

A Family Engagement Panel: STEM at Home: A Collaborative Approach to Engaging Families

This panel took place during the New Orleans, LA – Spring 2019 STEM Learning Ecosystems Community of Practice Convening in April 2019.

Speakers: Tina Rolewicz, Orange County STEM; Maria Elena Serratos, Orange County STEM; Laura Schmidl, Orange County STEM; Lindsay Bryce, Great Lakes, Bay Region

Summary: This panel focused on programs that bring STEM directly into the home and engage families with each other, directly at home using collaborative partnerships. The two programs showcased were Math in the Mail and Futuros Radiantes.

Math in the Mail provides under-resourced youth, pre-four-year-old preschool children, and their families with a series of six at home STEM activity kits over the course of the year before they enter preschool. The kits are free to qualifying students and are offered as a subscription service for families that don't qualify (this acts as an earned income strategy and helps to offset costs). The kits as well as the delivery and execution of the program were all designed collaboratively with stakeholders who play a role in ensuring children in the region served have the best possible start in math. Some of Math in the Mail's key partners are organizations, such as Headstart, that serve the same population and need the same income verification information. When eligible families come through those partner organizations they are automatically enrolled in Math in the Mail. These partnerships helped them address issues of enrollment when the program first started.

Math in the Mail also worked to make the enrollment process easier by including income verification in the enrollment form, instead of keeping it as a separate process. This along with enrollment partnerships helped them address initial issues of enrollment in the first year. They also utilized these partnerships to help ensure they were effectively reaching their audiences. Many of the kits were being returned due to high rates of transience – as addresses changed, kits would be returned and it was difficult to keep addresses updated. They transitioned to delivering kits to families in Headstart at their location site. Kits would be delivered to the sites and teachers would deliver them directly to families. This also saved on postage and packaging costs. An interesting strategy they used when working with homeless families, in partnership with the local homeless shelter and soup kitchen, was distributing the kits through the shelter and adding a playgroup component, the shelter formed playgroups for parents and kids around the Math in the Mail kits that also provided assistance with the activities as needed.

Math in the Mail also works to engage parents in the evaluation of the program by making their pre and post-kit surveys simple and accessible – families are asked how they and their children feel about math and to rate their experience with each kits using emojis.

Futuros Radiantes is a parent professional development program for low-income, latino families with preschool age children. The program is taught in Spanish and is free for parents. It consists of a series of six, hands-on and activity-based workshops to help them help their kids become school

ready. They specifically focus on ensuring understanding of standards, developing number sense, and language and reading skills.

The main challenges the program faced were around child care and transportation. The families served all have young children so being able to provide childcare while they are attending the workshops is essential. Futuros Radiantes was able to do this through their partnership with the Orange County Department of Education. The DOE gave the program access to the child care providers in the community which allowed for families to have access to child care providers they already knew and trusted. The program provides workshops at the child care facilities parents are already using around drop-off and/or pick-up times to make the program as accessible as possible.

One of the things they found is that when the administration of their schools, their principal and teachers were more engaged, the families were more willing to come on a regular basis and were more engaged as well.

Quotes: “My thinking about family engagement is engaging the family with each other in conversations and interactions about those foundational math skills.” (Lindsay Bryce)

“Every time we think we have a design finalized to take it into a preschool classroom. We play with the children. We put it all out in front of them and every single time they show me a new interactive way to use the materials in a way that none of us had thought of.” (Lindsay Bryce)

“We need to reach out to go and create a trusting relationship with you so that they are able to share with us what they need and what they want.” (Laura Schmidle)