

Between our community outreach and member demographics, FIRST Team 1764 “The Dirty Gears” consistently strives to represent FIRST in a positive, professional manner. Please oblige us as we take you on a tour of our proudest accomplishments- our team, members, and activities over the course of several years.

FIRST Team 1764 has always made an effort to be involved with the FIRST community, especially in the Greater Kansas City area. In December 2008 our team hosted the FIRST Lego League Tournament for the Kansas City area. Attendance reached a record breaking 50 FIRST Lego League (FLL) teams; almost fifteen teams over capacity. In addition to hosting the tournament, members were involved in competition functions and mentoring. In addition to FLL, we strive to become involved in community events. FIRST Team 1764 has participated in Rebuilding Together Clay County (2010), a program dedicated to revitalizing the community. The Dirty Gears also take part in a biannual highway clean up, through the Adopt-A-Highway organization. Bring your child to work day at KCP&L (2008, 2009) and Aptuit (2009) allowed us to interact with a much younger crowd that falls primarily outside of our community. Our various activities have not only provided an opportunity for us to share FIRST with others, but have created valuable and strong partnerships.

One of FIRST Team 1764’s crown jewels is the Massive Mini. An annual seminar for the greater KC area FIRST teams, the Massive Mini provides great insight and knowledge and also gives FIRST teams and organizations a chance to try out their presentation skills. This year was our fourth annual occurrence and it came off with a bang! Nineteen area teams were in attendance with thirteen different workshops offered. This seminar occurs on a Saturday in December and is usually four hours in duration with a variety of sessions. One of the most positive attributes of the Massive Mini is the camaraderie it encourages. Whether it’s a rookie team trying to get in shape or a senior veteran team sharing its knowledge, the Massive Mini has a place for everyone.

Liberty Robotics is sympathetic to teams who have lost their funding and even their programs. When an area school district cancelled their FIRST program, thus causing the team to dissolve, FIRST Team 1764 stepped up to the plate and invited the team to merge. Even though only one student accepted the offer, we felt driven to make the difference. We believe in being aggressive in pursuing new outreach opportunities and are not afraid of rejection. Practice fields are an additional way we try to connect with our fellow teams. The past four years our team has set up a game field in our facilities, throughout build season, to give teams without resources a chance to test their robots. After build season has officially ended, the game field is sent to Hale Arena by Liberty High School to serve as a practice field for the Kansas City Regional. Our team members are responsible for assisting the Kansas City Regional Planning Committee in the assembly and dismantling of the practice field. It has been a rewarding opportunity to be able to give a helping hand and share some common ground before going into competition.

Our team strives to excel in community outreach. In the past three seasons, we have been involved in over 18 community outreach events. These community events reach children of all ages. Our annual pancake breakfast is family-friendly, while the Project Lead the Way camp we hosted in 2008 focused on 6th- 9th graders. FIRST Team 1764 is in the process of setting up a TAKE self-defense class for

the greater KC area. Our participation in community parades is another team favorite. The creativity we are able to exude is unlimited and we love to display our engineering handiwork. The animated floats we build excite kids and adults of all ages. Handing out flyers lets the younger generations know that they too can participate in FIRST.

FIRST Team 1764 works diligently to affect the Liberty School System. Our district now boasts eight engineering courses, available between 8th and 12th grades, in three different schools. These courses, part of the Project Lead the Way program, encourage students to begin exploring engineering at an early age. We have also tried each year to include robotics in the high school curriculum as a credit earning class. Unfortunately, we have been unsuccessful, but each year the school board's decision moves closer and closer to a favorable outcome. Our team has also been actively working to implement a FIRST program in every school in the district. With FRC at the high school, FTC at the Jr. High, and one FLL team, we have our work cut out for us.

As you may expect, our team is very close, much like a family. While we are active during the entire year, build season is a special time for our team to bond. Every night a meal is graciously provided by our members' parents. The mentors eat in the shop for greatly earned quiet time, while inside, the classroom explodes with conversation. Whether it's pulling up an additional table or nicking a cookie from our nearest teammate, everyone feels involved and a part of the fun and love. Most members gain two completely different benefits from participating in robotics. Obviously, the engineering and technical side benefits many members in their future goals. Build season's other benefit, the art of communication, is one that will follow us the rest of our lives, no matter what goals we choose to pursue in the future. For the mutual success of our team, all team members learn how to communicate and work together efficiently. Additionally, members gain confidence which carries into multi-faceted areas of their lives. Many members will tell you Liberty Robotics has changed their lives.

Communication is in the glue that holds FIRST Team 1764 together. Our team structure closely emulates that of a business. Our team CEO oversees five officers, the CQO, COO, CFO, CMO, and CPRO. These officers in turn supervise department leads, and each lead manages a team of individual members. This system gives members a real life experience in leadership and management while also encouraging project management and planning. This structured business system also helps in communication between team members. Officers are charged with informing members of changed plans instead of relying on adult supervision and interference. As e-mail and Google Documents are the primary methods of communication, our members know that checking online at a regular frequency is essential to staying current with team activities. When there is a snow day or unplanned free day, FIRST Team 1764 uses texting to publicize the procedures. The results include a well-informed and empowered student organization.

Our members' post-high-school decisions are often deeply affected by their FIRST experience. While we have incomplete records concerning all of our past members, we have been able to discern notable trends. Foremost, of all our known members' plans, 100% of them are continuing their education. As our former members apply themselves to military careers, community college, traditional four-or-five year degrees, and technical school educations, we are proud that they continue to strive

forward. Our education-bound members are attending a variety of colleges in many disciplines. Computers, architecture, electrical and mechanical engineering, computer science, and math education are all areas our previous members are exploring. Several of our members have also endeavored to create their own businesses while in college, displaying an active entrepreneurial spirit. We are very excited to announce that one of our original senior members graduated last spring in the area of computer science and is back mentoring our programming team. We are hopeful that our members will continue to experience the same grade of success and involvement in STEM areas and the FIRST community.

Our last point of pride lies in our parent organization, the Liberty Robotics Foundation. This foundation consists of a board of parents, mentors, and student representatives, and focuses primarily on supporting FIRST Team 1764. Between organizing dinners during build season and helping fundraise off season, these parents are committed to serving our best interests. Featured sub-committees provide much needed services including guidance and information regarding scholarships and colleges of interest, ensuring our senior members are aware of their options. In its early years, the Foundation discovered creative fundraising events, and has successfully invoked interest in the district regarding the addition of Jr. First Lego League teams. Additionally, the Foundation proudly supports all science, engineering, and math classes, clubs, and organizations. Part of the Foundation's philosophy is that we are here to encourage excellence in all technical areas. Another benefit of the Liberty Robotics Foundation is that it provides a portal for parent involvement with district FIRST teams. While currently focused on FRC, the Foundation's vision is to create unity and parent involvement among each of the featured FIRST programs. As always, having parents involved with communication and planning makes student participation a much smoother experience. As we have already been bestowed with the many benefits of our parent organization, we hope that the Liberty Robotics Foundation will serve as a successful model which other teams may eventually emulate.

While in competition, school, build season, or the community, Team 1764 members are shining examples of "coopertition" and gracious professionalism – spreading the message of FIRST in everything we do.