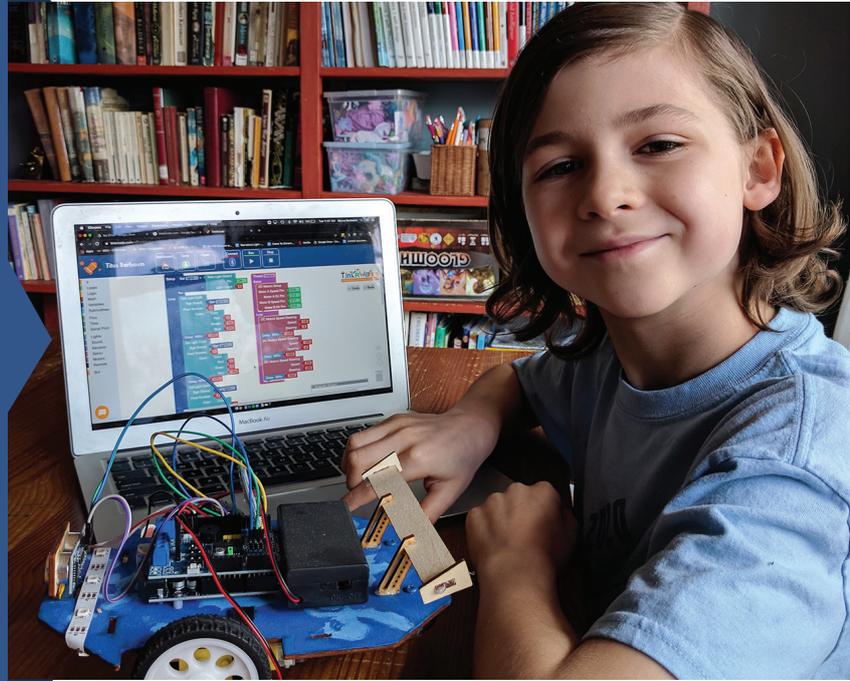


TinkRworks Case Study: LaGrange Highlands School District 106

Demand for STEAM Education
increases amongst students

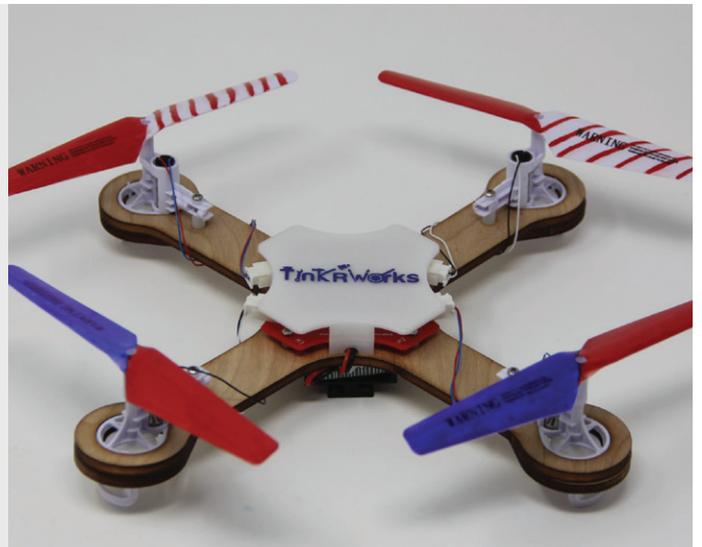


Background:

LaGrange Highlands School District 106 is a public school district located in LaGrange, IL. It's a high performing district, composed of early childhood, elementary, and middle school and serves about 950 students.

Challenge:

Highlands district identified a need to expand their STEAM offerings and were exploring options that would provide students with dynamic and hands-on STEAM projects. The school district was introduced to STEAM-X by a parent with students in the district, who had previously participated in TinkRworks STEAM programs.



Solution:

After meeting with TinkRworks and getting introduced to the multi-disciplinary STEAM-X curriculum, the Highlands leadership team decided to move forward with TinkRworks. They saw that the philosophy, methodology, and overall pedagogy of the STEAM-X curriculum aligned to the needs of the district. The district implemented TinkRdrone for eighth grade and TinkRbot for fifth grade.



Providing hands-on, project based learning:

Director of Teaching and Learning, Ali Beiermeister, stated that there were two distinct factors that set TinkRworks apart from other STEAM organizations Highlands was considering: the hands-on approach of the STEAM-X projects and the level of customer support. Beiermeister gave the example of drones, “We liked the step-by-step process of students building and learning to fly them.”

Students at Highlands are required to take an elective course, and TinkRworks STEAM-X projects are one of their elective options. According to Beiermeister, the students loved the TinkRworks projects. “The kids were so engaged. They were truly invested and excited about the courses,” said Beiermeister.



TinkRworks STEAM course at Highlands had **75** spots, all of which were filled with demand for much more.



Supporting teachers:

Highlands STEAM partnership with TinkRworks has much to do with the responsiveness and support from the team members. Beiermeister and other members of the faculty would often email the TinkRworks team with questions and receive immediate responses. They appreciate the accessible support and the continued professional development for the instructors.

“I think that’s what is really special and why we’ve remained with TinkRworks and will continue because that’s key to the implementation and the success.”



Showing parents and the community what students can achieve:

The feedback from the Board of Education and parents was extremely positive. Students demonstrated their TinkRdrones to the board, who were instantly captured by the depth of their knowledge and ability to apply it to their STEAM project. The students’ ability to talk about design and the construction challenges faced during the build process impressed the board. The students were embracing the theme of the school year, “safe to fail.”



Furthermore, parents and the community, excited about what their children are doing, are petitioning for more STEAM courses.

“They see where the world is going and what we need to provide our kids, and so they’re wanting as much [STEAM] as we can offer.”



Helping students problem solve and opening their minds:

Beiermeister added, “We want to see our students trying something and failing and figuring out a solution. She continued, “Our fifth graders coded their TinkRbots and they were so excited that it was going to go down this little path. Well, it went the wrong way. So, seeing the kids go back and look at their code and problem solve was something we wanted to see.”

“When we began the search for STEAM partners, we had two goals in mind. The first was to find a partner, who could provide us with multi-disciplinary, hands-on STEAM projects for our students that would provide them with 21st century learning opportunities. The second was to ensure that these projects explicitly bolstered NGSS and CCSS standards. TinkRworks met both aspects of this criteria.”

The Future:

Due to growing interest and demand in STEAM Projects, Highlands School District has expanded its relationship with TinkRworks and has added a STEAM teacher to the elementary building. “What we are finding now is that students are seeking as much STEAM as they can get” said Beiermeister. She has added two additional projects this year (Smart Lamp and Weather Station), and her vision is to implement at least one TinkRworks STEAM project at every grade level.

In the event that teaching will still take place remotely, Highlands would like to continue participating in TinkRworks’ “e-dapted” remote learning STEAM-X curriculum.

“If we are going to be teaching students remotely, we have to make it as normal as we can for the students,” said Beiermeister.



Highlands SD106 will be adding TinkRworks projects Smart Lamp (left) and Weather Station (right) in the Fall of 2020 to expand their STEAM engagement to include k-5 students for the first time.