The 24/7 digital buffet.
Ed tech, sim patients, virtual illness.

Classrooms, clinics, books and beyond. MySpace, YouTube, iPod, iPhone, Wii, PlayStation, Blackberry. These and their equivalents are how today’s generation interacts. How they learn. As electronic devices converge, multitasking increases. As nursing education evolves with evolving technologies, it becomes more personal. More portable. More interactive. And 24/7 on demand.

In this issue, Patricia Carstens talks about the College’s learning resources. In the next issue, Cheryl Thompson will address the burgeoning role of informatics.

THE ADVANCES INTERVIEW WITH PATRICIA CARSTENS

Q. You direct UNMC’s clinical skills center for all health professions. Do aspects of training help future nurses and physicians, for example, better understand each other’s care perspective and interdependent roles?

A. Yes. Clinical skills training is moving rapidly to a multidisciplinary approach. The goal is to enhance care quality and patient safety through collaborative teamwork. Nursing and Medicine are working together to develop training opportunities, including patient simulations. It’s important that health professions students work together before they enter the workforce. They gain new, broader perspective, and the patient gets better care.

Q. The College of Nursing is on the leading edge in using interactive patient simulators. How are these used in training?

A. For everything from childbirth to end-of-life care. High-fidelity pediatric manikins, for example, can mimic asthmatic symptoms or critical illness. Adult manikins can exhibit pulmonary disease, heart failure, encephaloma, diabetes, pre-eclampsia, and more. They can speak, bleed, cough, vomit, show allergic reaction, produce secretions and heart, lung and bowel sounds. They can react to right and wrong treatment or a narrated PowerPoint difficult may thrive when the same information is presented in interactive animation. Students today tend to approach subjects on their own terms, in non-linear fashion, and they’re adept at multitasking. Multiple presentation forms let students learn in their own way and at their own pace.

Q. Are simulators used for public health education in community outreach programs?

A. Yes. The College created a multi-disciplinary program with the UNMC Center for Bioterrorism to educate health professionals — doctors, nurses, EMTs and other first responders — on bioterrorism preparedness. It has an online component plus a mobile unit that travels the state. Both employ interactive simulation.

Q. Is learning support moving to interactive, on-demand, 24/7 anywhere access?

A. Absolutely. Many interactive resources at the College are available online. We’re creating a series of on-demand streaming videos that demonstrate correct procedures for clinical skills.

Q. The College offers a learning buffet of digital resources. Do you find that these accelerate as well as facilitate the learning process?

A. Accelerate, I’m not sure. Facilitate, no question. Students today learn differently than in the past. Some who find lectures more portable. More interactive. And 24/7 on demand.

Q. Which resources tend to be most heavily used?

A. The College heavily uses discussion boards, narrated PowerPoint and streaming video on its Blackboard learning management system. All courses have Blackboard sites. We actively explore new technologies — some are piloted by a class. A number of classes use blogs, podcasts, video conferences, archive video and online testing.

Q. Does technology represent a sea change in nursing education?

A. Technology has changed not just nursing education but all education. Today’s students grew up with it — they expect it. Clearly, much health science education must be done in person and in real time. But a large amount of content can be delivered through technology. I once heard an educational futurist describe today’s students as “digital natives” and their teachers as “digital immigrants.” Soon all new faculty will be digital natives as well.

Q. Will nurses of tomorrow carry a super all-in-one device that merges voice and data, web access, video interface, updatable patient charts and more?

A. The technology is already here in some forms — other pieces are coming rapidly. Protecting patient data is a problem in wireless applications, but IT experts are exploring solutions. So, yes, a super all-in-one device is coming for nurses — and other health professionals.

Q. When you envision learning technology at UNMC in five years, what do you see?

A. In technology, five years is a very long time. That said, I envision more simulation, virtual reality, digital interactivity and online presentation, resources and learning tools. I see students learning through virtual surgery on a simulated patient with virtual feedback displayed on the walls of the surgical simulation room.

Health care education, of course, will never be completely digital. It’s high science and high art — people caring for people with great attentiveness, respect and compassion. There’s no substitute for hands-on clinical learning. But learning technologies are vital in the preparation of competent, caring health professionals who work seamlessly together in the patient’s interest.

“The character of the nurse is as important as the knowledge she possesses.” ~ W.R. JARVIS

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