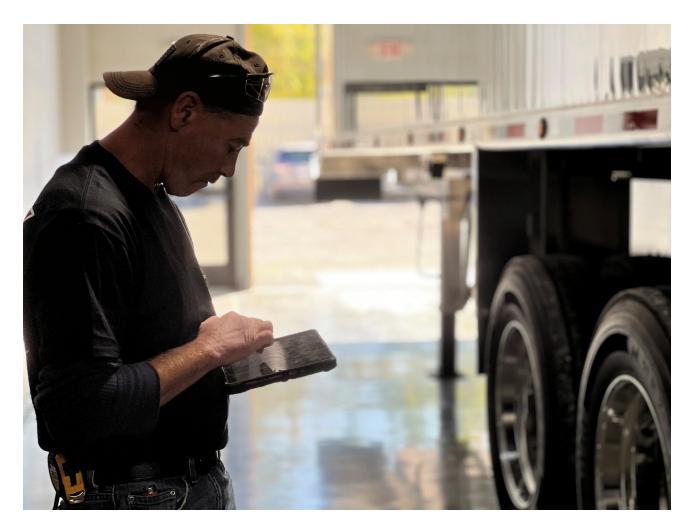
Walsh University looks to serve students, businesses at the same time

Rachel Abbey McCafferty



Walsh University is a small, Catholic school, serving less than 2,500 students on its North Canton campus. But the private university has in recent years been investing in technology and training that make it stand out in STEM and workforce development spaces, giving undergraduates hands-on research opportunities and helping local companies solve problems and upskill employees. Dan Passerini, executive director of cross-enterprise operations, said Walsh's increased focus on STEM and workforce is really in line with its mission of "service to others," because it makes the university a resource for the business community in a few different ways. Its Skilled Technical Workforce program aims to train employees for specific company needs. And its Center for Scientific Excellence Laboratory is a benefit to the students who get to train in it, but also to the businesses who can access its equipment and experts, too.

Both programs were highlighted in November, when the university hosted a Science and Technology Summit, drawing more than 300 professionals like education administrators and business leaders, as well as about 200 local high school students. Steven Leath, a National Science Board member, offered welcoming remarks, highlighting Walsh's efforts in creating education and training programs designed to meet workforce needs, a priority for the board.

"Walsh University is an innovative, creative and courageous university setting the example and leading the rest of the nation in fostering careers in STEM," Leath said in a news release. "When I think about the next generation, and worry whether they will be able to meet the needs and challenges for society in terms of quality of life, inventions and pushing our industries forward, I come to Walsh, I meet the students and see how engaged they are, and how the university collaborates with community partners, and I feel good about the future."

The Skilled Technical Workforce program and the Center for Scientific Excellence Laboratory both started a couple of years ago, Passerini said, but really took off in the past year.

The Skilled Technical Workforce program was, in part, a reaction to a

call from the National Science Board, Passerini said, which was concerned that the U.S. was falling behind in STEM — Science, Technology, Engineering and Mathematics — graduates. The program pairs Walsh with experts in areas like automation and the Internet of Things; the university then can deliver specialized training for local companies looking to upskill their employees. The program also is part of the state's TechCred program, which allows companies to receive tuition reimbursement for the credentials their employees earn. Since the Skilled Technical Workforce program was launched in the summer of 2020, Walsh has awarded about 850 certificates, Passerini said, enrolling more than 60 companies.

One those of companies was MAC Trailer in Alliance.

The specialty trailer maker started with a group of 30 employees in the training, which narrowed down to 15 for a more in-depth project, said corporate vice president Dennis Postiy. That smaller group decided to focus on a project around collecting inspection and quality data and documentation, moving from a paper-based system to a more automated, digital one. That's a project MAC Trailer had tried to do on its own, but that had "stalled," Postiy said. The company needed Walsh's "expertise" in running projects, he said, from asking the right questions to sticking to a timeline.

Now, the company has been able to implement that project, identifying improvements and starting to roll it out to its 11 shops, Postiy said.

Walsh aims to continue growing the Skilled Technical Workforce program, recently naming Timothy Gray its director. Gray will work with Passerini to help the program continue to build relationships in the community and seek collaborations. Walsh's other recent STEM focus, the Center for Scientific Excellence Laboratory, relies on relationships and collaboration, too. The center was established in 2021, when the university won a SPARQ (Shimadzu Partnership for Academics, Research and Quality of Life) grant from scientific equipment maker Shimadzu Scientific Instruments. With additional help from private donors, Walsh was able to invest in about \$1.2 million worth of new equipment.

Walsh didn't want its new lab to just do "cookbook chemistry," but instead to be part of its integrated lab sciences program, Passerini said.

"We wanted our students to experience real-world practical applications for the use of chemistry in a business environment," he said.

The new lab gives students such as Elizabeth Glander the opportunity for hands-on experience in their field of choice.

Glander chose to attend Walsh after retiring from professional ballet; for her next career, she wanted to pursue art conservation, and the small school in North Canton had an appealing museum studies program. She pursued a bachelor's degree in the program, as well as minors in art, art history and chemistry. The latter is important in art conservation, as it's critical to know how different materials will degrade over time or react to one another — and how that will affect the art being preserved.

At Walsh, Glander had the chance to participate in research that directly applies to work being done in art conservation today. Using the university's Shimadzu lab equipment, Glander has been able to advance the study of material safety. The field relies on what's called the Oddy test — named after its creator — to check whether the materials being used to preserve a piece of art, like wood glue in a case, will react with that artwork. Walsh's high-tech gas chromatography–mass spectrometry machinery is helping Glander drill down further, working to identify the specific compounds in a material that are causing the damage.

Glander graduated in May 2022. She's taking this year off, applying for graduate school while continuing her research at Walsh. She thinks that hands-on research will give her an edge in graduate school, and in the work she'll eventually be doing in her career.

But the research capabilities of Walsh's Center for Scientific Excellence Laboratory also serve the existing business community directly.

For example, Walsh University has quickly become a "go-to" lab for outside chemical analysis for packaging company Sonoco Products Co., said senior director of quality and technical services Paul Waldmiller.

"We know we're going to get good results with that group right there," he said.

South Carolina-based Sonoco has two plants in the Canton area that make products for its steel food and aerosol cans. The company sometimes needs analytical testing done on its products, Waldmiller said, and was losing that capability as it moved some employees and services from Colorado to Ohio.

Enter Walsh, which Sonoco learned was offering those services to companies in the community. It takes the right equipment and the right people to do that kind of analysis well, Waldmiller said. "And Walsh really had both," he said.

The company began working with Walsh last spring. He said he wouldn't have expected to find the right capabilities at a small liberal arts school like Walsh, but it's clear that industry outreach is part of the university's mission.

Passerini said Walsh has always made "experiential learning" part of its mission, requiring internships and integrating real-world applications into education, but the new lab has allowed it to offer testing and analysis services to the local business community. It didn't have the "capacity" to take on outside projects like that in the past, he said. Today, students can help solve real problems for local companies, in real time, as opposed to working on potential problems that could possibly happen at a future job.

Having this equipment — and opportunity — at a small liberal arts school is a differentiator for Walsh. And it could continue to grow, as the university has already been approved for a second SPARQ grant, which Passerini said would be used specifically for undergraduates to work with companies on research.