



The March edition of Optics Insider focuses on our next generation of optics technicians. We'll take a look at efforts to engage students and young professionals and share the stories of people leading the way.

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- Industry Stalwart Engages with Future Technicians
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Father and Daughter Share a Love of Optics

William (Bill) Dykstra, a high school teacher of physics and astronomy, and his daughter Esther have some interesting dinner table conversations. "Usually about some scientific procedure," Bill explained. "Anything that we happen to have worked on that day." Esther added, "For example, I tell him how I learned a new technique for polishing lenses." It's not your typical father-daughter banter. But this duo shares a love of optics, and they both also enjoy sharing that love with others.



Esther Dykstra presents Optics displays for the Monroe Community College (MCC) Optics Club.

Bill has been interested in science for as long as he can remember and, throughout his teaching career, he has cultivated that interest with his students. Bill also teaches the class, Introduction to Optics, which is a dual-enrollment course with Monroe Community College (MCC). Two years ago, as Esther was close to finishing high school, he encouraged her to consider MCC's Optical Systems Technology (OST) Program.

"It wasn't a hard sell," the proud dad said.

Read more about Bill and Esther.

An increasing number of high school students nationwide can study optics and earn college credit through a dual-enrollment program with a community college. In the greater Rochester, NY-area alone, there are 18 high schools offering optics classes. And an impressive 28 percent of students who are enrolled at Monroe Community College's Optical Systems Technology program took a dual-enrollment optics course while in high school.

Industry Stalwart Prepares New Technicians

It would be difficult to fully detail and quantify Donn Silberman's <u>professional</u> <u>contributions</u> to the optics industry. His impressive four-decade career includes multiple patents, publications, countless awards, management positions, boards seats, industry volunteer positions, and more. Now retired, Donn spends his time on what he believes may be his most important work: inspiring and training the next generation of optics technicians.



Donn Silberman speaks to students at a high school career fair.

Read more about Donn's inspiring work.



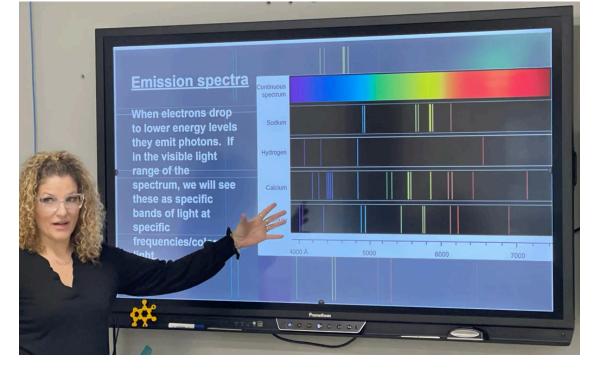




AmeriCOM's own Science Educator Liaison, Donna Smith, entertains and informs middle and high school students and their parents at the regional Terra Rochester Finger Lakes Science and Engineering Fair. Though many tried, none succeeded in picking up the frog, but now they all know why!

High School Optics Teacher Inspires Students to Love Science

Jennifer Nicholson is a 24-year-veteran teacher at Sussex County Technical School in New Jersey. She currently teaches chemistry and two classes, Advanced Biology and Fundamentals of Optics, both of which are part of a concurrent enrollment program at Sussex County Community College. She began teaching optics two years ago when school administrators asked her to take on the new course. She agreed, and soon learned something about herself and her students.



Jennifer had no specialized training in optics. She taught Honors Physics for more than a decade and always preferred variety in her schedule, so she jumped at the chance to try something new. Jennifer admits to being surprised by how well her science background helped her adapt to the new curriculum.

"My optics class is responsible for two former students becoming astrophysicists. I don't know what could be cooler than that."

Jennifer Nicholson, Optics Teacher

Read More

Making Education Part of the Bottom Line



Edmund Optics is a leading global optical solutions provider for several markets including Life Sciences, Biomedical, Industrial Inspection, Semiconductor, R&D, and Defense. But for the last ten years, the company has also invested in another important cause: Youth. In 2014, it developed an educational outreach program called **Edmund Scientific**, offering a variety of learning opportunities including classroom activities and community experiences. Interactive videos help engage students on relatable topics like lasers, refraction, and light absorption. Through its "Ask an Engineer" resource, students can inquire about anything in the world of optics and hear back from an expert. Edmund Scientific also has resources for science teachers including field trips to Edmund Optics and the development of lesson plans for middle school and high school students. Edmund Optics states on its website, "As new technologies become increasingly reliant on optics, we are proud to expose the next generation of thinkers, inventors, scientists, and engineers to this vital and wonderful field!" AmeriCOM salutes all efforts like this to engage young minds through optics.

Interested in ways you can open up people to optics? Check out the **Learning Resource** center on the AmeriCOM *The Future Is Optics* website.

UPCOMING EVENTS

CPIA 2024 Rocky Mountain Photonics Summit & Expo

Denver, CO

April 18, 2024

SPIE Defense and Commercial Sensing

National Harbor, MD April 21-25, 2024

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AmeriCOM - American Center for Optics Manufacturing, PO Box 23473, Rochester, NY 14692-3473

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