

Introduction

Established in 2016 by Dean Kamen, the founder of *FIRST*® (For Inspiration and Recognition of Science and Technology), *FIRST* Global is a USbased 501(c)(3) not-for-profit public charity that seeks to ignite a passion for Science, Technology, Engineering, and Mathematics (STEM) among the more than two billion youths across the world.

The inspiration for *FIRST* Global initially came through a conversation Dean had with Shimon Peres, in which Shimon stressed the importance of youth around the world overcoming political, cultural, and religious barriers and working together to build a brighter future. Dean was inspired by the Olympic model of international competition, wherein each country sends one team that works together to win gold, while encouraging the development of Olympic skills in its population at the ground level. As a result, Dean decided to establish an organization that could accelerate the abilities of *FIRST*® and its ideas of cooperative competition and gracious professionalism. He wanted to reach

When I was first introduced to robotics and FIRST Global, I only realized then how STEM was accessible to me and how I could implement it in my real life; how I could use technology, as a teenager, to change my communities and change the face of my nation. —Member of Team South Africa 2018

Support for STEM is extremely important, not just for the advancement of any one of us, but for the advancement of all of us, regardless of nationality, borders, religion, beliefs – anything. It's important that we can all move forward together and the way through that is with technology.

—Team New Zealand 2018

all around the world as fast as possible, bringing the excitement of STEM and robotics competitions to countries that did not have such programs. In countries where *FIRST*® was already established, *FIRST* Global complements those programs and aims to further their reach.

The mission of *FIRST* Global is to inspire science and technology leadership and innovation in young people from all nations in order to increase understanding, impress the importance of cooperation, address the world's most pressing issues, and improve quality of life for all. *FIRST* Global also strives to convince governments and organizations of the world to embrace STEM education and invest in their youth.

The inaugural *FIRST* Global Challenge, held in Washington, D.C. in July of 2017, saw 163 teams from 157 countries participate — from Team Afghanistan (all-girls) all the way through to Team Zimbabwe, as well as six continental teams and a team of Syrian refugees.

Since its launch, *FIRST* Global has continued to grow. The *FIRST* Global experience is not limited to the timeframe of the competition; participation

By providing us with STEM tools, *FIRST* Global increases our capacity to develop ourselves, transform our communities, and fight global challenges.

—Member of Team Chad 2018

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in *FIRST* Global programs is a year-round activity, as participants not only build their own STEM and soft skills, but also work to spread the impact of *FIRST* Global through outreach initiatives in their communities around the globe. In just the first two years, over 2,500 youth were directly impacted through their participation in our programs, not to mention the hundreds more who they went on to impact themselves.

This report provides an overview of what the *FIRST* Global team has accomplished in 2018. We hope to demonstrate the demand for, and applicability of, the work that we do, and look forward to your support in helping us continue this life-changing initiative.

The 2018 FIRST Global Challenge

At the end of the 2017 FIRST Global Challenge, Dean Kamen, along with FIRST Global Founding Member Ricardo Salinas, announced the second Challenge would be hosted in Mexico City. In partnership with Grupo Salinas, the 2018 FIRST Global Challenge was held at the Arena Ciudad de México in Mexico City in August. A total of 196 teams participated in the 2018 season.

Supporters who came to the event included both then President of Mexico Enrique Peña Nieto and

then President-Elect Andrés Manuel López Obrador, Mexico Secretary-Elect of Public Education Esteban Moctezuma, Mexico Secretary of Energy Pedro Joaquín Coldwell, U.S. Secretary of Energy Rick Perry, will.i.am and The Black Eyed Peas, and Tongan Olympian Pita Taufatofua.

We are glad that once more science and robotics has broken geopolitical borders and brought international students together to sing a song of friendship. — Mentor of Team Iran 2018



Our Programs FIRST Global Challenge

The FIRST Global Challenge is an annual robotics event, held in a different nation each year, that seeks to highlight the greatest challenges facing our planet while encouraging the next generations to build the STEM skills required to solve them.

Each year's event is themed around an issue of global importance. Teams receive the same kit of parts, which they use to build a robot designed to complete a series of tasks in the themed game.

By putting youth in an engaging and collaborative competition that drives home the importance, excitement, and applicability of STEM education, *FIRST* Global inspires students to learn the skills they will need to tackle challenges and effect positive world change.



FIRST Global's Global STEM Corps

The Global STEM Corps (GSC) is a movement of grassroots volunteers who work to motivate youth across the globe to pursue fulfilling, exciting, and rewarding lives through STEM education by mentoring teams in preparation for the *FIRST* Global Challenge, mainly in the building of their robot. These community-based volunteers range from high school robotics teams to entire university robotics and engineering departments.

Get involved: www.first.global/getting-involved/gsc



In the words of a GSC volunteer

I have been a GSC mentor for Team Honduras, both in 2018 and 2017. I would have to say this is one of the most rewarding experiences of my entire life. The students of Team Honduras come from a remote village in the mountains. Several of the team members walk an hour in the dark over mountainsides just to go to school and build the robot. They had no knowledge of coding or robotics, and have limited access to computers. Yet they have overcome all of these difficulties. These kids are some of the brightest, most appreciative, and gracious human beings I have ever had the pleasure of knowing. The FIRST Global experience has given these kids a sense of self worth that would be hard to produce in any other way. You are changing lives! -Alan, GSC volunteer

FIRST Global's Higher Education Network

The Higher Education Network is comprised of leading universities around the world, including Worcester Polytechnic Institute, Yale University, and The Technion, which are among the founding members. Participating institutions are partnered with their nation's *FIRST* Global robotics team and provide them with technical mentoring and guidance as part of inspiring the next generation of STEM leaders.

Get involved: www.first.global/fghen



In the words of an event volunteer

I am motivated to volunteer because I have seen the power of *FIRST* in my life and I want to make sure that other young people are given the same opportunity. I believe that competitions like *FIRST* Global are critically important to the future of our world. The students discover that they are a part of something bigger than themselves or their own country's challenges. *FIRST* Global lays the foundation for a more peaceful future. —Heidi, *FIRST* Global volunteer

I cannot describe how grateful. honored, and privileged I am to be part of such an amazing community of young, passionate, and talented STEM leaders from all over the globe. Seeing all the diversity and cultures that exist in the world, and cooperating and solving problems with all of them, gives me and my teammates inspiration and encouragement to extending continue opportunities to our community. -Member of

Event Volunteers

Team Vietnam 2018

Volunteers are an integral part of the *FIRST* Global experience — they help keep the robots running, make the matches fun, and help maintain the *FIRST* Global spirit. Ranging from high-school students to professional engineers, our volunteers are an integral part of the event. Volunteers can be anyone 13 or older, and many positions do not require robotics experience.

Get involved: www.first.global/volunteer



Our Impact



50+ STEM initiatives implemented by teams



1,250+ volunteers served in FIRST Global programs



of all girls or a



135+ news features produced about teams internationally



92 robots built

with the help of a

GSC Advisor Team

35 teams composed female majority



100+ businesses and organizations



sponsored teams



1+ million social media impressions



17 universities joined the Higher **Education Network**



10,000+ hours collectively volunteered



40+ government leaders supported teams

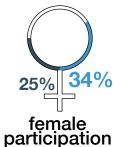


291 mentors trained youth in their communities



Our Growth (2017-2018)









Thank you!

Your generosity makes our work possible. Thanks to people like you, we are cultivating bright STEM futures in youth around the world.

