New nonprofit solves thorny issue for STEM teachers

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Todd Wackerman (MBA '18) is the founder of STEM Library Lab, a new nonprofit that gives teachers access to science and math equipment.

In the six years he spent teaching in New Orleans public schools, Todd Wackerman (MBA ’18) had a lot of great ideas about how to make science education more exciting — and a lot of trouble getting the tools he needed to make those ideas a reality.

To teach a lab on acceleration, he once tried rolling bocce balls down an aluminum gutter while his students tracked their motion with tape measures and stopwatches.

“It was engaging for the students, but we couldn’t get reliable results,” Wackerman recalls. “The right tool for that exercise is a Vernier Dynamics System with a motion sensor and accelerometer, but a set for the class would have cost $3,000. It just

wasn’t feasible.”

When Wackerman enrolled in the MBA program at Tulane University’s A. B. Freeman School of Business, he began thinking about ways to solve that problem. The result of his efforts is STEM Library Lab, a new nonprofit that gives New Orleans public and charter school teachers the tools they need to teach hands-on, inquiry-based science.

Library Lab works like a lending library for math and science teachers. When schools purchase an annual membership, their teachers get access to the library’s full inventory of STEM equipment, everything from microscopes and Bunsen burners to Paleozoic fossils and math manipulatives. If Library Lab doesn’t have a piece of equipment in stock, teachers can special order it and usually receive it within a week.

“The sharing model makes sense because there’s such a variety of STEM equipment, but it only gets used by a given teacher for a couple of days a year,” Wackerman says. “When a piece of equipment costs $1,700, no school is going to say, ‘You want that? You’re going to use it for one day? Sure, we’ll foot the bill.’”

Just as important as the equipment, Library Lab offers a lesson plan database and personalized coaching to help teachers use the resources effectively. Teachers can also contact previous borrowers with questions about their lesson plans and get expert advice from specialists with hospitals, universities and organizations like the Audubon Nature Institute.

Since launching as a pilot program with 24 teachers last November, Library Lab has built up an inventory of nearly 200 pieces of equipment and, even more importantly, proven that its model works. Library Lab was a semifinalist in the International Business Model Competition, placed second in the Harvard Social Enterprise Conference Pitch Competition, and finished in the top 12 out of 250 ventures at the Milken-Penn GSE Education Business Plan Competition.

This fall, Library Lab will launch at scale in a new 800-square-foot space within Bricolage Academy charter school on Esplanade Avenue. Wackerman says he currently has 10 schools signed up, and he's hoping to enroll 10 more by the end of August.

"It's a great time to be trying new things in education," Wackerman says, “and we're excited to be a part of that change.”