

# High school kids get hands-on experience with STEM jobs at Roche

**Exposing high school students to jobs in science, technology, engineering and math can transform their academic and career paths.**

That's been the experience for students at Lawrence North High School and Lawrence Township's McKenzie Career Center, who are getting an up-close look at STEM jobs at Roche Diagnostics.

The Roche Diabetes Care partnership with Lawrence North/McKenzie is a program now in its eighth year that gives high-achieving high school seniors an opportunity to spend several hours a week at Roche, where they prepare for academic and career success by helping solve real-life problems for Roche and its customers.

Don Anderson, a Roche senior manager who collaborated with Lawrence North to start the program, recalls a student who wrote software for a project over the course of the school year that saved Roche about \$400,000 over the anticipated life of the project.

Then there's Michelle Spicklemire, who was considering going into architecture or engineering before the Roche externship tipped the scales in favor of chemical engineering.

That's what she's studying at Purdue University, from which she expects to graduate next May.

"Even going into my senior year [at LN]

I didn't know what I wanted to do," Spicklemire said. Her experience at Roche "was the deciding factor for me to go to Purdue." After the Roche experience "I realized I would be more satisfied working in engineering," said Spicklemire, who spent the last two summers working at Roche as a college intern.

Spicklemire said the high school program at Roche opened doors for her. "Even just going to the career fair as a freshman at Purdue it gave me a leg up on my peers. It gave me something to talk to companies about. Not just academic work. Her goal now is to put her chemical engineering degree to work on behalf of a company in a way that will have a positive impact on the lives of people.

The type of transformational experience that Spicklemire and other students are having at Roche is everything Don Anderson could have hoped for when he approached Lawrence North administrators with the externship idea.

"I thought, 'How do we give kids an idea what real life is about and what their interests might be,'" said Anderson, whose sons were attending Lawrence North at the time the idea came to him.

Anderson thought it would be as simple as identifying a few good students and assigning them to some simple tasks at Roche, where he works in design verification for Roche Diabetes Care. Making it work from a human resource and logistical standpoint became a larger challenge than he envisioned. "But the payoff has been worth it," Anderson said.

The program has now grown to include the township's McKenzie Career Center, though it's still centered at Lawrence North, where students interview for the available externship positions in May of their junior year.

It's a competitive process that favors top students, but a demonstrated interest in STEM fields is just as important as a student's grade point average, Anderson said.

This year there are 10 students participating who spend about two hours every other day at Roche. "They're never required to be there after school hours," Anderson said. "We don't want them to miss out on things they'd do as normal high school students."

Anderson and other Roche employees who volunteer to act as mentors simply want the kids to gain a good perspective on STEM careers. One student came in thinking he wanted to be a chemist but ended up becoming a civil engineer. "If they find out that's not what they want to do, it's a win," Anderson said.

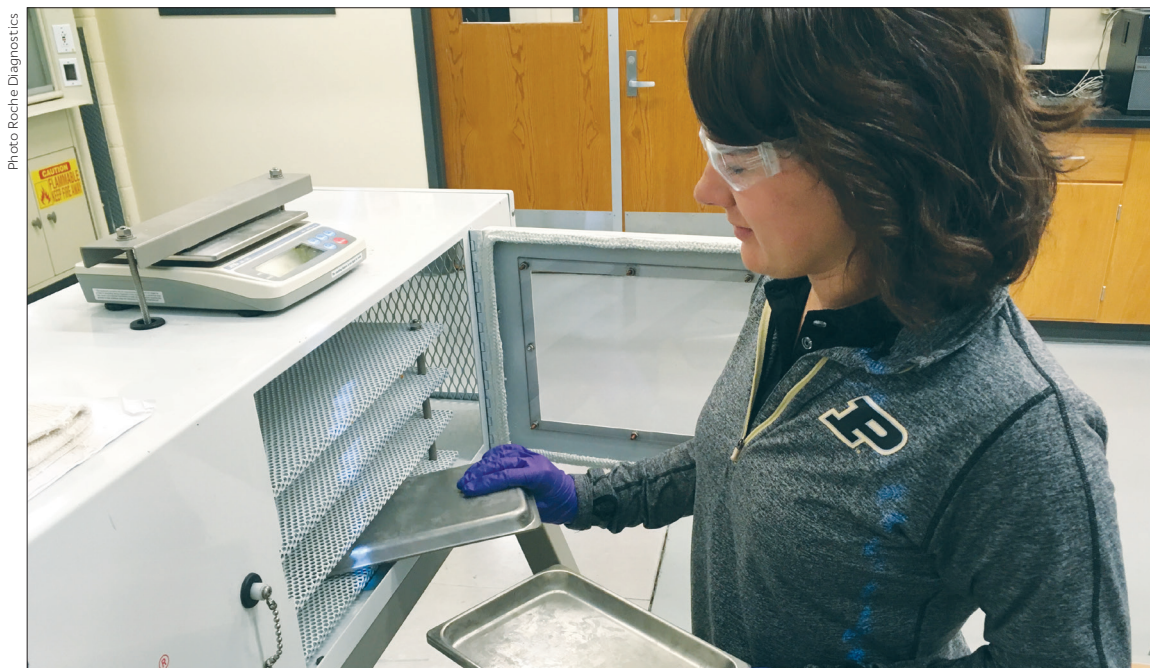
Several of the students who've held externships have come back for paid internships while in college and two became full-time Roche employees. "It's a great recruiting tool for Roche," Anderson said. And it's helped the school district, where one former participant ended up working in information technology.

Mike Wheeler, a principal scientist at Roche in analytical chemistry, says it's refreshing for him to be able to work with young people. He tries to impress upon them that both accuracy and creativity are important in STEM jobs. And he learns from them. "We've learned that kids don't use computers, they use their phones. That told us that our products need to be app-based."

Brett Cousore, Lawrence North's principal, sees the program as valuable on numerous levels. Besides the obvious benefits to the students, it's a great tool for reaching out to kids, introducing them to good careers, and keeping them in state. And with the program's emphasis on diversity, it helps Roche build a workforce that mirrors the school district's student population.

Cousore said the township couldn't ask for a better partner in helping kids succeed.

"Roche is phenomenal. It has been a pleasure to work with them."



Michelle Spicklemire's experience working in the R&D labs at Roche as a high school senior inspired her to pursue a chemical engineering degree at Purdue University.