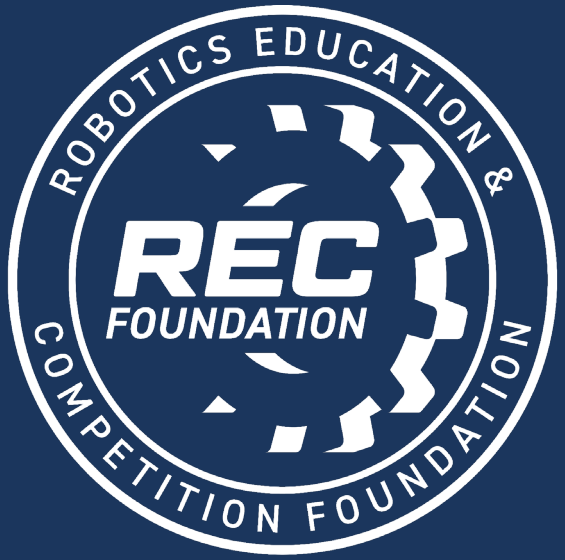
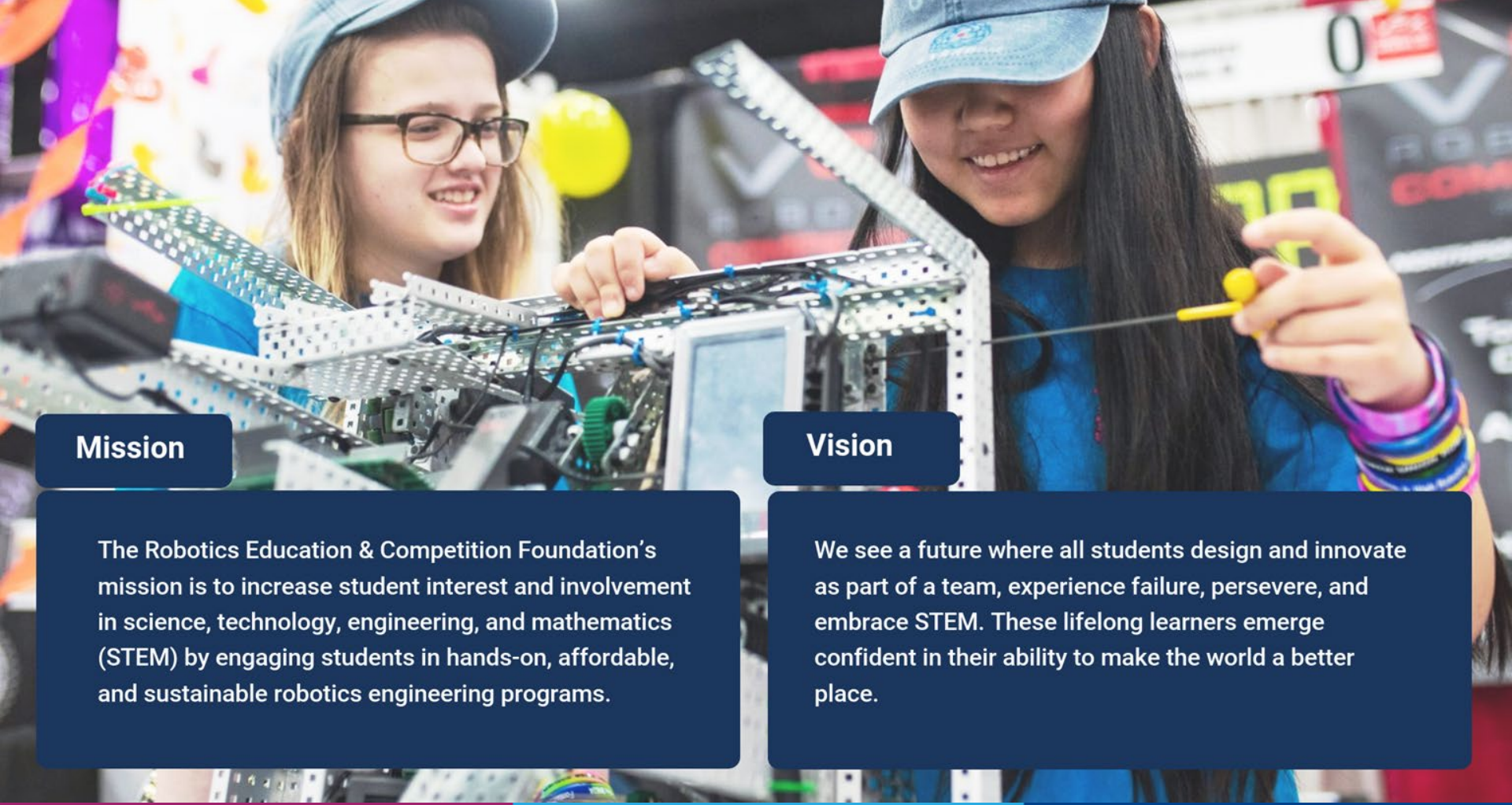


Inspiring students, one robot at a time



Mission

The Robotics Education & Competition Foundation's mission is to increase student interest and involvement in science, technology, engineering, and mathematics (STEM) by engaging students in hands-on, affordable, and sustainable robotics engineering programs.

Vision

We see a future where all students design and innovate as part of a team, experience failure, persevere, and embrace STEM. These lifelong learners emerge confident in their ability to make the world a better place.

IMPACT

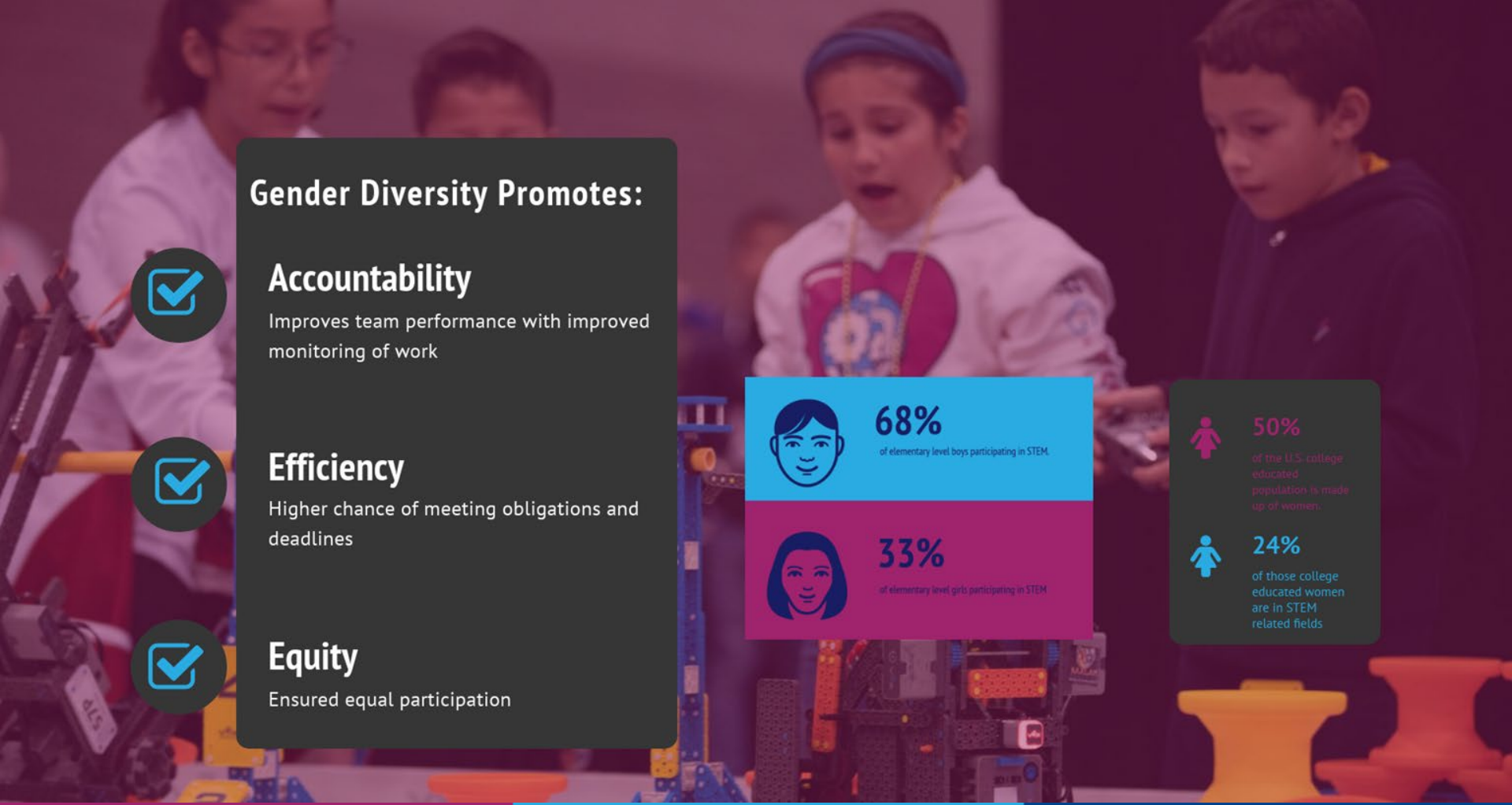
The REC Foundation is proud to impact so many within the robotics and STEM communities world-wide.

I can hire these kids who are coming out of these programs directly into the workforce because they have all the skills that we look for. They know how to work on a team, they know how to program, they know how to deal with real-world systems, they also know how to deal with failures more importantly.

Shivakumar Venkataraman, Vice President of Engineering at Google.

Girl Powered.

Girl Powered is a joint initiative between the REC Foundation and VEX Robotics to redefine the face of STEM and strives for equal (50%) representation of girls in our robotics programs.


Gender Diversity Promotes:
Accountability
Improves team performance with improved monitoring of work
Efficiency
Higher chance of meeting obligations and deadlines
Equity
Ensured equal participation
68%
of elementary level boys participating in STEM.
33%
of elementary level girls participating in STEM
50%
of the U.S. college educated population is made up of women.
24%
of those college educated women are in STEM related fields

Gender Comparison Research

Male students enjoyed driving the robot and decision making.

Female students enjoyed programming the robot and attending competitions.

Girl Powered Grants

491

$288k

> **Robotics and STEM should be about building everyone within the community up and valuing each person's voice and opinions.**
>
> Jaden Baldwin, VEX Robotics Mentor

Female Participation in VEX Programs

Female participation in VEX Programs is on the rise from 23% in 2016 to 39% in 2019. We hope to reach our goal of 50% participation in 2020.

Girl Powered Workshops

Girl Powered Workshops empower women and their communities to engage in STEM activities, hear from inspirational female speakers, and build friendships.

*Soft skills such as collaboration, communication and creative thinking are critical to Hiring Managers in their evaluation of job applicants

SKILLS GAINED THROUGH ROBOTICS

1. TEAMWORK
2. COLLABORATION
3. CREATIVE PROBLEM SOLVING
4. TIME MANAGEMENT
5. CRITICAL THINKING
6. COMMUNICATION

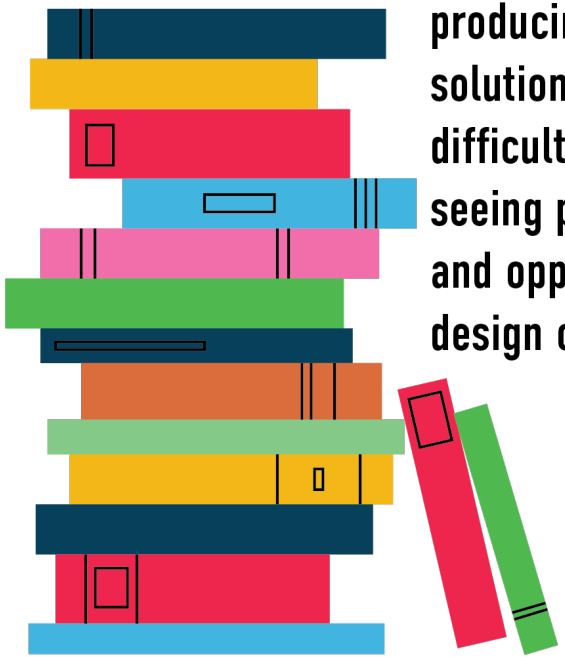
It turns out that the global business world agrees that creativity is a critical skill for the future workforce

World Economic Forum:
Complex problem solving, critical thinking and creativity are the three most important workforce skills required to thrive in 2020 and beyond.

Bloomberg:
Creative problem solving, communication, strategic thinking and leadership are the most desired but hardest to find skillsets

VRC positively impacts student growth in

95% of students in the areas of



producing creative solutions to difficult problems, seeing possibilities, and opportunities in design challenges.

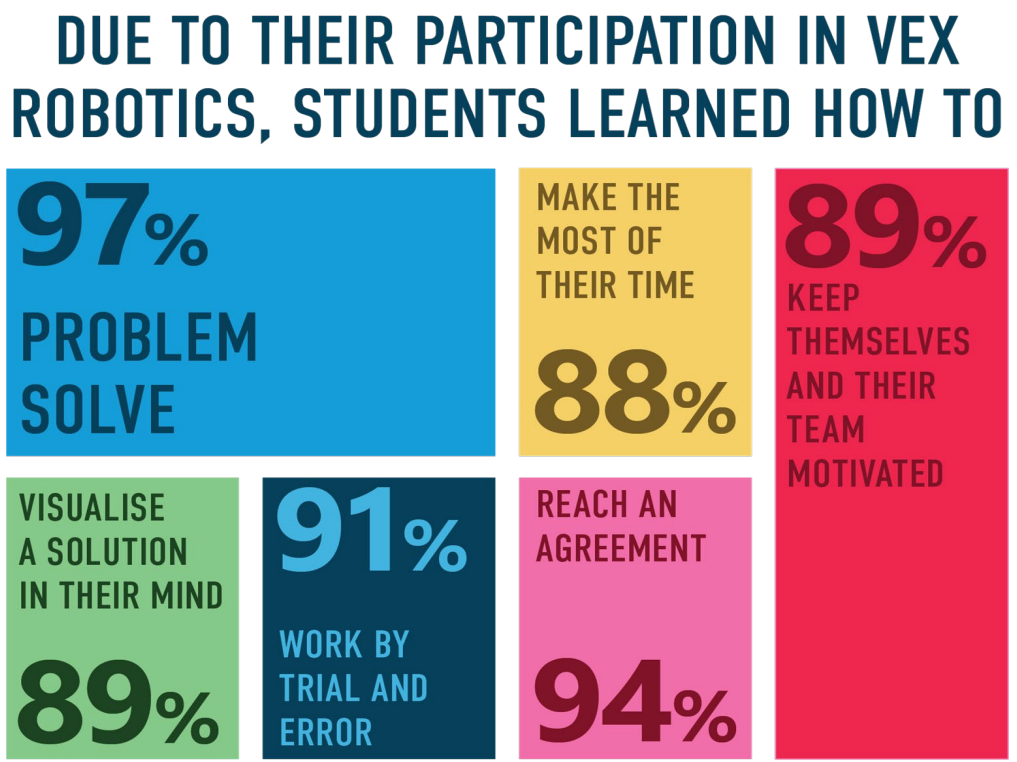
Source: Georgia Institute of Technology - An Evaluation of the VEX Robotics Competition

Creative problem solving skills are critical to future career success in an age of automation

69% of educators agree that there is not enough emphasis on creative problem solving in today's curricula

These skills are not being nurtured in school due to lack of time to create; lack of teacher training on new software, outdated standardized tests and more.

Source: http://cps.adobeeducate.com



Source: Upfront Consulting 2012 Evaluation Report

89% of students and 93% of teachers agree that creativity is going to play an integral role in solving today's global challenges.

Source: http://cps.adobeeducate.com

97% of team leaders reported student growth in engineering habits of mind including communications and justification of ideas and engaging in systems thinking

Source: Georgia Institute of Technology - An Evaluation of the VEX Robotics Competition

Host or Volunteer at a Girl Powered Workshop

Girl Powered Workshops are meant to engage and inform young women about STEM and robotics!

Workshops may include:

- Hands-on activities
- Robotics demonstrations
- Girl Powered Pledge Station
- Female STEM Speaker

Resources and materials are available at girlpowered.com/workshops including:

- Sample Schedules
- Activity Guides
- Coaches Guide
- Downloadable Assets

Girl Powered

STEM CITY
DALLAS, TX

Join our Executive Advisory Committee for the VEX Robotics World Championship

- Planning and Implementing Public Relations
- Fundraising Leadership
- Development of Program Policy

Thank You

Contact Amelia Gulling at amelia_gulling@roboticseducation.org to learn more and get involved