

Duke University School of Nursing:

Introducing Innovation to Better Serve the Spanish-Speaking Population

Abstract

Canopy Innovations has helped Duke University School of Nursing (DUSON) to diversify and enrich their medical Spanish offering. This more robust offering further promotes DUSON's mission to foster a nursing community able to effectively address health disparities through improved communication with their limited English proficiency (LEP) patients.

Duke University School of Nursing

DUSON is supporting a diverse network of scholars and clinicians to address health issues of global significance through transformational nursing leadership. DUSON has consistently been a leader in nursing education. The U.S. News & World Report Best Graduate Schools and Best Online Programs rankings listed DUSON as:

- 4th best nursing program in the country
- 5th best online program for nursing
- 3rd best DNP program
- 2nd best nursing school for Nurse Practitioner: Family education
- 3rd best nursing school for Nursing Informatics education
- 3rd best nursing school for Nurse Anesthesia education

Commitment to Diversity and Inclusiveness

DUSON's mission is to create a center of excellence for the advancement of nursing science, the promotion of clinical scholarship, and the education of clinical leaders, advanced practitioners, and researchers. One of DUSON's core institutional values is diversity and inclusiveness; through nursing research, education, and practice, students and faculty seek to enhance the quality of life for patients from all walks of life. This commitment to diversity and inclusiveness manifests in many capacities, included but not limited to the following initiatives and programs: DUSON's Office of Global and Community Health Initiatives (OGACHI), the Health Equity Academy, and the Bridge to the Doctorate Program, all which seek to address health disparities.

DUSON's Medical Spanish Elective: A Commitment to the LEP Population

“Part of DUSON’s mission is to provide students a skillset that they can bring into workplaces in diverse communities with patients from diverse backgrounds. Our medical Spanish offering is critical to effectively serve the community here locally in addition to the broader United States and internationally.” - Rosa Solorzano, MD, MPH

In the United States, over 60 million people speak a language other than English at home. In five states—California, New York, Texas, Hawaii and New Mexico—more than 10 percent of the population has LEP. As the U.S. becomes more ethnically and racially diverse, health care institutions face an increasing need to provide language services to their non-English speaking patrons. Given the high costs and risks of insufficient language access, linguistic and cultural competency are skills critical to delivering quality care to all patients. As Spanish-speakers are far and away the largest language-minority population, there exists a pressing and unprecedented need for nurses to develop relevant skills in order to overcome communication barriers and deliver quality care to this patient population. DUSON has traditionally offered its ABSN and masters students a medical Spanish elective, that — since 2009 — has been directed by Rosa Solorzano, MD, MPH and co-taught by Ximena Yañez-Poole, MA.Ed.

Dr. Solorzano emphasizes the importance of making medical Spanish acquisition a priority for nursing students: “One of the main reasons minority populations suffer health disparities is due to a misunderstanding of culture. Because of linguistic and cultural barriers, providers are unable to tailor their healthcare delivery to this patient population. The Spanish-speaking population in the United States is growing: the development of medical Spanish skills is a priority.”

Rosa Solorzano, MD, MPH

Rosa M. Solorzano, MD, MPH, is DUSON's Medical Spanish Instructor and Coordinator in addition to Adjunct Instructor in Spanish Language Programs and Romance Studies. Solorzano has been with Duke University since 2009, but she has been teaching medical Spanish and cultural competency in the United States since 1992. She completed her Doctor of Medicine degree at Universidad Pontificia Bolivariana-COLOMBIA in 1987 followed by a Masters in Public Health degree at Emory University in 2005. Dr. Solorzano's research interests focus on risk behaviors and resilience among adolescents, and she was recently recognized by Duke University President, Richard Brodhead, with the inaugural Senior Honors recognition for making a special impact on Duke University students' experience. Dr. Solorzano co-teaches the medical Spanish curriculum with Ximena Yañez-Poole, a native of Chile, with a Masters in Education who works for El Centro Hispano of North Carolina.

“One of the main reasons minority populations suffer health disparities is due to a misunderstanding of culture. Because of linguistic and cultural barriers, providers are unable to tailor their healthcare delivery to this patient population. The Spanish-speaking population in the United States is growing: the development of medical Spanish skills is a priority.”



Innovating On DUSON's Offering: Canopy Learn

Up until recently, the DUSON Medical Spanish curriculum has relied solely on face-to-face instruction. Dr. Solorzano, however, was interested in broadening the scope of the curriculum to attract more students and accommodate different learning platforms and styles. She chose to incorporate Canopy Learn into the curriculum to enrich DUSON's program. "Lack of communication has great implications for the health of the patient. Patients with LEP have difficulty communicating, they have a higher probability of medical errors, and they often don't understand instructions for critical medicine. We needed to fill a gap and Canopy accomplished that for us: Canopy Learn is a great tool to add to my curriculum and is a critical component of the nursing program."

"Lack of communication has great implications for the health

of the patient. Patients with LEP have difficulty communicating, they have a higher probability of medical errors, and they often don't understand instructions for critical medicine. We needed to fill a gap and Canopy accomplished that for us: Canopy Learn is a great tool to add to my curriculum and is a critical component of the nursing program."

Dr. Solorzano was introduced to Canopy Learn by a colleague within the Duke University community, Dennis Clements, MD, MPH, PhD. Dr. Clements is a Dr. of Pediatrics, Community and Family Medicine, and Global Health, in addition to a Senior Advisor to the Duke Global Health Institute and the Director of Medical School Programs at the Duke Global Health Institute. Knowing that Dr. Solorzano was

looking for a way to expand her medical Spanish program in the School of Nursing, Dr. Clements recommended Canopy Learn, with which he was already familiar. After evaluating Canopy Learn, herself, Dr. Solorzano decided to integrate it into the curriculum.

With the introduction of Canopy, DUSON is able to offer a hybrid program combining Dr. Solorzano and Professor Yañez-Poole's in-person instruction with the digital experience of Canopy Learn.

What is Canopy Learn?

Canopy Learn is a three-level medical Spanish course designed specifically for healthcare personnel. It is powered by a research-validated pedagogy and a rich array of interactive exercises,

and consists of web-based curricula. It is self-paced, features a highly engaging medical telenovela, and focuses on common practitioner-patient interactions. The course covers a wide breadth of medical concepts and Spanish grammar constructions across 36 lessons. The learning objectives are as follows:

- Build linguistic capacity, enabling the provider to better build rapport with Spanish-speaking patients to provide effective and compassionate care.
- Acquire specialized medical vocabulary across a wide spectrum of commonly-encountered medical scenarios.
- Gain a deepened awareness for the cultural diversity found within the Spanish-speaking world in addition to an appreciation for the necessity of heightened cultural sensitivity.

How Professor Solorzano Uses Canopy Learn

Reference

Once every week, students meet with their professor for one hour and forty-five minutes. Those enrolled in the medical Spanish curriculum are required to complete Canopy units each week for class. Dr. Solorzano uses the Canopy material as a point of reference in class: "We often will relate what we learned in Canopy and apply it in classroom."

Exposure

Use of Canopy Learn is tailored to whichever student group is being instructed: "The grammar section in Canopy is a little too fast-paced for my particular beginner students — they can get a bit lost — so in that case, I use Canopy as an 'exposure' tool as opposed to a 'follow-up day by day' tool."

Track

Canopy students' progress are tracked through the Canopy Learn administrative dashboard: "I can see what they have completed. These reports are excellent for me to see the time that the students have devoted to the lessons, the progress that they have made, and their performance on assessments for each unit."

Practice

"It is a great tool for students to be exposed to new vocabulary and to practice their oral skills. Through the telenovela — for example — they can hear different medical terminology in use that they may not have heard before." In course evaluations Dr. Solorzano repeatedly finds that students enjoy Canopy: "They love the pace, the telenovela, the flashcards... they value the program."

Expanding the Canopy Offering: Access for All

Canopy Learn quickly became a standard offering as an adjunct requirement in Dr. Solorzano's in-person ABSN courses. Through a recent expansion to an institutional site license, all DUSON students, faculty, and staff are able to request access to Canopy Learn whether they are on campus or distance-based. The Canopy Learn platform is no longer restricted to the those selective students in Dr. Solorzano or Professor Yañez-Poole's elective; now all DUSON students are able to hone their medical Spanish skills at their own convenience.

The students who have access to Learn, but who aren't enrolled in the elective, naturally do not have the personal instruction and follow-up with Dr. Solorzano or Professor Yañez-Poole. For this group, the success of the tool will depend on dedicated, autonomous study. Dr. Solorzano, however, is not worried about Learn's usefulness when it exists independent of her curriculum. "It's like any self-study. Students can go at their own pace. Many people are eager to learn. There is a captive audience here."

Fulfilling DUSON's Mission

Through their recent expansion to an institutional site license implementation, the DUSON community at large is able to benefit from Canopy Learn. Learn is now accessible to the entire student body, faculty, and staff.

Part of DUSON's mission is to provide students a skillset that they can bring into workplaces in diverse communities with patients from diverse backgrounds. Our medical Spanish offering is critical to effectively serve the community here locally in addition to the broader United States and internationally. The University is truly committed to serving the growing Spanish-speaking population. And, the students are not all going to stay here in North Carolina. The Spanish-speaking population in North Carolina constitutes about 7-8% of the population; in Durham, it's around 14%, which is quite large. However, we know that 17% of this country is Hispanic, and that number is growing."

Canopy Innovations

Canopy Innovations is an innovative NYC-based digital health company. Canopy is a leading provider of healthcare technologies designed to bridge the linguistic and cultural barrier between providers and their limited-English proficient (LEP) patients.

Canopy's technology research and development is supported by innovation grant funding from the National Institutes of Health (NIH). Partners and customers include the Duke University School

of Nursing, American College of Emergency Physicians (ACEP), UCLA David Geffen School of Medicine, Thomas Jefferson University Hospital, and American Academy of Physician Assistants (AAPA).

To learn more about Canopy:

info@canopyapps.com
www.canopyapps.com