Like other optometry schools, NECO has long required its students to complete a business management course. The NECO-developed practice management simulation program, used in Dr. David Mills’ Ophthalmic Business and Management Policy class, sets a new standard in health care education.

LEARNING BY DOING: MANAGING THE VIRTUAL PRACTICE
“It’s a unique way of learning, different from the typical lecture format,” says Mills, OD ‘80, MBA. His NECO students form teams and compete in managing virtual optometry practices, making strategic and economic decisions and evaluating the impact of their choices on the financial health of their business. Using cloud-based simulation software, they come to understand the challenges facing practicing optometrists as they work to improve their financial standing and operational success.

Dr. Mills began teaching his course in 2007 as a one-semester class in which students created formal business plans for an optometric practice. At the semester’s end, the top plans were entered in a competition judged by a panel of experts from the business community.

One of those judges was Cam Tipping, founder of the International Institute for Business Development (IIBD), a British Columbia-based provider of strategic planning and marketing simulation programs for business and academia. “After the competition, Cam and I discussed the possibility of developing a simulation program tailored to optometry practices,” explains Dr. Mills.

Over the next five years, he and Tipping filled countless white boards and notebooks with ideas and sketches of their vision. From the outset, NECO embraced their idea, and in 2010, President Scott, Dr. Mills, and Tipping approached Essilor, the leading provider of corrective lenses, about partnering with NECO and IIBD.

“Essilor was in the process of creating a simulation program for the optometric practitioner,” explains Dr. Mills. “Working with their developers and with IIBD, we rewrote the computer code and produced a version relevant to optometry students.”

The program was added to Dr. Mills’ class in January 2012 and forms the cornerstone of the new course content: an MBA-style overview of business fundamentals followed by an entire semester of simulated practice management.
A TOWN CALLED MAYFIELD
The route to Mayfield appears in no atlas; Dr. Mills’ students arrive there via iPad or laptop. Dr. Mills created the virtual city and populated it with 1,000 virtual patients, each with unique attributes including age, gender, income level, ocular conditions, location, and preference for glasses or contact lenses. He then expanded the model to create a city of 10,000 inhabitants. When the semester begins, each of Mayfield’s five neighborhoods – ranging from economically depressed to affluent – includes an optometric practice up for sale.

Student teams review and analyze distribution data and financial reports in order to choose the section of Mayfield in which they’d like to own a practice. “Students have the information they need to understand what they’re bidding on and the ocular needs of a neighborhood,” says Dr. Mills. “For example, they get a feel for how many children or older people live there in order to determine the type of care to specialize in.”

Each team receives a line of credit and submits a competitive bid on the office in their chosen neighborhood. Once the bids are in, they’re each awarded a practice – and the competition for market share begins in earnest.

In conjunction with coursework on practice evaluation, market segmentation, cost accounting, inventory control, and marketing, they periodically log in to access financial reports and graphs that reflect the details of their business. (See sidebar.) Based on the reports, they make business decisions regarding staffing, office size, equipment purchases, and advertising and marketing budgets.

Meanwhile, Mayfield’s citizens are making decisions, too. Programmed to periodically seek eye care, they visit their neighborhood practices for eye exams, glaucoma treatment, or a new pair of designer frames. “As in real life, if a practice isn’t set up to deliver what they need, patients will go to the next closest location, and then the next,” explains Dr. Mills. “A practice will lose its patient base if it isn’t able to capture an adequate share of the market.”

Several times during the semester, Dr. Mills crunches the student-generated data, accelerating time and capturing six months of patient encounters in each run. Students receive profit and loss statements, balance sheets, and updated charts and graphs reflecting the results of their decisions. They learn that their decisions are not made in isolation, explains Dr. Mills. “The outcomes for each practice are affected by every action of every participant. I tell students to think of a giant Rubik’s Cube. They need to get all the colors aligned perfectly – while their competitors are trying to do exactly the same thing.”

“THIS IS A WHOLE NEW WORLD FOR OPTOMETRY EDUCATION.”

–David Mills, OD ’80
DECLUSIONS, DECISIONS
The practice management simulation software developed by Dr. Mills prompts students to make a range of decisions about running an ophthalmic practice, including:

- Services
  Specialty of care: basic eye exams, pediatrics, glaucoma treatment, low-vision

- Personnel
  Staff size, pay rate, hours worked per week

- Equipment
  Necessary topographers, OCT machines, and other devices to deliver the care specialty

- Products
  Quantity and cost of frames and other eye care products

- Space allocation
  Square footage allocated to display, exam areas, and administration

After each run, teams review their data and produce reports that analyze the reasons for their decisions, the results of those decisions, and their plans for correcting their missteps. “That’s where the learning comes in,” says Dr. Mills. “It’s not like Monopoly, where the one with the most money wins. Some of the best reports are from students whose practices are floundering, and they’re faced with making new decisions to improve their situation.” The program allows Dr. Mills to monitor the time students spend on each decision; he adapts classroom content to allow more time to address challenging topics.

Optometry schools across the country have expressed interest in the program. Business management faculty from nine institutions recently competed in a pilot run, and Dr. Mills expects to introduce the program in their classrooms in spring 2013. “This is a whole new world for optometry education,” he says. “NECO took a leap of faith – they believed that investing in the simulation program and expanding the course to two semesters would be advantageous to students.”

Mills’ students complete the course with more than an understanding of the ins and outs of practice management. “Few of our students will open a practice the day they graduate,” he says. “But the simulation experience goes far beyond that. It teaches valuable lessons about real-life fiscal scenarios and prepares them for any situation in which they must manage financial decision-making.”