

Why do we do our BEST?

Why do we do this? Why do teachers, mentors, and hundreds of BEST volunteers devote countless hours of their personal time to this program? What is it about BEST that is worth the effort?

One answer can be seen in a small piece of the event that often goes unnoticed. In this tiny slice of time, a student's actions become a microcosm of the entire reason for BEST. It happens only in the frantic few minutes before a round of competition starts. Those final few seconds when all eyes are on them, the crowd noise is deafening, and the time pressure is mounting. It happens when that student makes the sudden realization that their robot is not working.

What happens then reflects everything that student has learned in BEST. In that pressure cooker environment, young students walk through a cognitive detective process worthy of any NASA mission controller. Without their adult mentors to help, under time pressure and under emotional strain, they encounter a remarkable 60-second life lesson.

Most push through. They do it because in the proceeding six weeks of design, test, and redesign, they have learned a skill. They have learned how to break the problem barrier.

Breaking the problem barrier is the realization that a problem is not an endpoint, but only an answer not yet found. Being able to break the problem barrier divides students who can from those who can't. Each year BEST helps students push through that barrier.

Life is a set of problems. A broken water heater, a flat tire, a tax form to fill out, a jammed manipulator arm on a robot driving on the surface of Mars, two nations on the brink of war, they are all problems. Once the problem barrier is broken, problems are replaced with process.

BEST changes mindsets. BEST places students in a situation that conditions their mind. It is a situation that flows from concept, to physical structure, and finally to operational use. Using robot design and competition, BEST presents an opportunity for students to break the problem barrier.

BEST appears first as an almost insurmountable problem and ends with the accomplishment of a solution; in the middle, a process. That process is the key. Somewhere in that process the problem barrier is broken and, in these young minds, the perception of a problem is changed.

Our country, our world, needs these changed young minds. Young minds that understand problems are not endpoints, but undiscovered answers waiting for the correct process.

That's why we do this. **That's why we continue to do our BEST.**



Steve Marum and Ted Mahler
Co-founders BEST Robotics Inc.

