

A group of students in blue polo shirts are gathered around a table, focused on building and testing a LEGO-based robot. One student is adjusting a wire, while others look on with interest. The background shows other students and a bright, open hall.

STEM AMERICAS



WHAT WE DO

The STEM Americas program is a Pan American Development Foundation (PADF) initiative that promotes sustainable livelihoods through STEM (science, technology, engineering, and mathematics) education in Latin America and the Caribbean. We work with children, youth, teachers, and partners to adapt educational approaches and contribute to rapidly changing economies. This is an interactive and hands-on STEM educational experience that ensures students, especially girls, gain curiosity, knowledge, and practical skills for the 21st century. Boeing and Royal Caribbean International are proud sponsors of our STEM programs.

OUR PROJECTS HAVE REACHED

**632 SCHOOLS,
1,972 TEACHERS,**



75,071 STUDENTS

TO DATE.

GENDER & EDUCATION

PADF is closing the gender gap in STEM by inspiring the next generation of girls in science. STEM Americas sensitizes teachers and parents, exposes students to female role models, and provides new opportunities for girls, inspiring them to pursue their dreams. To date, our STEM programs have reached more than 37,000 girls and women.

A hemisphere of opportunity. For all.

www.padf.org

STEM FOR OCEANS: PROMOTING ENVIRONMENTAL SUSTAINABILITY

PADF believes in the power of STEM as a key driver of environmental sustainability.

Our innovative STEM for Oceans program teaches students how to use robotic kits to build underwater drones, which are often used for underwater exploration and scientific research. Underwater drones can reach unexplored parts of the ocean and help us better understand its characteristics, such as levels of salinity, temperature, and direction of currents.

More than 100 students participated in the inaugural program in the Bahamas, working in groups to build 10 underwater drones.



HOW DO WE PROMOTE STEM EDUCATION?



STRENGTHENING LOCAL STEM PARTNERS

PADF works with local partners to provide tailored technical support to improve the impact of their STEM education programs. Our partners have access to trainings on gender equity, monitoring and evaluation tools, and a comprehensive six-month online STEM education degree. Partners now engage in a STEM Americas community of practice where they exchange knowledge and methodologies.



GOODWILL AMBASSADOR FOR STEM EDUCATION

In 2020, the First Lady of Panama, Mrs. Yazmín Colón de Cortizo, was named PADF'S Goodwill Ambassador for STEM Education. In her role, First Lady Colón de Cortizo promotes STEM education as an education strategy that helps close the educational gap in the region and prepare children and young people to face the challenges of the 21st century.



VIRTUAL LEARNING

Teachers and students learn through activities that spark their curiosity, knowledge, and problem-solving skills in STEM to succeed and dream bigger. STEM Americas has helped students, teachers, and families adapt to a virtual world and continue to have meaningful learning opportunities throughout the COVID-19 pandemic. In July 2020, Colombian students designed a prototype for a spatial mission to explore moon craters and presented their work to engineers and NASA staff.



PROVIDING IMMERSIVE TRAININGS

PADF is currently working on its first STEM aerospace course with its STEM Americas partners. This course will hone teachers' skills to implement STEM methodologies with an aerospace twist in their classrooms.

A SUSTAINABLE APPROACH

GENDER EQUALITY

PADF trains local partners to identify gender barriers and ensure girls fully benefit from and are inspired to pursue STEM education.

INVESTING IN LOCAL CAPACITY

We strengthen the work of local partners working on STEM activities and connect them to a powerful network to exchange innovative ideas, pedagogical strategies, lessons learned, and educational platforms.

DIVERSITY AND INCLUSION

We equip local partners with necessary tools to reach vulnerable populations, such as children and youth from displaced migrant families.

EDUCATION FOR EMPLOYABILITY

PADF promotes sustainable livelihoods by preparing students to be workplace-ready and working with teachers and educational institutions to encourage the use of technical and soft skills such as creativity, innovation, critical thinking, problem-solving, and decision making, among others. It is our goal to ensure vulnerable populations have access to high-quality education and acquire the skills to enter the workforce, secure new jobs, or start new businesses.

STAY CONNECTED!

CLAUDIA CADENA

Senior Program Manager

T: +593.99.511.0073 | Email: ccadena@padf.org

