



Boards Making a Difference

Ottumwa's SparkTank Lights a Flame in Students

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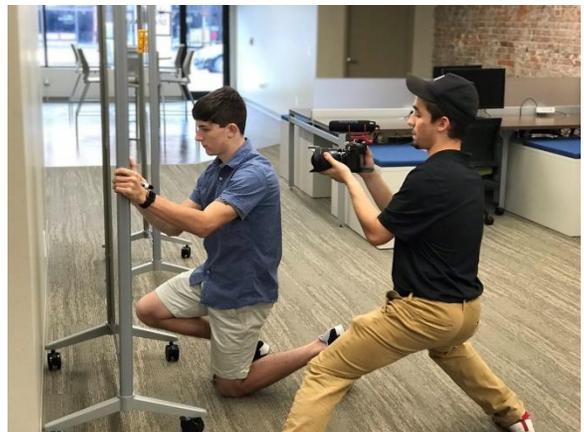
"Education is not the filling of a bucket, but the lighting of a fire."

This quote, from Poet WB Yeats, could not be more appropriate when describing Ottumwa Schools' SparkTank high school program. The work-based learning program connects students with local businesses and organizations. Students work directly with these businesses to complete projects for them in a professional environment, complete with deadlines and teamwork. Through problem-solving, authentic experiences and culture immersion, students find their passions. And, SparkTank is designed for ALL students.

"SparkTank involves every student at every level, because every student matters. That's our core belief, that every student matters. SparkTank is centered around that. You can be an honor student, or you don't have to be excelling in school, but this program is designed to meet every student's needs," says Board Member Nancy Manson.

SparkTank is the result of more than four years of discussions and research on how to best meet the needs of the community and the needs of students for the future. In Ottumwa, secondary attainment has been a constant concern, with many students not continuing their learning at two or four-year colleges following high school graduation. The district made a decision: Why don't we bring the education to them and partner with Indian Hills Community College? This partnership meant students could graduate from high school with dual diplomas, essentially bringing work skills directly to them.

That was step one—step two was a school-to-work program...the program now known as SparkTank.



“For many of our students, the traditional school model doesn’t work. Students need hands-on, real-world experiences. Connecting with students where they are helps with behavior management, dropout rates, and really fills the need in our community,” said Superintendent Nicole Kooiker.

Director of Innovative Learning Jeff Kirby sums up the SparkTank experience in four words: Innovative, technical, professional and authentic.

INNOVATIVE, TECHNICAL, PROFESSIONAL & AUTHENTIC EXPERIENCES PUT THE SPARK IN SPARKTANK

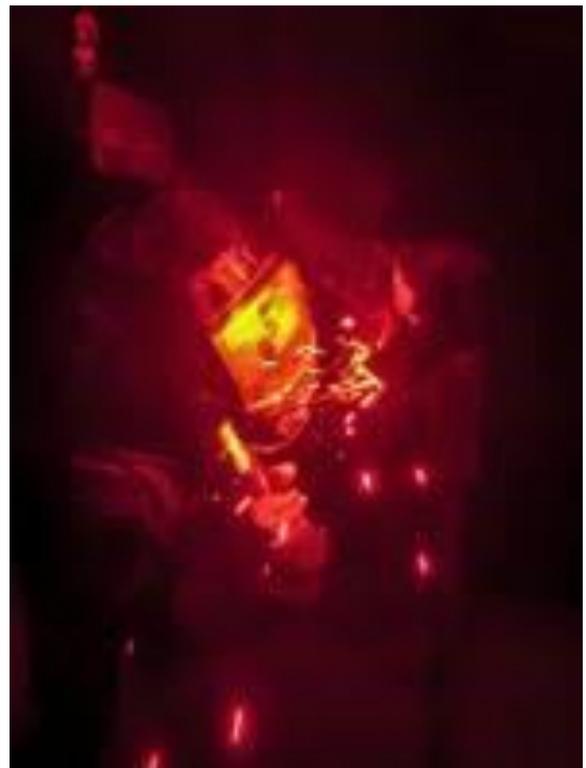
“Students in SparkTank are completing real projects for real people. They are learning skills by doing them. First, we train them in employability skills before they meet with businesses. Then, they learn business skills like leading meetings and goal setting. Finally, once they’ve tackled all these, they learn the technical skills by working hand-in-hand with businesses to complete projects,” says Kirby.

Students in SparkTank also tackle time management, conflict management, and have created their own code of conduct.

Local businesses and organizations have partnered with SparkTank to offer programs for students. The projects range in length, from a few weeks to as long as six months; they differ depending on the field and strand; and one project can include students from multiple strands. For example, the Ottumwa Symphony Guild charged engineering students to design a palm tree for an on-stage production, and manufacturing students then built the tree based off their design.

IF YOU BUILD IT, THEY WILL COME

Following a full year of researching other project-based learning programs, like Waukee APEX, the district found out they received unexpected funding in April 2017.



“If we didn’t receive that funding, we weren’t going to be able to get this program off the ground. We were in full planning mode, we just weren’t sure where the money was coming from. We knew if we secured the funding, we could get SparkTank off the ground,” says Kirby.

The district pulled together the program within three months of receiving \$664,150 from the Ottumwa Regional Legacy Foundation. This money helped fund SparkTank over the first two years, paying for equipment and technology. They also received money from John Deere, and were awarded a STEM BEST award.

“When the board first heard about the program, we were very excited. We started learning about it, we even took a trip to Waukee to see the APEX program. We were kept well apprised of the progress all along. Once we received the grant, it was frosting on the cake. It was all we needed, we said, ‘let’s go, let’s move!’” says Manson.

And move they did. Over three months, the district hired two instructors, remodeled a facility, developed the original strands and competencies for grading, and built up business connections.

So, the district built it. Did they come?

(YES, THEY CAME): THREE ADDITIONAL STRANDS ADDED DUE TO HIGH DEMAND

The first year of SparkTank was so popular that the district added manufacturing, construction, and a career-focused strand to the original three strands. In the first year, 20 students completed the program. In FY 2019–20, the program is so popular it is now capped at 60 students.

SparkTank is first come first served—open to any and every student. “We take every student. This is not a program built for a specific type of student, we want to engage them all. They sign up with their counselor like they would a regular class,” says Kirby.

SparkTank Strands:

- Engineering & Design
- Bulldog Construction
- Bulldog Manufacturing
- Communications & Technology
- Ignite
- School-to-Work

SPARKTANK BRINGS TOGETHER COMMUNITY LEADERS

With a program of this magnitude, there are many community partners that help make it successful. All the coursework for the program syllabus come from Indian Hills Community College. An advisory

council comprised of local businesses and organizations help generate projects, initiate outreach to businesses, spread the word, and guide implementation of new strands.

“It’s a very effective advisory council, made up of the decisionmakers in our community. They are a huge asset to the program,” says Manson.

The district also has curriculum committees that meet twice per year. Those are made up of educators and businesspeople within the sectors that can give teachers more specific information. “The curriculum committees help guide us. We ask them, ‘What computer programs are you using in your fields, what processes are you using, what should our students address in the area of ethics?’ This is essential information to keep us relevant and on the front edge,” says Kirby.

SHOWCASING AND PROMOTING THE PROGRAM

During the first year, the district showcased the new program by inviting staff and students into the facility’s open house, asked business partners to help promote it, and even held school board meetings there as a way to bring the public in to the facility and understand what’s happening.

“We’ve been intentional about not wanting it to look like a classroom—we want it to feel like a business, like Google. We want students to feel like we are offering a different type of learning environment. We also want businesses to feel welcome, not like they are walking into one of our school buildings,” says Kirby.

Many businesses choose to meet at the SparkTank facility, in part because of its fun, comfortable environment, but also because it is conveniently located right on Main Street.

In addition to the school board, the district has committees meet there as well. Often, while these meetings are happening, students are working on projects at SparkTank.

“It’s great for the students to see a group of adults collaborate and work together as a team--we’re modeling for them. And as adults, we see the purpose behind all the decisions we’re making, which are the students,” says Kooiker.

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