TinkRworks Case Study:
St. John of the
Cross Parish School

STEAM Programs Provide Students with Real-World Problem-Solving Techniques

Background:

St. John of the Cross Parish School (SJC) is a private, Catholic school located in Western Springs, IL. It serves about 630 students, pre-K through eighth grade.

Challenge:

Fred Reynolds, Tech Coach at SJC, was looking for STEAM solutions that would allow his students to work with real-world engineering components and develop their problem-solving skills.

Solution:

Reynolds was introduced to TinkRworks through a parent of a current student, who had enrolled his son in a STEAM program at TinkRworks. Intrigued by the parent's enthusiasm, Reynolds and the principle of SJC, Kathleen Gorman, met with TinkRworks leadership and were introduced to STEAM-X projects at the TinkRworks Engagement Center. By the time the two got back into the elevator, they had already decided they would partner with TinkRworks.

"The decision was immediate because when you walk into the center, you can see that it's an engineering workspace," said Reynolds. "It was very apparent the team knew engineering and also very apparent that they knew education. Most of the time, you don't see that."

Providing students real-world problem-solving techniques:

"I want my kids my to learn how to use wires and how things go together. There's a right way, and there's a wrong way. I want them to be able to problem solve if they do go a wrong way. And, I want them to use components to resemble real-world engineering components. TinkRworks does all that."

Reynolds introduced TinkRdrones, a STEAM-X project, in his eighth-grade curriculum plan. "I could have looked around and tried to figure out a way to make a drone. It would have taken me years. They [TinkRworks] have it all in a kit, all perfect, and broken down with all of the standards."

The feedback from the students has been really positive, and popularity of the STEAM program has grown.

"They love it. It's the best thing. I save it for the last grading period because it's the best thing that we do in class."

Reynolds also heads SJC's Tech Club, which in the past typically had about four to five students.

This year, with the introduction of TinkRworks' TinkRbot project, participation rose to **40** students.

Collaboration and support:

Reynolds also touched on TinkRworks' professional development, where instructors are taught how to assemble the STEAM-X projects using the kits themselves before they begin teaching students. According to Reynolds, this step is crucial to the instructors' knowledge base on the projects.

Reynolds emphasized his continued appreciation of the depth of engineering and education knowledge at TinkRworks, as well as, the dedication of the support and instructional team.

"Every time I had an issue or a question, someone would always get back to me immediately. They make it really easy to work with you." He continued, "It's a great company, with great products, and great people."
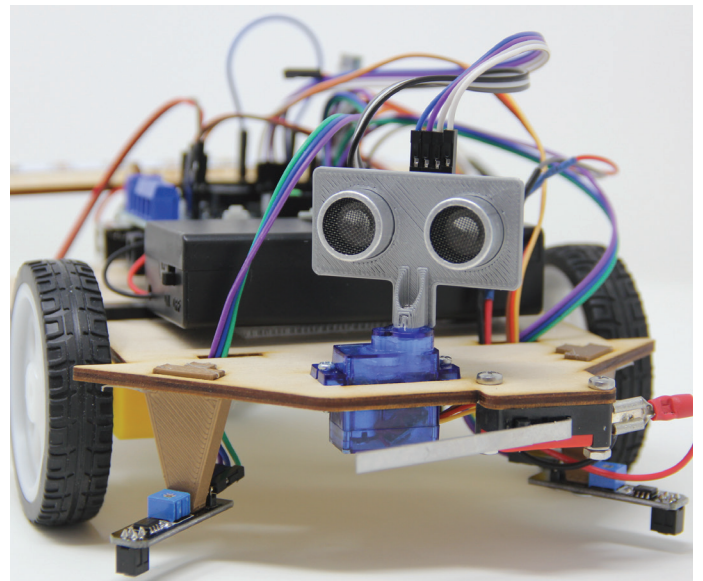

The Future:

Impressed with the authenticity of the TinkRworks curriculum and STEAM-X projects, Reynolds anticipates a growing partnership between SJC and TinkRworks.

"We are partnering forever. This is it. I always shied away from partnering because I never found a partner I wanted to partner with. We're definitely going to stay with TinkRworks because we want more of a realistic engineering curriculum. We want something the kids can troubleshoot, think about, and work with," said Reynolds.

TinkRworks
transforming learners to innovators

Reynolds' vision is to have at least one TinkRworks project at the sixth, seventh, and eighth grade levels. Reynolds has decided to add the TinkRworks SensorBot project to his seventh-grade classroom, in order to, teach the students programming concepts and plans to implement TinkRdrones again this year in his eighth-grade classroom. His ultimate goal is to create a makerspace for the students.
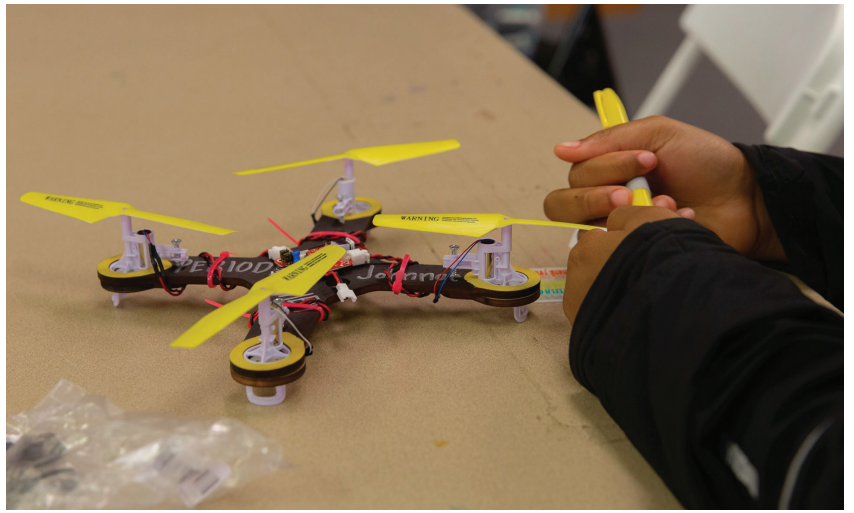
Furthermore, in the event that teaching continues to be virtual due to COVID-19 restrictions, Reynolds remains optimistic. TinkRworks recently modified their curriculum to make it "e-daptable," with the focus on activities that work well both inside the classroom and virtually.

"As long as you can get the kits in the hands of the students, I see no problem. I could see this working."