

## FIRST Impact Award - Team 359

<b>2026 - Team 359</b>
<b>Team Number</b>
359
<b>Team Nickname</b>
Hawaiian Kids
<b>Team Location</b>
Waialua, HI - USA
<b>Describe the impact of the <i>FIRST</i> program on team participants within the last 3 years. Think about percentages of those graduating high school, attending college, in STEM careers, leadership skills, and serving as mentors/sponsors in <i>FIRST</i> programs.</b>
We bring modern technology to our rural town. Our STEM Learning Center (SLC) is a maker space for students to explore mechanics, electronics, & graphics. This leads to higher academic proficiency in Science, Math, and English compared to our school's population. In the last 3 years, 100% of our students have pursued higher education, compared to 30% schoolwide. 25+ of our students have returned as mentors. 70% of current mentors are 359 alumni or their parents.
<b>Describe your community along with its unique opportunities and circumstances. Think about your geographic region, diversity of town/school, language barriers, socioeconomic barriers, and cultural expectations.</b>
At around 3000 people in our town, it is 0.3% of Oahu's population. Our team consists of 30 students, making us 1% of our town's population. The majority of our community is underdeveloped and agricultural; we're the most geographically isolated team on Oahu, separated by mountains. With few people and students, there are limited STEM opportunities in our area. Our program addresses that by serving as one of the only community SLCs in our region, providing tools and resources for youth success.
<b>Describe the team's methods, with emphasis on the past 3 years, for spreading the <i>FIRST</i> Mission in ways that are effective, scalable, sustainable, and creative.</b>
We regularly act as ambassadors, hosting facility tours & STEM workshops for students & mentors on FRC teams in 8 countries. We host virtual FIA exchanges, which 35+ teams from 6 countries have attended to share and receive feedback annually. Teams share their best practices for others to trial. Teams are able to effectively share and adopt new ideas and methods from around the world through the exchange. We hope to instill collaboration and bring the flag of <i>FIRST</i> forward.
<b>Describe your team's goals and the progress you have made towards them to fulfill <i>FIRST</i>'s Vision.</b>
We apply for grants that not only uplift our team, but our school and community. We fund programs in our school like band, athletics, and Chinese lion dance. We completely fund After-School All-Stars (ASAS), a

program that promotes STEAM education to underprivileged and at-risk students. We advocate for STEM to be accessible to students in Hawaii. We testified with 3 other teams for robotics to be recognized as a sport. Robotics teams and mentors would receive allocated funding from sports.

**What impact has your team seen from your efforts described in the above question? How does your team measure impact?**

85% of students in our school participate in extracurricular school activities. Without our program, these STEAM opportunities would cease to exist. ASAS is a pipeline for students in grades 7-8, as 80% of our team members participated in it. ASAS not only benefits students, but also parents, providing them with a free after-school care option. Our team recognizes that by bringing up the community around us, we're also bringing up ourselves.

**Please provide specific examples of how your team and team members act as role models within the *FIRST* community with emphasis on the past 3 years. How do you share these best practices with other teams?**

Our Hawaiian Helpers service has assisted 100+ teams at various regional events. We extend our support to 7+ off-island teams during the Hawaii Regional and 25+ local teams throughout the year by providing a practice field and machines to make parts. We create social media for the *FIRST* Hall of Fame account, which gives tips and suggestions, helping other teams with their own award submission. We publish our best practices on our website for all to see.

**Describe your team's initiatives to Mentor and/or Start other *FIRST* teams with emphasis on activities within the past 3 years.**

In the past 3 years 100+ teams reached out to us with questions about autonomous, CAD, shipping, and fundraising. We share our lessons learned by creating published resources on our website about our most FAQs. We took that knowledge and worked with 6909 to create the FRC Japan Workshop. The purpose was to make it easier for Japanese teams to participate in *FIRST*, taking them through a mock season, sharing tips on travel logistics, and discussing how to effectively communicate with judges.

**What other initiatives have you created, grown, sustained, or participated in (*FIRST* or otherwise) to help inspire young people to be science and technology leaders and innovators? What outcomes have you seen from your efforts in the past 3 years?**

Our initiative is to have industry and state-of-the-art machinery. The Dream List Grant allows us to obtain cutting-edge technology like 3D, UV, and T-shirt printers. This gives our students skills to make them marketable for both jobs and higher education. When they get there, they see it is no different than what they learned on 359 as we tackle imposter syndrome head on. Many local businesses come to us for their manufacturing needs, side-stepping lengthy and expensive shipping costs.

**Describe the partnerships and relationships that you've created with other organizations (teams, sponsors, educational institutions, government, philanthropic entities, etc.) and what you have accomplished together, with emphasis on the past 3 years.**

We volunteer at local service events such as Hawaii Special Olympics and Bon Dances. Within our town, we share our program by selling our products in local shops, building relationships, and connecting with business owners. We also serve those internationally, through our partnership with Life Changer Prosthetics, creating and 3D printing the parts for prosthetic legs. These partnerships allow our team to give back to those who truly need it while also growing our students' technical skills.

**Describe your team's efforts in the past 3 years to promote *STEM for Everyone*<sup>TM</sup> within your team, *FIRST*, and your communities.**

We accept students of all backgrounds. 80% of students are part of minority groups, with most of our students being people of color, multiple races, and/or of Native Hawaiian descent. Females make up 1/3 of leadership roles and members on our team. Our school is 43% free or reduced lunch. During our meetings, we provide meals. To ensure students can attend *FIRST* competitions off-island, we subsidize travel costs by 70% and provide internships for students to fund their travel.

**Explain how you ensure your team and the initiatives you have created will be sustainable.**

We ensure the future of 359 is sustainable by partnering with various grantors, sponsors, and local establishments. We manufacture local solutions for businesses while providing our team with a steady income. Knowing we need to fly to various competitions, we redesigned our pit and materials to be collapsible and modular. This reduces shipping costs and logistics. We have started selling student redesigns on our new marketplace to help other teams reduce travel costs.

**Highlight one area in which your team needs to improve and describe the steps actively being taken to make those improvements.**

Our team struggles with recruiting students and mentors in our small community. For years, our team has had remote mentors; this year, we brought on remote students. We use Zoom and Slack to keep all our students connected. We set up webcams throughout our workspace so remote members can follow our progress in real time and interact with their peers. Without remote students and mentors, our team wouldn't have the support and success that we have today.

**Briefly describe other matters of interest to the *FIRST* Judges, including items that may not fit into the above topics. The judges are interested in learning about aspects of your team that may be unique, particularly noteworthy, or had a large impact.**

Our goal is for Waialua to be known around the world for our Robotics Team and STEM Learning Center leadership. In 2025, 25 schools from 3 different countries toured our SLC. When schools visit our campus, they experience an average day of STEM. We inspire and give opportunities to students from areas where STEM opportunities are limited. Recently, we've had a group of 90+ students from Osaka, Japan, showing them our projects. We welcomed 50+ dignitaries in the last 3 years.

## **Essay**

Our 'Ohana We are Team 359, The Hawaiian Kids, established in 1999, as the first robotics program in Hawai'i. Today, we are 33 students who share a continued passion for STEM innovation. We are the most geographically isolated team on Oahu, separated from the capital and main tourist area by a mountain range. Surrounded by underdeveloped farmland, students can't envision themselves as part of the thriving technological and industrial hubs on the other side of the island. To change that narrative, our mission is to create STEAM opportunities for our community, transforming our town's identity and creating a place of belonging for our students through our STEM Learning Center (SLC). We are raising the next generation of leaders and putting Waialua on the map.

Serving Our 'Ohana In Hawai'i, a shared culture of "support local" sustains small businesses across our islands. Our program offers graphic technology, PCB milling, laser engraving, 3D printing, mini-milling,

and waterjet cutting services for local and international businesses and programs as a self-sustaining mechanism to fund our team and “support local”. Through these ‘Special Projects’, our students utilize the engineering design process and our SLC’s resources to design and manufacture high-quality products that address community challenges. From spam slicers that reduce the physical strain on food-service workers to catalytic converter shields that protect our island’s vehicles from theft, we create real solutions to local business challenges. Through these initiatives, we’ve earned \$50K+ in the last 3 years and grown relationships with local businesses. This year, we’ve expanded our projects to the FIRST community. After overheating issues with the Limelight cameras used by many FRC teams, we created a cooling fan and captured data to see its impact. It was so successful that we offered our solution to the FIRST community. Within the first week of launch, we received 10 orders from teams around the globe. One of our new Special Projects is through LifeChanger Prosthetics. We created knee and ankle components for amputees in Central America. We plan to create more components and scale up production as the year progresses, significantly improving the lives of these amputees and giving them new opportunities. We present our Special Projects annually at AFCEA (Armed Forces Communications Electronics Association), making connections with tech companies, earning a \$3K sponsorship, and securing job/internship offers for 10 students. Our State Government and Department of Education (DOE) recognize the tremendous impact we have on the Waiialua community and throughout the state, awarding us a \$1.35M grant to fund and expand our SLC. Being at the end of the power gridline, we experience frequent power outages at school, with 8+ in the last school year. To ensure that learning continues for everyone across our school, we purchased electric generators. We repaired our leaky roof and sewer lines, replaced aging infrastructure like roads and railing, and upgraded our site to support our new waterjet and match other cutting-edge technological centers on the mainland. To grow the state’s technical resources, we led a collaborative effort with 5 schools to apply for a STEM Dream List Grant and secured a collective \$7M. Schools used this grant to improve education in Hawai’i with better equipment and machinery, such as 3D printers and water jets. Our team selected equipment, ensured proper installation, and trained the other schools to maximize value from the opportunity. FRC 3880 shared, “Our students are better prepared for 21st-century jobs, industry opportunities, and community resiliency.” Such initiatives create more STEM opportunities and manufacturing hubs in our state. Since 2025, our students have participated in the DOE Career and Technical Study Program to learn employable, technical skills from worksite mentors by working on Special Projects. These paid internships enable students to travel out of state to competitions while boosting their resumes. We are dedicated to providing a well-rounded education to Waiialua’s youth. Over half of our students are in minority groups, with 60% of our school needing free/reduced lunch. Our team is actively working to ensure that ALL students in rural Waiialua receive a strong education and real-world experiences despite economic and educational hardships. We donate \$250K annually to extracurricular organizations, including Waiialua HS’s graphic design, athletics, Lion Dance, and band. \$106K is allocated to fully staff After-School All-Stars (ASAS), a non-profit program that offers after-school tutoring and STEM enrichment activities for K-8 students. Older students gain leadership skills, providing academic support to younger students. Nearly 80% of our team members participated. The results show that while only 30% of students at Waiialua HS pursue post-secondary education, 100% of students in our program do. Sharing Aloha We rely on alumni mentors and volunteers to sustain our team. Due to our isolation, it is challenging to recruit mentors from outside of our town. Recognizing our knowledge gaps, we invited remote mentors from the mainland US to support our Business, Media, & Documentation and Control Systems subteams. Students on our team make up 1% of our town’s population of 3k. Because 359 is one of the few SLCs on the North Shore, we invite students from neighboring districts to join us. To extend our reach, this year we invite students across the US to join remotely. Through Zoom and Slack, we keep everyone in the loop with several webcams set up throughout our workspace so our remote

members can see our progress in real time and interact with their peers. About 20% of our team comes from outside of Waialua, including 3 other US states. In 2024, we created a team magazine, offering an organized, approachable medium to showcase our program. This inspired our sponsors to visit our site and learn more about our initiatives, leading them to give additional funding. As some of our grants come with reporting requirements, the magazine fulfills these obligations, ensuring we can continue securing funding and providing STEAM education to students. Over the last three years, we've produced 1000+ copies and continue to publish new works every year. We enhance our team's skills by promoting global cooperation, FIRST's core values, and the spirit of Aloha. Our service, Hawaiian Helpers, assisted 25 teams in Hawai'i with supplies, equipment, practice space, and knowledge. Over the last three years, we assisted 100+ teams at competitions with spare parts and troubleshooting help. To alleviate the stresses of figuring out travel logistics, we hosted and assisted 4 off-island teams in our SLC during the Hawai'i Regional and plan to host 3 more this year. Teams took a tour, unpacked, and troubleshooted their robots on our practice field. We build our community by participating in cultural events and festivals, supporting 1500+ community members through Japanese bon dances, Kūpuna luncheons, and Hawai'i Special Olympics. These local events encourage us to embrace our culture by incorporating elements of different faiths, connecting with our elderly population, and supporting local initiatives. Our team strives to build and sustain relationships within the FIRST community. In 2023, Japanese Team 6909 visited our SLC to learn more about our program before competing at the Hawai'i Regional. We mentored their students on how to effectively communicate with judges, which led them to win the EI Award. A year later, our team traveled to Japan for a STEM technology and cultural tour, meeting up with 6909 to explore the Chiba Institute of Technology Exhibition. To introduce new Japanese students and teams to FIRST, we planned and co-hosted a virtual workshop with 6909 in November 2025. We published resources on past FRC games, award categories, and the build season, lowering the barrier of entry. Like us, teams in Japan face extra challenges with competition travel, so we shared tips on transportation, airline policies, and other important logistics. During our award seminar, we highlighted the cultural differences in communicating with judges in the US v. Japan. Our SLC welcomes many organizations outside of FIRST. In October of 2025, we hosted the principal and 90 students from Josho Gakuen Junior and High School from Osaka, Japan. During the tour, students shared how inspiring it was to see peers their age running advanced machinery. It gave them a glimpse of the impact that hands-on learning opportunities can have on students' futures and was a great way for both of our schools to exchange cultures! Efforts like these are part of our ongoing efforts to build relationships with Japan as a whole. We plan to visit their school during our next Japanese STEM technology and cultural tour this year. For our virtual FIRST Impact Award (FIA) Exchanges, we invite teams from around the world to share ideas, present their work, and identify places for improvement. Our platform has an extensive reach, with 80+ attendees from Taiwan, Japan, Mexico, Canada, Brazil, Turkey, and the US. FRC Team 316 credits our exchanges for winning the FIA two years in a row. One student said, "Working with 359 made us better at effectively communicating the benefits and opportunities our programs provide within our disadvantaged community." From local Special Projects to far-reaching FIA Exchanges, Team 359 commits to supporting and engaging with our local community and teams worldwide. We are redefining what's possible by showing that Waialua's students have a place to thrive in STEM and lead with purpose. Through FIRST, we extend our Aloha globally, solidifying our position as a focal point in STEAM. Today, when someone mentions Waialua, they don't just think of our agricultural roots; they think of STEM leaders paving the way for the future. ;

