# Why We Teach Robotics

1. **To Erase Preconceptions About Technology**
   Robotics gives students the ability to get a glimpse at a real-life application of the STEM fields and see past the myth that these areas are only accessible to the ultra-gifted. Robotics takes obscure concepts and translates them into easily observable behaviors, teaching them that the true keys to success in STEM are hard work and determination, rather than natural ability or high intelligence.

2. **To Make Programming Accessible**
   As the world becomes more and more reliant upon technology, it becomes increasingly crucial for students to learn programming.  Robotics affords students the opportunity to learn programming in a way that is drastically different than the manner in which it is usually taught, namely, one that is both fun and obvious in a program's effect on a system. Making programming a hands-on activity is one of robotics' greatest strengths.

3. **To Boost Creativity**
   Few, if any, disciplines combine STEM fields with creative thinking like robotics does.  The "cool factor" that robotics can bring to the classroom improves engagement and retention levels over more traditional school subjects.  This increased interest leads to some truly out-of-the-box thinking, particularly when combined with intriguing problems for students to solve using their robots.

4. **To Promote Inclusivity**
   In spite of recent efforts to encourage girls to pursue STEM-related degrees and careers, the STEM job market remains firmly male-dominated.  Providing girls with the tools and opportunity to build and program robots gives many the opportunity to rid themselves of cultural and societal expectations of what girls can or cannot accomplish, empowering them to pursue their own passions rather than what is "expected" of them.

5. **To Prepare Them for The Future**
   STEM fields are among the fastest growing industries with a projected growth of another 17% in the next decade. With this growth comes a demand for qualified, inventive new minds to further push the boundaries of what technology is able to accomplish.  By instilling an interest in these fields in students from a young age, we give them the confidence to one day join these growing fields and create the technology to solve the problems of today and tomorrow.