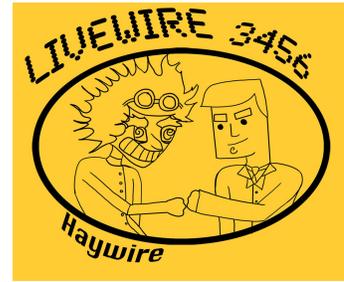


LiveWire Robotics FRC Team # 3456 Pocatello, Idaho



3 high schools, **4** coaches, **5** thousand hours, **6** weeks of building –LiveWire Team **3456** alongside our mentoring team, Haywire Team 1569 share a vision of working together and combining resources to promote the values and ideals of *FIRST* within our community. Both teams exemplify the virtues of cooperation and gracious professionalism and naturally form a successful community that works together toward a common goal.

LiveWire was formed in September 2010; joining 13 new FRC participants with 5 members familiar with FRC through experience from our sister team Haywire. This season we've worked with Haywire sharing workspaces, resources, ideas, brain power and the guidance and expertise of our coaches and mentors. In a truly cooperative manner, Haywire has exemplified gracious professionalism throughout the mentoring of our team. We view ourselves, from the sharing of a single workspace to our entwined logo, as two teams working together in the true spirit of gracious professionalism. We are proud to say we fully represent our school district with members of all four grade levels and all three of Pocatello's high schools. Ultimately, our goal is to see how far intelligence, hard work, creativity, and a whole lot of energy can inspire individuals to achieve. The keystone of our goal comes from asking the most important question, "What if? What if we provided opportunity for more students to realize their potential for excellence?" Our students live in southeast Idaho, an agrarian community where careers in science and engineering are the exception rather than the rule. Idaho is a state where only a fourth of the workforce holds a bachelor's degree or higher and more than 20% of our students' peers will not graduate from high school. We are proud to say that all six of our team's high school seniors intend to enroll in college next fall and four plan to major in an engineering field.

LiveWire has been made possible through generous start-up grants from JCPenney and the MJ Murdock Charitable Trust, as well as support from Pocatello School District 25, Idaho State University (GK-12) program, National Science Foundation, and various corporate sponsors. One of our most important sponsors has been the community of Pocatello where committed donors who believe in what we represent have contributed to make our team a reality. Their financial gifts and hours of mentoring resources have allowed for more students to participate and advance the influence of *FIRST*.

Throughout the history of Pocatello, our city has established a legacy of deep-seated rivalry between local high schools. Even ESPN noted our enmity during past infamous Black and Blue Bowls between football teams of Highland High School and Pocatello High School. Moving past these cross school dynamics has been one of the many obstacles that we've overcome to create a strong and unified team. Through gracious professionalism, we are able to look beyond petty rivalries and truly fuse together a diverse range of students from each school making this program a multi-school effort and stronger through our differences. In turn, we have

been rewarded with a team that views itself as part of a larger community rather than a school entity, enhancing our team's desire for community outreach.

Our level of community involvement exemplifies another *FIRST* ideal: *inspiration*. As a team, we strive to provide exposure for high school students and younger generations. This fall presented the opportunity to be involved with Idaho State University's annual FLL competition. Team members refereed matches, judged the competition's various components and were able to show leadership as they switched roles and became the mentors for the day, interacting with aspiring engineers and future FRC team members.

One of our most fulfilling accomplishments of this season was co-hosting the first annual "Robot Showcase" at our local mall during President's Day weekend at the close of our build season. Our local JCPenney store manager graciously arranged the high profile setting to give our team the ability to reach a wide range of ages and community members. It allowed us to share the vision of *FIRST* and educate others about *FIRST*, FRC, FLL, and our Robotics Summer Camp. Team members interacted with younger students by allowing them to operate Vex robots in a mock game and advertising our Robotics Summer Camp. We projected the Logomotion game animation and demonstrated our robot in action while team members expressed their pride and enthusiasm in the *FIRST* ideals.

Whenever we demonstrate our robot for younger students, we see their eyes light up with excitement. In these moments, we realize the extent of our influence. We're helping them understand that through robotics, whether our Robotics Summer Camp or FLL, they take their first step into a world of possibilities. It brings us great joy to give them a sneak peek into how engineering looks at the next level. Several of our current team members joined the team because of their previous exposures to FLL or the Robotics Summer Camp. In past years, one of our coaches and a team captain have volunteered their time to mentor and coach new FLL teams, encouraging younger students to embrace the excitement and challenges of building a robot.

Additionally, our future plans include partnering with Haywire to co-host the Robotics Summer Camp. For the past four years, Haywire has planned and implemented the camp, and we now look forward to being a part of its success. The week-long day camp is an opportunity for 6th thru 12th grade students to nurture an interest in robotics, science, and technology that further promotes awareness of *FIRST* opportunities in our community. For similar purposes, we also plan to showcase our current robot "Venom" to middle school students at our high schools' 9th grade Elective Fairs. For advertising purposes, we will be hosting a booth at the upcoming Chamber of Commerce Business Fair as well as selling concessions and helping to referee our local high schools' Vex Robotics competition.

But, we're still students and we know it isn't all fun and games; there's homework as well. In this case, it's Dean Kamen's homework to spread the message of *FIRST*. This year our team includes a Brazilian exchange student who expressed interest in robotics. Team members extended a hand of friendship and recruited him to join LiveWire. After participating in the season, we hope he can say, in addition to learning another language, he learned about *FIRST*. We have hope that he will continue to spread the message when he returns to Brazil. We understand this is only one person, but it's our first step to influencing other parts of the world to pursue the ideals of *FIRST*.

One of our team captains has started a Programming Club at his high school to interest more students in robotics and to educate students about computer programming. Additionally, seven publications in school and local newspapers have featured the season's exploits of LiveWire and Haywire teams. We have begun to see the end of one era and the birth of a new one: an era where academics and technology are recognized and respected for achievements with the same enthusiasm as athletics.

Our energy and enthusiasm for learning is apparent not only in our classrooms but in our community and throughout each high school. Of the many *FIRST* ideals, teamwork, gracious professionalism, and inspiration serve as our foundation. Each team member is willing to help one another (whether tightening the chassis, constructing the website, troubleshooting LabView code, or solving a homework problem). For assistance beyond meetings, team members need to look no further than the hallways or the team's e-mail list serve. These have been effective outlets for communication where ideas bounce off members in order to help our team constantly progress.

The impact and outreach of *FIRST* never fail to leave a lasting impression on team participants. As students, we've found that robotics provides the most important follow up for education: application. We may think we understand the concepts in our textbooks but our minds are truly challenged and our eyes are opened when faced with the same concepts in real life situations. *FIRST* provides a niche where we find others with similar interests and thinking. For some, it provides the alternative to potentially damaging activities and serves as a strong foundation during difficult times. For others, this is where they come to a realization they're capable of constructing something with their hands or that they are a natural at computer programming, potentials that may have otherwise been undiscovered.

The *FIRST* program values hard work and education, inspiring us to do our best in school and bring what we learn back to our team. Above all, it helps us develop the confidence to go into the world and accept any challenge that comes our way. Our team roster includes students who are enrolled in numerous AP and Honors classes, members of National Honor Society, a National Merit Scholarship Finalist, many above average academic students, and one of our captains, who last year was a sophomore on the Haywire team, was honored as a 2010 Dean's List Finalist. The culmination of hard work given by students combined with high expectations and unflinching gracious professionalism from our mentors and coaches will continue to drive us to our own definitions of success. So much of this program would not be possible without the unconditional support we have received from our parents, mentors, and coaches.

Throughout our season, we have repeatedly rediscovered that we are all different in many aspects, but we continually find ways to relate to each other through *FIRST*. It means that at times the situation will be hectic and very rarely will things go as we expect; such are the fields of engineering and life. We have trials, shortcomings, and upsets, but through it all we support each other, adapt to find new solutions, and continue to work as a team. **6** weeks of building, **5** thousand hours, **4** coaches, **3** high schools, **2** teams with **1** goal achieved through *coopertition* and gracious professionalism.