PACE UNIVERSITY



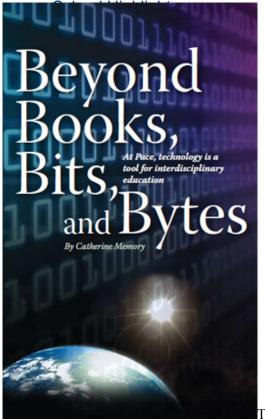


Alumni Profiles •

•

# Beyond Books, Bits, and Bytes

009. Mar 26id to Letters



Today's college students cut their teeth on technology. They grew up on the Internet

and cannot imagine a world without cell phones. They expect their college coursework to be technologically enriched tooincorporating social media, blogs, and Blackboard.

At Pace, more and more faculty members are teaching with technology in truly innovative ways, across all disciplines.



Mapping the Future

Almost everyone who drives a car these days depends on GPS navigation. GIS, or Geographic Information Systems, is the next big thing to develop from GPS technology. "All sectors of the economy-transportation, marketing, retail, health care-are using GIS for analysis," explains Daniel Farkas, PhD, chair of the department of information technology in Westchester. Farkas conducts

faculty workshops on GIS and helps infuse GIS into the curriculum. "Most other universities are using GIS in the sciences," says Farkas, but Pace is on the cutting edge for including it in the social sciences and, eventually, business and health care.

Since 2009, Professor Joseph Ryan, PhD, has been teaching a class in Understanding Terrorism using Google Maps, a readilyavailable GIS program, to track terrorism around the globe. In his prior career with the New York City Police Department, Ryan had used pin maps to track crime. Realizing he could apply GIS in similar yet more dynamic ways, he asked Farkas for assistance with the class.

Students comb open source documents—mostly news accounts—online to locate terrorist events, and they present the information graphically using Google Maps. With Excel spreadsheets, students track the types of explosives used and other patterns. They also research religions and cultures. One of the first classes made a presentation to members of the FBI and the U.S. Department of Justice's joint terrorism task force. "The [task force members] were stunned," says Ryan. "They said it was the best presentation they'd had, surpassing anything the government had given them."



Into the Wilderness

This September, Melissa Grigione, PhD, associate professor of environmental science, will teach Integrating Ecology and Information Technology, another course developed in collaboration with Farkas. "We needed to make the class experiential," says Grigione. And it is. Students will hike through the Rockefeller State Park Preserve, placing remotely triggered cameras to photograph bobcats and coyotes. A GIS program will track the camera locations, as well as the habitat, including distances to roads and human communities. "The hypothesis is we'll be able to predict the impact of human recreation upon these rare animals," explains Grigione. Students also will use a video chat program to discuss their original research with peers in similar classes at Hofstra University and Ithaca College. "T'm learning with Dan [Farkas] that technology can make the world a closer place," says Grigione.

Environmental science is inherently interdisciplinary. "It's more complex than just the ecosystem," explains Grigione. "It's the economy, humans, sociological factors, public health factors, and traffic patterns." GIS helps scientists—and students—collect data, present it, and understand all the layers. "Technology is a saving grace," says Grigione. "It's giving us information we wouldn't be able to collect on our own in the field."



High Tech, High Touch

Sadly, the over-65 crowd is often left by the wayside on the information superhighway. To help its growing senior citizen population improve its fluency with technology, in 2005 the Westchester County Department of Senior Programs and Services reached out to Pace. In response, Jean Coppola,PhD, associate professor of computer science and information systems, developed a class called Intergenerational Computing. Piloted in 2006, the course includes a seven week class-within-a-class, in which the students teach seniors at assisted living facilities in Westchester and New York City how to send e-mail, download and manage photos, use Google and Skype, and more. The seniors are extremely grateful to learn how to connect with their families and friends online. "This class changes people's lives," says Coppola. "If [the students] do nothing but help [their senior], they will have an everlasting effect."

Lots of colleges and universities have programs for students to teach computing to seniors, but Pace is unique in its intense preparation of students. Lin Drury, PhD, associate professor of nursing, and Sharon Wexler, PhD, assistant professor of nursing, provide sensitivity training to show students what it is like for seniors to operate computers. Students put masking tape on their fingers to simulate arthritis, wear special glasses to simulate cataracts, and put cotton balls in their ears to simulate hearing loss.

The interdisciplinary component attracts a handful of nursing and education majors to the class. And of course, there are always a few computer science majors. But surprisingly, the course has become a big hit among business majors. One reason for this is a new partnership with a company called Telikin. Last November, Telikin came to market with a touch screen computer designed especially

for the elderly. Pace students teach seniors to use a Telikin computer and have the opportunity to provide focus-group style feedback to Telikin executives. This feedback is leading to actual modifications in the product. "The marketing students eat this up!" says Coppola. "We get feedback from the seniors, as well as the students," explains Telikin CEO Fred Allegrezza. "The students have an awareness of technology, so they can make suggestions thatmay not occur to the seniors."

Original research emerging from Coppola's class is groundbreaking as well. "We have statistically significant research that shows that the students' hands-on experience with older adults changes their attitudes and advocacy for them," says Coppola. And the seniors' learning experience with technology has proven to improve cognitive function, depression levels, and physical abilities in other areas. "We want to show that we're slowing the progression of dementia," says Coppola. "After the program the seniors are different people."



## Medieval (Second) Life

What could technology possibly have in common with medieval literature? The answer is Literature 361, a Chaucer class taught by Martha Driver, PhD, distinguished professor of English. Driver's students adopt a Canterbury pilgrim to be their avatar in a simulated, medieval environment on the Second Life website (a 3D virtual world where users can socialize and connect). In addition to jousting, fencing, riding horses, and weaving, the students' avatars quote Chaucer and participate in a live, online performance involving avatars from all over the world.

In fall 2008, Driver began exploring the potential of Second Life to serve as a teaching tool. Her Chaucer class was first offered in spring 2010, and Martina Blackwood, PhD, Dyson's director of instructional technology, was enlisted to help orient the students. As tech-savvy as they are, typically, this class provides the students' first visit to Second Life.

"To read Chaucer in Middle English, it helps to be able to visualize, and with Second Life that's what we are able to do," says Dyson student Mara Berkoff '12. According to Driver, the students are motivated and inspired by having an expanded, public audience in Second Life. Yet to stay true to Chaucer and their chosen pilgrim, they read the text closely.

Eugenie Noel '10 works as a teacher's assistant and plans to become an elementary school teacher after attending graduate school. She hopes to repeat the Second Life experience with her own students someday. "Technology is really important for my career," she says. "You can do everything with technology!"



#### Avatars for Education

In fall 2011, the School of Education will pilot a unique new technological approach to teacher preparation—using avatars to give student-teachers experience in a virtual classroom to develop their skills in teaching and classroom management. One of only a few such programs in the country, the technology would place student-teachers in a virtual classroom where they could interact with "student" avatars and learn how to best respond to challenging situations, before they begin interacting with real students.

"The idea isn't to replace the real-life interaction between students and teachers," says Annjanet Woodburn, EdD, assistant dean of the School of Education, "but instead to enhance their experience. This would give aspiring teachers a chance to practice their skills before they enter a real classroom."

This new technology initiative is one of the ways the School of Education will build on its excellence in preparing teachers. "Technology is a critical component of a 21st century education," says Andrea (Penny) Spencer, PhD, dean of the School of Education. "That is why we think it is important to incorporate it into preparing the teachers of tomorrow."



#### Speaking of Two Billion

In 2008, only one of Pace's core courses wasn't offered online: public speaking—educators didn't think it was possible. But Media and Communication Arts Professor Maria Luskay, EdD, and Executive Director of Pace's Center for Teaching, Learning, and Technology James Stenerson, PhD, were determined to marry their film and technology backgrounds to create a class that was not only innovative, but also careerfocused.

"Companies aren't spending money to send their executives around the world anymore," Luskay says. "They're holding videoconferences, so you're in a room in New York and someone else is in London. People need to be able to present themselves in front of a camera. We're teaching our students that now."

When the course piloted, Luskay and Stenerson were using Blackboard and YouTube. Today, they work with McGraw-Hill's Connect Lucas, a video platform with features that include an interactive e-textbook and peer review. After they've uploaded a video, students receive specific feedback on hand gestures, eye contact, and expressions attached to the video, minute by minute— something that could not be done in the classroom. The course is especially popular among students who are home for the summer, studying abroad or travelling, and even nursing students who are doing their rotations, offering up a flexible and innovative alternative to the in-class public speaking experience.

#### Article by: Catherine Memory



The Interdisciplinary Approach in Action

## No comments yet... Be the first to leave a reply!

### Leave a Reply

Name (required)

Email (required)

Website (optional)

# Mathematical International Int

- Law Alumni Reunion 2011
- Cruise on the Zephhyr as recent alumni welcome the class of 2011!
- <u>14th Annual Setters Club Golf Classic</u>
- Graduate and Undergraduate Field Study in International Business and Management to Israel

Ŧ

## **Select Past Issues**

Select Month

## Search by Category

#### Select Category



# CLASS NOTES



Ben Li '03 writes, "I was selected by lottery to run the 2011 NYC ING Marathon this November. It's going to be a challenge, but I look forward to finishing and will represent...

Lindsey M. Rourke '05 and Weston Burk are happy to announce their marriage on March 18, 2011 at the Canterbury Chapel in New Milford, Connecticut...

Maritza Colon-Rivera '91 writes "After many years of small business ventures Ceron Christie and I have partnered up to open a Charter School for High School...













Videos

#### • <u>Temple Grandin Speaks at Convocation</u>



## Send us your stories!

Do you have a favorite Pace story? Is there a teacher who inspired you or course you want to recommend? Do you want to suggest an article or feature? If so, we want to hear from you! Email us at <u>editor@pace.edu</u>.

# **Tag Cloud**

9/11 alumni alumni spotlight Bookshelf classroom instruction communciations conferences confucius institute Dyson enrollment environment events featured insidetrack interdisciplinary interdisciplinary education japan jim whitaker learning communities Lienhard lubin michelle bachelet narrative education new literacies pace perspective poisel project rebirth provost rebirth research scholarship School of education school of law screenwriting Seidenberg semester at sea Study abroad tax assistance Technology The Pforzheimer Honors College videos Videostories VITA program volunteer women and gender studies

© 2011 Pace Magazine. All Rights Reserved.