YouthQuest in Flint, MI provides experiential learning experiences in an afterschool setting that connects what children learn in school to their everyday lives and communities. YouthQuest also convenes STEM events for all youth at their school with community partners, including other youth-serving organizations and local colleges.

The challenge facing YouthQuest is how to create a cohesive plan for family engagement in STEM across settings (school, afterschool, events) and over time. For example, the team has been considering whether to target family engagement by holding a particular type of STEM event (career day or science fair) or in their afterschool program, or both. The YouthQuest team also wants to raise awareness of STEM careers available in the community and make STEM learning and careers more interesting and appealing for families.

The Family Engagement Plan

The YouthQuest team convened a series of smaller STEM engagement events on STEM topics and STEM-related careers, including robotics, music production, and fashion. At one event: “Families were able to create an apron. They learned not just about a person that designs the clothes, and not just about a person that models them, but the many different careers associated with fashion.” The YouthQuest team also engaged partners to connect STEM to families’ everyday lives. The team used pre- and post-event surveys to find out what topics parents/caregivers and youth were interested in: “[We asked]: ‘What is it you want to learn about? What careers are you interested in?’ Then we can dive into the careers they don’t know are associated with that.”

They also asked families what they needed most, and learned that many needed clothing and food. Returning to the fashion example, “To go with the aprons they made, we made $30 vouchers for Flint Fresh, to deliver fresh fruits and veggies to their house. And they are able to use the recipe books to use food items to make a meal at home.” Some events were held at STEM-rich institutions: “We did a science activity at the local museum. Parents were able to do activities with their kids at different stations they could rotate through... Off site, so were able to provide transportation, but even the parents who were not able to take their kids, still had a program at school, and their kids were able to rotate through science activities.”
The A-Ha Moment

The YouthQuest team were inspired by the programs in the cohort. “Meeting with other organizations...[like PE] in Chicago, they got a bus and went around to different neighborhoods. That was an ah-ha moment for us. There are so many things we didn’t tap into.” The YouthQuest team realized that they could impact more youth and families. “One of the biggest things taken from this project is pushing more schoolwide than program wide. We have 500 kids in the school versus just 80 kids in the program.”

When they engaged more families, YouthQuest saw the need to support reading as much as STEM. “As we tried to introduce them to more STEM careers and things, it came to the forefront that we really need to tackle something before we get there, which is reading. Reading is the foundation of just about anything. Our parents were struggling with it too.” The YouthQuest team now works to improve literacy with STEM. “We are going to start offering tutoring for the students. Parents can sit in. Not [in a way that says] ‘You can’t do this’ [but instead in a way that says] ‘It’s going to be a family night. You can sit in on activities.’ ...Building on [the CARE domain] Connect, we’re connecting parents to day school especially.”

Family Engagement Strategies Reimagined

YouthQuest had always offered family events, but they became more intentional about making STEM relevant and accessible. “Once we started this process, [our team] sat down and thought ‘We think we do STEM, but not in the way we think we should be.’ ... Once we had the [Planning] Tool, we’d say ‘Ahhhh!’ ... We usually have a large STEM event with another organization once a year. Now we are doing it schoolwise.”

They also emphasize representation: “It is going to be awesome tying in Asian and African American inventors because that is our population.” The team is going deeper into the CARE domains of Connect and Act, and targeting Empower. “I am really coming for Empowerment! ... I need parents to buy-in...[and] I really want to get people that look like our students to come in and tell them that careers are obtainable for you.”

Evidence of Success

YouthQuest made their STEM events for families more meaningful and authentic, and they increased their reach to families by taking a more inclusive approach. “What I did want to do is maximize our reach to students. I like that we stepped outside our programs. We had the opportunity to reach over 500 kids. We strengthened the way we connected with our parents...and we started to be more intentional about incorporating STEM... I would say that is a success—just opening our eyes to new ideas, and being intentional about STEM, sets us up ...to make sure we’re hitting our goals. We’re now sharing with other sites some of the things we are learning and what we are doing with the [Planning] Tool. It has helped us to grow our program.”