, increase system predictability, and provide long-term cost reductions. After the phased-in implementation over the next three to four years, UB will achieve annual telephone cost reductions of nearly \$800,000. More information on the VoIP consolidation, including a roll-out schedule, can be found at <a href="https://www.buffalo.edu/ub2020/itst/voip.html">www.buffalo.edu/ub2020/itst/voip.html</a>.



## **Security Office News**

Information Security Officer

UB has appointed an Information Security Officer (ISO), Chuck Dunn, charged with the development, management, and facilitation of a campus-wide IT security program. The ISO has established an information security governance structure and a risk assessment framework for IT security at UB.

Resources are being focused on protecting sensitive data, such as Social Security, credit/debit card and driver's license numbers. The campus has adopted the New York State Information Security Policy, with a few adaptations for the university environment, to set forth the minimum requirements, responsibilities, and accepted behaviors to establish and maintain a secure environment. The governance structure established can be viewed at <a href="https://www.cio.buffalo.edu/info-sec-advisory.shtml">www.cio.buffalo.edu/info-sec-advisory.shtml</a>. IT Policies can be viewed at: <a href="https://www.itpolicies.buffalo.edu">www.itpolicies.buffalo.edu</a>.

# Wireless Network Upgrade Expansion

The conversion of the wireless infrastructure to a centrally-managed system is enabling more efficient maintenance of the large numbers of access points deployed. In addition all access points have been upgraded to current code levels, and the campus build-out to provide ubiquitous coverage continues. The network currently provides 460 access points, supporting approximately 10,000 concurrent users. Maps showing UB wireless hot spots are available at: <a href="https://www.oss.buffalo.edu/Network/Wireless/wls-maps/">www.oss.buffalo.edu/Network/Wireless/wls-maps/</a>.