



Selecting Drivers for *FIRST*® Robotics Competition

FIRST® is a global robotics community that prepares young people for the future.



Selecting Drivers

One important skill in FIRST Robotics Competition gameplay is driving and operating the robot. Often overlooked due to the demands of constructing the robot, thoughtful driver selection is regularly a key differentiator for competitive teams. This guide lays out some helpful considerations when selecting drivers.

Drivers must have good communication skills, demonstrate talent for operating the robot, and a commitment to practicing throughout the competition season. Some techniques and considerations for selecting drivers include:

Talent vs. Experience

When evaluating drivers, consider a candidate's raw talent and their accrued experience. Talent, or the candidate's natural innate ability to operate the robot, is a powerful differentiator that sets candidates apart. A candidate with high talent but little experience can often perform at a level equal to or greater than candidates with experience but little talent. Analogous with sports, arts, music, and education, an individual with high talent cannot rely on talent alone and must practice and reflect to improve.

The driver selection process should look for talented, dedicated candidates willing to put in the time and effort to grow their skills. Consider how much time you will have available to practice with the robot. If you have little time available for practice, a candidate with high talent may be the right choice. If you have more time available for practice, a candidate with lower initial talent that excels in communication and composure may become the better choice over time. You don't have to wait for your current robot to be complete in order to assess driver talent, a previous robot, test drivetrain, or the bare drivetrain of the current robot can all be used to assess driver talent.

Communication

The ability to effectively and respectfully communicate new ideas, strategies, and opportunities for improvement is critical for drivers. Effective drivers are also able to communicate robot improvements and issues with the rest of the team. Drivers often find it easier to communicate and share ideas if their drive team has "chemistry," a good rapport developed through shared experiences like team-building exercises. Drive team members should feel safe to communicate frustrations and successes with each other and work as a team to grow and learn together. A post-match "debrief" is a great way to highlight areas of improvement and celebrate successes.

Composure

A FIRST Robotics Competition tournament is a complex environment with immense competitive and time pressures. Effective drivers will be able to remain calm under pressure and coolly evaluate the situation before choosing the best actions. When evaluating drivers, look for individuals that are able to adapt well when something goes wrong and quickly move to an alternate plan. While careful planning can reduce unexpected scenarios and the panic that may come with them, over the course of a tournament it's likely that unexpected things will still happen, and the driver will be forced to react immediately.

Knowledge

While it's not the sole responsibility of the drive team to read and understand the rules, thorough knowledge of the rules by every member of the drive team is certainly a must. Successful drive teams observe constant vigilance with the rules by keeping up with all [Team Updates](#) and the [Q&A](#) and making sure to have a reference copy of the updated [Game Manual](#) with them at all events. Some matches are decided by a single penalty, so understanding the rules is key!