

Cyber Blue 234 2009 Chairman's Essay

In 1969, Neil Armstrong touched the surface of the moon and stepped beyond the limits of exploration and discovery. In 1992, Dean Kamen founded *FIRST*, stepping beyond limits and opening high school minds to a world of science and technology. Since 1999, Cyber Blue has united students with engineers and mentors in an effort to step beyond those same limits.

FIRST has had a significant impact on our learning experiences. As a team, we have grown together through shared experiences. We have broken the stereotypical boundaries in our high school by creating a program that brings together everyone, from computer gurus and mechanically gifted to theater students and star athletes. For team members, we are an extended family to help get through the challenges of teen life. We also gain valuable life skills such as public speaking and presentation skills, resume writing, interview experience and leadership skills. *FIRST* becomes such an important part of team members' lives that many continue in *FIRST* as college student mentors, game announcers and other event volunteers. Over one-third of our alumni are still active in *FIRST*. Two have returned after college to mentor our team.

We have created many innovative ways to spread *FIRST*'s message. Recently, we participated in the American Cancer Society's Relay For Life. With the help of family, community, and sponsors, we raised \$1,600 for research. We not only participated in the walk, but, we stepped beyond limits by demonstrating our robot and explaining the *FIRST* Program to other participants. We also invited children to drive our VEX robots on playing fields we constructed. We have challenged all local FRC teams to get involved in 2009.

We discovered a unique opportunity to introduce thousands of children and their parents to *FIRST*. After learning that the Indianapolis Children's Museum, the largest children's museum in the world, was planning an exhibit entitled "Robots+Us," we knew right away that we wanted to get involved. We contacted the museum, explained our program, and offered assistance. We built four small robots and two obstacle courses for children to navigate. We had fun teaching the children how the robots work and telling them how much we love working with robots. Our students led this exhibit on many weekends, including the exhibit's kick-off weekend, and we did a presentation and demo during a family night event. Our experience at the Children's Museum sparked so much excitement that we have continued to work with young children.

We have created a special partnership with Abraham Lincoln Elementary School, a school that has struggled with low test scores and has recently adopted a new reading curriculum. We began our partnership by building and painting bookshelves for their classrooms. One of the teachers who received these bookshelves stated, "Knowing that the Robotics team has assembled them assures us all that not only will the quality be 'Top Notch', but they will be reliable and dependable. Thanks for all the time and effort that went into providing us with a much needed addition to our classrooms!" Going a step beyond, we have developed a special relationship with one kindergarten class that received the shelves. We have named them "Cyber Blue Buddies" and visited them several times, donated books and read to the students, taught them simple robotics lessons, and helped them drive our small robots.

Every build season, we send nearby rookie teams "care packages". We hope that the box of snacks will encourage them throughout the build season. We include a personal letter congratulating them on being a part of our *FIRST* family, wishing them the good luck, and offering our help and support during the season and at their *FIRST* competition.

Through our care package contact, we discovered that rookie Team 2783 in Kentucky was struggling in their build progress due to a week of weather cancellations. We offered to help them and sent a group of students and mentors over 100 miles with parts, manpower, advice and encouragement.

Cyber Blue has a strong year-round partnership with our students, mentors, community and sponsors. The positive environment we have created has helped strengthen us through some team leadership losses over the past three years. Our founding principal retired, and the following year our founding teacher-sponsor moved. Last spring, we lost our second lead teacher, who had been with the team since its second year. Due to the strength of the partnership and level of respect between our students, mentors, sponsors, and school administration, the team worked a plan for temporary leadership during the summer and fall before a new team leader was named in December. Through this turmoil, we have not only survived, but actually thrived, completing the Relay for Life event, the Indiana Robotics Invitational, fall design project and creating that special bond with our elementary school buddies. Our 2009 team is also the largest ever, with 40 active students. We are proud that most people outside of our team have not noticed these leadership changes we have experienced in the past few years.

All of our students have a high level of dedication and have shown this through participating year round. We meet during the off season to pursue additional projects that are difficult to tackle during the season. This past fall, we accomplished the design and testing of a new chassis design. We used “Design of Experiments” methods to test belt drives versus chain drives, and are publishing a white paper with our results. We mentor Lego, FTC, and Vex teams at local schools during the fall as well. We use the summer to recruit and train new students, and wash cars to raise funds for local charities.

We’re very proud to co-host the Indiana Robotics Invitational (IRI). This off-season event brings together 72 teams from around the world. Not just a great robotics competition, this event focuses on community outreach activities, including the collection and distribution of donated backpacks and supplies for 2nd graders, the *FIRST* memorabilia auction to benefit local charities, college scholarships for seniors, and our parent crew led effort to cook and serve dinner for 1400 team members and mentors.

We take pride in preparing demonstrations and presentations for our corporate sponsors and potential new teams. These presentations allow us to maintain our strong relationships with existing sponsors and to share the excitement of *FIRST* with potential new sponsors and new teams.

We shared the vision of *FIRST* with a potential new all girls team. We helped lead a “Women in Engineering” camp hosted by our sponsor, Rolls-Royce, and a local university. We taught them about *FIRST* and the workings of our robotics team. To continue to encourage them, we built a duplicate robot allowing them to compete in the IRI. This year, an alumnus of our team is a mentor of this team, Team 2360. We are proud of their growth and success in their second year.

Cyber Blue communicates excitement and impact within our school, community, and beyond through several different methods. To get our school more involved and interested in *FIRST*, we showed weekly videos of our progress during build season on our school-wide announcements. This has sparked enthusiasm and interest from both students and teachers for our robotics program. One teacher stated, “I think the Robotics team is one of the best programs at Perry, and because competitions are elsewhere and the work is all done in the dungeon of the 13 hallway, many people at school don’t realize how amazing the program is. I want to help promote it!” New this year, each student recruited at least one “teacher sponsor” to be their personal supporter during the season. Our teacher sponsors were encouraged to visit our lab during the build season, and to ask us about the team’s progress. Many attended our open house at the end of the build season and bought Cyber Blue T-shirts to wear when

our school celebrated “Cyber Blue” day before we left for Washington D.C. . The response has been overwhelming, very positive, and now there are over 40 teachers and administrators with a direct link to our program.

Our open house is a highly attended event in our community, drawing over 250 people. We invite our sponsors, community members, local media, teachers, administrators, legislators, and families. We advertise our open house in local newspapers and school newsletters to reach as many as possible.

As part of the team membership, each of us secures \$250 in community sponsorship. We visit local businesses, inform them about the benefits of our program, and ask for their support. We are learning communication skills while creating a bond with the local community and spreading the word of *FIRST*. Each of these sponsors, large and small, are included on our website and team poster.

We are also proud of our unique group of sponsors – our Grandmas. Taking a cue from Woodie Flowers, we work hard to “make them proud”. Each student eagerly tells their Grandmas about the team and what we do. The students then make a small donation in their honor and we include them on our team poster.

Cyber Blue continues to explore and change. Our history is filled with new, unique and creative approaches to *FIRST* ideals in our community and each year we find new ways to step beyond limits. This year to enhance our business plan, we added a team continuity plan that will assure our ability to grow and thrive in the future. We make our actions available for the *FIRST* community by publishing our Chairman’s submission, Business Plan and many other documents each year. Our pit is full of information for others to use. We will be presenting two seminars at the Championship Forums in Atlanta.

With every project, every volunteer activity, we step beyond our own limits of community involvement and team activities to spread the message and excitement of *FIRST*.