

# Creating New Pathways for Innovation





Fundamentally, nursing is about solving problems, whether it's in a clinic, a classroom or a lab. At Duke University School of Nursing (DUSON) we understand this and strive to educate our students in ways that support creativity and innovation, core skills for problem-solving. In a digital world, where access to information is virtually limitless, teaching and curricula must assume the added challenge of capitalizing on new ideas and approaches to health care while continuing to honor proven nursing practices and traditions.

To **Dean Marion E. Broome, PhD, RN, FAAN**, and Ruby Wilson Professor of Nursing, nurses are natural innovators. Especially when they come from a variety of perspectives and experiences, she says, the sky is the limit. "My observation has been you can give me any challenge, and if I can put a group of nurses in a room together, who are very different and come from different backgrounds, we can make huge strides toward solving the problem. I don't care what it is."

Because today's practitioners and researchers rely so much on readily available digital health information, faculty must continually adapt their approach to teaching, mentoring and guiding their students, she adds. An important task they have is helping students filter through the mass of information and resources,

since many students may not yet have the knowledge to effectively interpret them. "The best teachers can translate knowledge in a way that users can find accessible," Broome says.

Being innovative in instruction is critical to keeping up with the dynamic and increasingly digital age of health care because that is what practitioners and nurse scientists are dealing with every day, and their learning processes must reflect that reality. It's natural to teach how one has learned, but because the world of science and information has changed so much, faculty have to acknowledge and adjust to those changes in not just what we know, but how we access and translate that knowledge, Broome says. "Younger generations have different ways of looking at information that sometimes includes data, but also includes their impressions of other people's assessments of that data. It's more a 'group think'," she says. "They trust their intuition more than I did when I was a nurse scientist. I always wanted data and more data to make decisions."

Even though a quick Google search can render almost every bit of information on a topic, that information becomes much more powerful and complex in the hands of someone who has years of deep study and learning, heightening the importance of savvy instructors. "It takes a certain kind of thinking to really be innovative. I think almost everybody is innovative in some parts

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of their life. But innovation truly takes somebody who’s okay about failing at certain times and also is able to then re-conceptualize their approach and see new possibilities in order to move forward,” Broome says, noting that technology is one tool of innovation, but not the ultimate one. “It’s one mechanism to use, but it’s not the be all end all. Innovators rely on data, intuition and cues from disparate sources, combined with their vision of what could be.”

Teaching students how to think creatively by structuring classes in new ways is another way of being innovative. A class can be broken up into smaller groups and given a case or problem to solve, Broome says. For instance, an observation about a consistent increase in no-shows at pediatric and prenatal appointments among certain groups of women should signal a need for change. Students may be tasked with researching and gathering data about what has been happening, hearing from providers and the women about their perspectives of the problem. They might also observe a typical clinic visit from beginning to end or even take transportation women typically take to clinic. Then they collaborate in small groups to puzzle out what social, political or economic issues might be driving the increase and also to look at the downstream effects of more no-shows. Each group could come up with different viable solutions for how to reverse the trend or deal with its ramifications, thus giving the class as a whole a broader and more complex view of problem-solving.

“When those students go out into practice and a problem arises on their unit, they’re going to think about solutions in an entirely different way,” Broome says, noting that this type of teaching gives students the room and support to collaborate and expand their thinking. One question faculty should be asking, Broome says, is “How do we really pull out the very best of our students and let them take their ideas and talents way beyond what we thought they could?”

## Health Care Innovation

DUSON will be offering a new course on health care innovation, created by Associate Professor **Ryan Shaw, PhD’12, RN**, and director of the Duke Health Innovation Lab (HIL). The class will be situated within an inter-professional education framework, Shaw says, with the goal to teach not only nurses, but also physicians, physical therapists and engineers to work as a group to create change.

“We’re trying to empower nurses to be able to act upon their ideas and unmet needs to improve health and health outcomes,” Shaw says, noting that collaboration with other disciplines enhances problem-solving skills. “We will educate our students to think in different ways so that when they do graduate and they go into their own practice, they have the skills and knowledge to be empowered to innovate.”

The HIL provides the support and resources for students, faculty and practitioners at Duke who want



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to improve processes and patient care through innovative thinking and ideas. Whether it’s testing the viability of a new product or brainstorming about changing how data are collected, stored and used, the goal is to support creative potential, Shaw says. “I think it’s important for us to create a strategy so that the School has direction for how to create new opportunities for both our students and faculty. And we also want to collaborate with practicing clinicians who identify real-world problems within health care and to be able to make a difference.”

Duke not only has the resources to innovate—through its faculty, funding sources, and state-of-the-art labs and tools—it also has a tradition of altruism. “The beauty of being at Duke is that’s what we are all about: knowledge in the service of society,” Broome said. Creating new ways to teach so that the new generation of nurses learn in a way that will serve them in a digital age can be a daunting task, but it’s necessary to the pursuit of excellence, she says. But innovation doesn’t mean change for change’s sake, Broome warns. It must be methodical and thoughtful.

Her advice is to start with one course. “You don’t need to reinvent the entire curriculum, start with just one course. Present students with a set of challenges in health care and let them try to solve them,” Broome said. “The outcomes could be exciting. Alternative

learning that acknowledges different approaches and perspectives on health care produces students who are better prepared to be critical and innovative thinkers, and ultimately better nurses when they graduate,” she added.

“The Accelerated Bachelor of Science in Nursing (ABSN) programs are perfect for this type of approach because these students all come with previous degrees. So they already come with different perspectives and approaches to problem solving—maybe one’s an engineer, one’s a sociologist,” Broome says. “They’re going to learn much more from each other and it will be a deeper learning experience.”

And that’s what innovation is all about, Broome says. “I look at DUSON and the intellectual and social capital here, it’s pretty amazing. We have people who are incredibly strong researchers, incredibly strong practitioners, incredibly strong educators. And when they bring it to bear on a challenge or an issue, there’s very little stopping them.”

Broome encourages other schools to find ways to foster innovation and creative problem solving. “Innovation doesn’t have to be expensive,” Broome said “Regardless of where you are, there is never enough time and never enough resources. It’s really about identifying new ways of thinking and doing what nurses already do so well.” ■