

TinkRworks Case Study: St. Isaac Jogues School

STEAM Projects Implemented for Curriculum Enrichment



Background:

St. Isaac Jogues School is a private, Catholic school in Hinsdale, IL. The school serves 500 students pre-K to eighth grade. They are a part of the Diocese of Joliet.

Challenge:

St. Isaac's was looking for a STEAM program that could enhance their focus on standards-based instruction, specifically the ability to support NGSS standards. Their plan was to implement this STEAM Program during their last period of the day, called WIN (what I need). St. Isaac's students utilize WIN to get extra help on core subjects, go to the computer lab, receive speech/occupational therapy services or get a jump start on nightly homework assignments.



Solution:

Katey Goll, a special education teacher at St. Isaac's became interested in TinkRworks STEAM-X projects and curriculum when she first met Anu Mahajan, CEO and founder of TinkRworks. At the time, she was looking for opportunities for students to turn WIN time into a more focused period for development and enrichment.

After looking through TinkRworks programs, St. Isaac's chose two TinkRworks STEAM-X projects, Art Electric and TinkRdrone for the WIN period.



Student engagement and collaboration:

What impressed Goll the most was the fact that there was a wide range of students with various abilities, who were able to participate in the TinkRworks programs and also learn while building the projects.

“I think having the freedom to explore project-based learning through TinkRworks helps ease the students in and make them more comfortable with STEAM-based exploration. That’s what makes the difference. During class students are more timid, afraid that they are going to say the wrong thing. With TinkRworks you’re constantly debugging things. It’s a continuous process of trial and error.”

Students loved the collective problem-solving aspect in the STEAM-X projects.

“No one is embarrassed to ask questions. Everyone is going through problem-solving together. Everyone is trying to figure out coding. Everyone is working through it together. So, it’s nothing that calls out an individual student if they are being challenged.”

As an educator, Goll says she is very much in

tune with her students’ interests and abilities. She listens to them attentively and is very passionate about their learning process.

“I have a pretty good feel for what the students do in and out of school and what they like. I think, what TinkRworks has to offer is truly invaluable. Students absolutely love having their own project kits and creating something. And, I think, that is something not a lot of other places can offer. It’s such a solid curriculum that is educational yet engaging and captivating. At the same time, the kids are learning, but it’s so much fun for them. And, they are genuinely proud of what they make. That’s really the best part. The whole goal of being a teacher is to create meaningful learning experiences. TinkRworks does that seamlessly.”



Meeting needs of special education students:

As a special education teacher, Goll saw the benefits of offering STEAM-X projects to students in the special education program. She believed, TinkRworks offered a wide variety of opportunity for students, whether they were advanced academically or struggling.

“I work with special education students. I pride myself in finding good opportunities that captivate all students in things that really engage the whole student population. TinkRworks is definitely one of them.”

Goll emphasized that TinkRworks programs are acting as therapeutic projects for kids with ADHD and those on the autism spectrum.

“Throughout the year we had students with different disabilities, learning disabilities, ADHD, and autism spectrum disorders, who participated in TinkRworks classes. Honestly it was so great. It was something that the students were very proud of. It helped the students, who do struggle with attention disabilities, to sit and focus because they were able to see what they were producing. They could exercise problem solving techniques, which in the classroom kids don’t always have the opportunity to create solutions.”



Understanding and meeting teachers needs:

Much of the staff at St. Isaac's were interested in teaching the STEAM-X courses. Initially, Goll was nervous about the professional development (PD) process, as there were varying levels of experiences among the staff in teaching STEAM courses.

"I was a little nervous for the PD at first, but I have nothing but positive things to say about it. Everyone's classes went so well. Everyone left the PD with a firm understanding on how to execute the classes and how to deliver the instruction.

Goll emphasized and praised the prompt and ongoing support from the TinkRworks staff.

"Anytime the teachers did have some questions about slides or if they forgot something, they just popped an email to the help desk, and someone responded immediately!"



Feedback from parents and community:

According to Goll, the feedback from parents and students regarding the TinkRworks courses has been outstanding.

"Kids loved having their own projects. They get so excited to come up to the enrichment center. They would go to the shelf and grab their box with their name on it and start working on their project and decorate it. They worked with their peers on programming things. They loved it."

Goll continued to describe the interest from the students.

"Our first class was for third and fourth grade. And, once the third and fourth graders did it, their siblings wanted to do it. So, then it totally spiraled, and everyone loved it."

Goll, also, sent out a survey to the parents regarding the TinkRworks courses.

"All the parents loved the TinkRworks courses and wanted their children to continue participating in them."



The Future:

Goll sees a growing relationship between TinkRworks and St. Isaac's.

"I see the relationship continuing. I don't see it ending anytime in the near future. Also, a lot of our kids right now are signed up for the [virtual] summer camps."

In fact, plans are already in place to continue teaching the TinkRworks projects virtually in the event that curriculum continues to remain virtual due to COVID-19 restrictions. St. Isaac's will continue to teach TinkRdrone due to its great popularity among the students, and they will continue with Art Electric and hope to add on the Smart Lamp project.