



VOLUNTEERS & PARTICIPANTS

Judges

(Blue Shirts)

There are a lot of them; 20-30 in Regionals and over 100 at the *FIRST* Championship. They determine which teams earn which awards. A group of role model leaders spend time listening and talking to the student participants — a great motivator. Kids get a lot of recognition from people they don't expect. Many kids already know which teams deserve awards. The judges spend a lot of time learning, explaining, and deciding ... a humbling experience for them.

Mentors

Perhaps the most valuable element of the *FIRST* experience. Engineering mentors come from sponsor companies. They bring a real-world perspective to problem solving and become coach and friend. Their motivation, support, and assistance are powerful. Mentors can also be *FIRST* Alumni and college engineering students.

Ambassadors

(Red Shirts)

Sometimes they are former judges (you never leave *FIRST*); sometimes they are just friends; but they are story tellers who help kids, supporters, and guests understand what *FIRST* is all about.

Volunteers

More than 250,000 volunteer roles are filled at *FIRST* each year. From driving duties, catering, planning, and fundraising to mentoring — a truly committed community.



“FIRST gives kids the opportunity to develop the muscle between their ears; to gain experience that will directly affect their future and our future as well.” — Dean Kamen, *FIRST* Founder

“In today’s social environment, FIRST has a chance to re-define the larger economic and moral playing field. Our students can be their own economic stimulus packages by leveraging their skills into self-sustaining careers and help with the issues we face in the 21st century.”

— Dr. Woodie Flowers, *FIRST* Distinguished Advisor and Pappalardo Professor Emeritus of Mechanical Engineering, Massachusetts Institute of Technology



FOR INSPIRATION & RECOGNITION OF SCIENCE & TECHNOLOGY

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The Psychology of the *FIRST*® Experience

You are what you celebrate

John E. Abele — *FIRST* Board of Directors



It's a **competitive sport**. It's a **life experience**.
It's an **opportunity**. It's a **community**. It's **amazing**.



FOR INSPIRATION & RECOGNITION OF SCIENCE & TECHNOLOGY

firstinspires.org

It's all about, "you are what you celebrate." That's another way of saying "aligning incentives."

Think of the elements...

ATMOSPHERE

Part Rock Concert	Audio visual screens. Music. Dancing. Outrageous costumes.
Part Basketball Championship	"Final Four [®] " of smarts. Cheerleading teams. Mascots. Cheers. Dances. Referees. Team logos and colors. Television coverage. Announcing.
Part NASCAR[®]	The "pits." The machines. Sponsor names on robots. A procession of robots enters the field with logos and lights.
Part Broadway	Lights, set, orchestration, and choreography combine to produce a well-rehearsed show. Rehearsal (practice), scripts that determine the sequence of events, an overture of guidance, the main act with many subplots, and a finale of awards/celebration.
Unique FIRST[®] Traditions	<i>Gracious Professionalism[®]</i> . Button trading. Wild costumes. Announcers asking for help for teams that need it. Worldwide on-line collaboration. Dr. Woodie Flowers' shirt with a "gazillion" signatures. Dean Kamen's "homework."
It's More Than RobotsSM	It's about completing a very challenging project with limits on your budget and a firm deadline. It's about working on teams, help from caring and knowledgeable mentors and peers, <i>Gracious Professionalism</i> , helping an opponent.
Look and Feel	The same look and feel at every competition venue. No matter where a <i>FIRST</i> event is held, the learning, excitement, and experience are the same. Careful oversight and a tight schedule preserve the culture.
Entrepreneurial	Fast-paced and changing conditions require creative solutions and initiative from all.

DESIGN COOPERTITION[®]

Alliances	Teams compete in alliances. There are many short two-minute games (8 to 12, depending on the number of teams and fields) with different Alliance partners. Your competitor in one match may be your partner in the next. The teams are motivated to know their competitors, make friends with them, and help them out. That's <i>Coopertition[®]</i> .
Short and Intense	The games are short to suit the attention span of most kids. The "pits" become the venue for getting to know each other. Successful teams have market research and sales teams that get to know the strengths and weaknesses of each group and earn trust to form alliances.
The Design and Build Experience	Teams have limited time and resources. Planning and thinking. Assigning tasks. Applying formulas and knowledge. Arguing and collaborating. Trusting and challenging your colleagues. Trial and error. Success and failure. Experiential learning.
Learning To Innovate	Learning from teammates. Teaching teammates. Learning from mentors. Some teams have special subteams that focus on helping other struggling teams. Often the students' first experience in managing and being managed by their peers in a "mini corporation." (<i>Coopertition.</i>)
Gracious Professionalism[®]	<i>Gracious Professionalism</i> is part of the ethos of <i>FIRST</i> . It's a way of doing things that encourages high-quality work, emphasizes the value of others, and respects individuals and the community. With <i>Gracious Professionalism</i> , fierce competition and mutual gain are not separate notions. Gracious professionals learn and compete like crazy, but treat one another with respect and kindness in the process.
Scholarships	More than \$80 million in scholarships from nearly 200 providers.
Awards	Awards that recognize everything from entrepreneurship to media and technology innovation. "You are what you celebrate."

MORE KEY ELEMENTS

Chairman's Award	The most prestigious award in <i>FIRST</i> . It's not about robots or winning the game. It's about impacting a school and community. It's about maximizing the number of people involved. It's about recruiting and mentoring new teams. Teams are recognized for their exemplary efforts in spreading the <i>FIRST</i> message.
Diversity of Participants	Not a science fair, driven by a teacher-selected list of the best and the brightest. Not about individuals so much as it is about teams. It is truly diverse. Minority and female participation is the norm. Many kids who aren't necessarily doing well academically ... yet. They aren't just geeks. They are athletes, musicians, and former dropouts, and they demonstrate talent they didn't know they had. It's an experience that removes the reasons for not doing well.
Diversity of Support	<i>FIRST</i> is apolitical. Support comes from large and small industries, including competitors. More than 200 of the <i>Fortune</i> 500 companies support <i>FIRST</i> . It is also colleges, universities, teachers, principals, professionals, artists, farmers, engineers, bankers ... All the people who care about kids having an experience that will change them for life.
Progression of Learning	Four after-school, mentor-based programs provide young people, grades K-12, with the same set of values and prepare them to participate in the "major league" of games: FIRST[®] LEGO[®] League Jr. FIRST[®] LEGO[®] League FIRST[®] Tech Challenge FIRST[®] Robotics Competition
Longevity Fuels FIRST	Participants have fulfilled a dream — attended college, become professionals — and then mentor <i>FIRST</i> teams. <i>FIRST</i> begets future scientists, engineers, and teachers who in turn come back to the programs as mentors, coaches, advisors, and volunteers ... as the cycle continues.