

CHALLENGE ISLAND SAN DIEGO COASTAL

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The Challenge Island San Diego Coastal team in San Diego, CA is dedicated to increasing girls' interest and engagement in STEAM learning and careers. They found a silver lining of the COVID-19 pandemic: increased multi-generational engagement in their remote STEAM workshops. Challenge Island decided to make parent/caregiver engagement in their children's learning the new norm, even after COVID restrictions lifted, by setting the expectation that parents/caregivers can be thinking and doing STEAM with their children, as opposed to dropping children off or watching their children from the sidelines: "We're marrying some ideas [from the Planning Tool] and taking them to the next level...We're thinking about making the activities more hands-on... with more active participation from parents..."

The Family Engagement Plan

The Challenge Island team hosted a STEAM Career Exploration Badge workshop for girls (Grades 3 to 5) using the Girl Scouts curriculum, which introduces girls to STEAM careers and promotes critical thinking skills and engineering mindset. Prior to the workshop, the staff sent out a prep package and encouraged parents/caregivers to work with their girls as they earn their badge.

Girls were asked to look at examples of STEAM professionals—in traditional and nontraditional jobs—and view video clips that connect STEAM activities to everyday life (from the [IF/THEN Collection](#)). These activities were designed to increase entry points for child-parent/caregiver discussions, regardless of comfort or experience with STEAM.

The girls were then asked to interview a family member about STEAM careers, so participants arrived at the workshop with advance knowledge and connection to STEAM. Lastly, girls created vision boards, to translate their ideas about STEAM career interests, family interviews, and role models ideas into a visual medium (e.g., drawing, creating a diorama).

At the workshop, the girls developed their critical thinking and engineering mindset alongside their parents: **"Parents were there with them, they participated...[and were] interested in guiding the girls without necessarily driving the activities."**

PROGRAM
SPOTLIGHT

The A-Ha Moment

After inviting parents/caregivers to participate in child-led interviews and create a vision board with their child at home, the staff found that parents/caregivers were happy to make their involvement deeper: families self-organized to complete their vision boards together, coordinated by two parents who also led Girl Scout troops.

The Challenge Island team attended this "pre-workshop" meeting, and noticed that **"It's very easy when your dad is right there to just let him do it. But [staff member] would walk by and say, 'That is a great idea, but what is something you can do.' It's okay to give a nudge to the parent to let them know it's okay to let the kid figure this out on their own."**

The team believes their success was supported by the families' shared community (church). Upon further reflection, the team pondered: **"We want to invite diverse groups, but we want to keep where there is some level of connection and some level of familiarity and feed off each other's positive energy."**

Family engagement work can include building on existing resources, like church communities. Challenge Island now plans to look for other local organizations so future activities can also meet families where they already gather.

Family Engagement Strategies Reimagined

The Challenge Island team began to see how STEAM programming and family engagement fit together. They spent time to ensure their efforts would be intentional and meaningful, and drew upon previous work planning activities and outreach. **“These pieces have all been there, some because of the program, some because of the pandemic. The biggest thing ...was to reflect on the pieces we had and to put them into a package that was much more structured, deliberate, and intentional about promoting STEM family engagement, rather than just a one-off workshop.”** The team is now refining their family-centered workshops with local libraries, which are **“going to get better and more customized based on the feedback we receive.”**



Evidence of Success

During the workshop, girls shared highlights from family interviews and connected their parents/caregivers' jobs to STEAM. One student reported her STEAM inspiration was her own mom, a restaurant owner, even after viewing many different videos of STEAM professionals. The Challenge Island team also observed a lot of discussion between parents/caregivers and their children: **“The parents seemed very engaged. It was fun to see their girls, and they were all talking in terms of their girls' perspective, and engaged and excited.”** Other indications of success include the families' completion of visioning boards, as well as positive results on a post-workshop survey the girls completed. The Challenge Island team found that engaging families was empowering for youth: **“The girls were the drivers of the workshops. ‘I want to do this, so I talked to my mom or I talked to my uncle...’”**

Did you know that things you love like baking, cycling, camping, and walking the dog all contain **STEM**? There is **Science** in making bread rise, **Technology** in the design of your bicycle, **Engineering** helps keep your tent up, and **Math** makes your dog's collar fit snugly.

Watch one of our **Mingling with the STEAM stars** videos at www.challenge-island.com to learn about how the person followed their dreams and became a **STEM** career. **refer to email video link*

Think about these questions:

- What is their name? *My mom*
- What was their favorite subject at school? *Science*
- What did they love doing when they weren't at school? *Reading and singing*
- How did they get a taste of the job before they realized it was what they wanted to do for a career? *Always wanted to have a family business*
- What do they do in their job? *Multi-business worker*

Now it's your turn!

Think About: If you had a day to schedule or plan...what would you do? What do you love doing? What do you have a favorite hobby? What are you good at?

INSPIRE

How could you change one thing about the world, what would it be? How would you protect endangered animals? Stop global warming? Solve climate change? You can do it with a career in STEAM.

Write your ideas on the back of this worksheet.

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Share with your family or friends your ideas of what you love, what you're good at, and what bothers you in the world.

Ask them about careers which you might like to follow. You may find careers that combine many things you love.

career. A vision board has visual images which aid as reminders and provide motivation toward a goal. Find words and pictures that motivate you. What can you use to show your strengths and interests? How will you show your vision of how you will make a difference?

SHARE your dreams and goals with your family and Girl Scout friends!

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