"Our Lights are Stronger Now"

Building Coastal Resilience with Students in Puerto Rico

By Maggie Favretti and Paul Duddy '71

Public school students in Bayamón, Puerto Rico, learn how to build resilient communities with a little help from the Coast Guard and a few CGA alumni using a process called "design thinking."

When public school students in Bayamón, impressed by how the Coast Guard seemed to be prepared for every possible disaster, asked LCDR Jesse Harms '08 if there was also a plan for Zombies, he didn't skip a beat. "Oh, yes," he said. "I was just in a meeting about that yesterday." Long pause. "Just kidding!" However, if you considered Zombies an infectious disease, then they definitely did prepare for that, he said. For the rest of the week, even though the government shutdown prevented LCDR Harms from actually being at the school, he was with us, motivating and energizing us as we developed emergency plans for our school, planned "go-bag" systems and public service preparedness communication, and designed resilient community hubs (which double as shelters so schools can get back on line faster). Before we said good-bye, one of the students asked him what his daily job looked like. "I spend most of every day getting people to work together."

I thanked LCDR Harms for taking the time to build direct community relations with young people. "It runs in our blood," he said without hesitation.

And it's more than just common-sense law enforcement and emergency management at stake. Coastal resilience begins with people and ends with people. It is as much or more mindsets and collaborations as it is future-proofed infrastructures. Coast Guard capacity to recognize and build on local ingenuity and culture, to identify and enlist the support of social leaders, to infuse their own skillsets with empathy-based problem-solving, and to motivate optimism in youth sets the stage for preparedness, strong recoveries, and long-term resilience.

What is Design Thinking?

Together, we use a process called "design thinking," or human-centered problem solving that starts by observing and listening to people, and then building them into the solutions-finding process. I designed and was teaching a public policy class based on this concept (City 2.0) that explored what makes communities resilient, and then worked with communities and Sector New York to improve resilience, when the back-to-back hurricanes Irma and Maria struck Puerto Rico. Two weeks later, because

of the attention City 2.0 had gathered as a transformative use of human-centered design to engage students in developing their own and their communities' resilience, the American Superintendents' Association sent me to sit with the Puerto Rico Department of Education to imagine how teachers and students might function in this new, complicated, catastrophic environment. As experts in disaster risk reduction through preparation and response, and as LCDR Harms said, mission-driven community builders, the Coast Guard serve as natural partners with youth and the communities they inhabit.

Building Resilience in Toa Baja

In May, Sector San Juan continued their support for another Bayamón public school design lab. This time, LT Courtney Wolf '10, ENS Stacy Urreola, and MST3 Angel Davila joined us for our work with a neighboring and very low-lying community in Toa Baja. Students had visited with residents in Barrio Ingenio, and listened carefully to their stories and concerns. Their own school, Escuela Francisco Manrique Cabrera, struggles with attendance issues and disengagement. It has many students whose lives have been hard. They did not find it difficult to empathize with our new friends in Ingenio. "I thought I had it bad," reflected one student on the way back to the school, "they didn't even know the flood was coming!" "One person lost her whole house!" "They can't sleep at night…" "But one said that it made their community more 'together. Our lights are stronger now' she said." The students identified Ingenio residents' perspectives on (and feelings about) a number of issues: community identity, housing, heat, floods, insects, staying there or leaving, and the government. This helped us to define the key problems to solve.

Design Teams self-selected to focus on housing, emergency evacuation, mental health first aid and recovery, and emergency preparedness and "pre-covery." They ideated in three different ways to generate the most ideas possible. Then they sorted their ideas, including Ingenio community leaders' feedback to shape criteria. Our Coast Guard partners visited during this process. "What is possible?" we asked them. What does an emergency evacuation (search and rescue) mission look like for you? How could we speed that up for the residents of Ingenio, in case they get caught there again? How could we help them to be better prepared, and to know ahead of time what to do to improve their recovery? After a few minutes describing what it is like to be in the Coast Guard and to do search and rescue, LT Wolf, ENS Urreola, and MST3 Davila jumped right in to the teams' conversations. "I was impressed by how they used their creativity and critical thinking skills, and built on their empathy and sympathy to make solutions that brought the community together," said ENS Urreola. "They were using their culture, too." While our USCG partners were unable to come to the Open House sharing of the ideas, they took the time to check in to see how the solutions "turned out."

Committed to Solutions

The solutions may not all be implemented, but the students created implementation plans and made a personal commitment to "stay connected with the people we now think of as part of us." Several are there in Ingenio at the time of this writing, working with kids in the summer camp to teach them design thinking and creating their own emergency management plans and solutions. Commitment was part of the conversation, too. "What's it like to be in the Coast Guard?" was a frequent question. "Serving takes commitment," said ENS Urreola. "And it's not just any

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kind of commitment. It's your life…who you are." LT Wolf also thought this was an important question, no matter what direction the students chose. "It's so important for us to have an outward face where we can connect with communities - as we learned with Maria, we need to work closely with them," she said. "Also, we can show them the opportunities that are open to them through the Coast Guard, and they can pass the information and the experience they got from us on to their families and future generations." ENS Urreola concurred. "It is imperative that CG works hand-in-hand with communities, also because we are part of the community." This sense of two-way commitment to community-building and solutions fed the students' desire to stay connected.

A Boost of Confidence

What was the impact on the students? Adrian wrote, "I learned how much I want to help people. Now I want to become a lawyer to protect people and help them move to a safer place. Design thinking helped me see what I can really do and also what I want to do." Another student came to appreciate the human importance of understanding the threats, and demonstrated that by deepening her knowledge. Grace shared, "I want to know more about climate change so I can figure out how to help in the future." And Paola came out of her trauma.

"During and for a very long time after the storm, all I could do was draw. I just drew and drew. Design Lab gave me my voice back. Now I know I have ideas that can help." Meeting and working alongside LCDR Harms, LT Wolf, ENS Urreola, and MST3 Davila Gonzalez affirmed and informed these young leaders, boosted their confidence, and gave them more reasons to plan for their own future.

After the program concluded, Paul Duddy and I asked LT Wolf and ENS Urreola to reflect. What should the kids study? "What I learned from working with your group is how important climate change and environmental adaptation is and will be," said LT Wolf said. "If we can help them to come up with ideas, and they can help us, …we can work together to try and prevent some of the worst of the issues we are going to be facing down the road."

And is there anything else the Coast Guard Academy could do to support such work? She added that community service and community events on summer assignments helped, and "at the Academy, it would be great if we could study contingency planning and force readiness with the communities up in CT…maybe if we had community outreach or design thinking labs around resilience while we're studying it in our classes. We can apply our classwork using design thinking in the community, and that would get us in the readiness mindset for after graduation."

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