



Why a Project in a Robotics Competition?

The *FIRST*® *LEGO*® League program is designed to show kids how exciting science, technology, and engineering can be. Research and problem solving are *integral* parts of these fields and keys to the success of any real-world engineering team. Just think about the Mars rovers. If the NASA team had not done their research about the atmospheric, gravity, and terrain conditions on Mars ahead of time, they would not have been able to design successful rovers.

Through the Project, FLL teams learn more about the science behind the Challenge theme and better understand the work of professionals in that field. Teams encounter challenges similar to those faced by scientists and engineers as they identify a problem and develop an innovative solution. It gives students a chance to take what they learn in the classroom and apply it through research, critical thinking, and creativity – and see how fun that can be! Exposure to different areas of science and technology will also introduce team members to new career options they might never have known about.

Through the Project presentation, teams have the opportunity to have discussions and get feedback from judges who are often experts in the Challenge field. Getting comfortable giving a “live” presentation and sharing ideas effectively is a valuable life skill.

The Project is the opportunity for the teams to really explore deeper into the Challenge theme for the season and allows them to have a firsthand opportunity in proposing a solution to a problem they selected. We have teams that are learning about the patent process and are thinking and acting like real inventors. We want our teams to have as much exposure to the world of science and technology as possible. We want them to know about all the interesting fields of study that they may go into and have the opportunity to get excited about how to make a difference in the world – starting now!