

RESPONSES TO OPEN-ENDED FRC SURVEY QUESTIONS

The survey gave respondents the opportunity to expand upon their experience in FIRST through several open-ended questions. The comments to each of these questions were grouped into themes and are presented below. Note that within each question, some responses appear in multiple categories.

Q 42. What aspect of FIRST do you think had the greatest impact on you? What was the most important part of the FIRST experience for you?

(Sample Answering: 162 Responses)

Team/Group Work (71)

- Although our team had problems with who does the work, I learned how to get along with a group.
- The comradery between teammates and coaches. The personal relationships that were built made a big impact on my life.
- Working together with several students/teachers/professionals towards the same goal.
- Working on a team with other students, building with our own hands a robot that functioned. Seeing our ideas come to life and how our math and science all helped.
- Overcoming obstacles on a team effort. Getting personal and interlinking with other crew members (doing activities I'm fond of is always more interesting with my friends; team).
- Working on the team everyday with a tight group of friends, truly brought us together. year after year we became more and more co-dependant of each other and learned to function as one. The determination we gained from each other was priceless.
- Work with the other students
- The most important part of the FIRST experience for me was being a part of a team and learning the skills to achieve a common goal.
- The aspect of FIRST that had the greatest impact, or influence, on me was probably the interaction with a team. I have been on many teams, mostly for sports. The FIRST team however taught me a lot about interacting with people who were very different from one another. On sports teams everyone is very similar and has a common interest in the sport. In FIRST, however, each person is very different. I was therefore forced to learn how to interact with, and get along with, very different people.
- The greatest impact the FIRST experience had on me was during the competition, the entire team was unified, the robot was a real thing and the entire team got together to cheer on our bot. Some of us would analyze the other teams' strategies and we would all get together and work on a way of defeating them. It was a lot of fun.
- The teamwork and team camaraderie.
- Working with power tools and working with other people.
- The aspect that had the greatest impact on me was the motivation and the "drive" to accomplish our goal. The most important part of the FIRST experience was the teamwork and being able to get hands-on experience.
- The opportunity to work in a team environment allowed me to learn to incorporate my ideas and those of other people to solve complex problems. The most important part of my FIRST experience is that it helped me decide what to do as a career.
- Learning how to work on a team, and then in my later years, becoming a co-captain of the team, and leading the rest of the team.
- The most important part of the FIRST experience for me was being part of a team and getting to know, meet and interact with new people in a personal and professional level.
- I believe that working with the guys and getting the robot to actually work was what had the most impact on me. The most important part of the FIRST experience was team work, since we wouldn't have gotten anywhere without it.

- The most important part of the FIRST experience for me was working with a large group of people as a team, and being able to listen to one another's ideas or comments about anything.
- The greatest impact on me came from the chance to get into a project that I really enjoyed and work with other people to develop teamwork and leadership skills. This has already helped me in college to be a leader in multiple groups around the campus.
- Teamwork. Nationals at Disney.
- Teamwork, responsibility, unity.
- The team work needed to put together a full-functioning robot. That I can contribute to the group in one way or another.
- The sportsmanship and teamwork. I was amazed at how much people helped each other solve problems, even if they were on another team.
- Working as a team had a great impact The friendships made were very important.
- Being part of a team. But FIRST should not get all the credit because I was also involved in many other activities like sports and other activities. I think this survey is biased.
- The design process and working with a team who all had different ideas.
- Working as a team. Meeting new people with the greatest opportunity.
- Working with a wide range of people, as one team. Just being on the team was the best experience - winning isn't bad either.
- Seeing the final project that I personally worked on succeed. Working as a group.
- Teamwork had the biggest impact on me. That was also the most important part of the FIRST experience for me.
- The most important part was teamwork. I learned how to better cooperate to solve problems.
- The greatest impact of FIRST was the teamwork. It was the most important part of the FIRST experience because it taught me how to work with other people and share ideas with them.
- Working together is the most important part of my FIRST experience because it involves getting along, having fun, and doing things as a group team together to build something up and works. As far as I know so far I enjoy clubs they're nothing like FIRST as working together.
- I believe it was the ability for students from all over, came together, became a team and succeeded. Nationals.
- Feeling proud about being part of a team and representing my school.
- Team work and gracious professionalism.
- I learned a lot about teamwork and learning to get along and work with others. This impacts myself still today. The most important part of FIRST was the fact that I could participate in a competition where everybody got along, no matter the outcome.
- I think the aspect of teamwork had the greatest impact on me. We had to work as a group in order to accomplish a common goal. Communication skills like this will prove helpful in the future.
- Working as a team with students, teachers and engineers.
- The teamwork and cooperation. Even if we didn't like someone, we were forced to work with them. It taught me to accept these hard choices and adapt to them.
- Teamwork is very important.
- Working in a team and having teamwork was the most important.
- What had the greatest impact was probably dealing with the ideas of other people and trying to get everyone to agree on a certain strategy.
- Teamwork.
- That everything required team work. One wrong move from anyone can change your game from a win to a loss. Most important was to know having fun is better than winning.
- I think cheering in the crowd for my team had the most impact on me. Just to see the way people were coming together for their teams. It's amazing.
- Having individual projects being completed separately to come together to create one final result.
- FIRST had the greatest impact on me is building the robot and meeting so many different people from different places. Everything from build the robot, working with my team, traveling, and the people.
- The aspect that had the greatest is knowing we had a certain time to get things done. So that made me responsible and working with everyone as a team.

- The setup of program itself - gave people opportunities to learn to work as a team and learn about technology in general.
- Team work at taking incentive for complete work or fine.
- Working in a team. Travel, designing the robot, working with professional people.
- Team work was the most important of the FIRST experience.
- The whole time there, just building and being a part of that got me into the team spirit.
- Team work and camaraderie.
- Working as a part of a team. Working towards a common goal and actually succeeding in that.
- The team didn't always work together but I did learn team skills.
- Being part of a winning team. Making friends with people from across the USA.
- Being part of team, developing relationships with engineers, teachers and other students. Developing school spirit, learning to support other teams and other schools.
- I think the greatest impact that FIRST had on me was letting me know how important it is working together as a Team. It showed me how other people can have great ideas, too, but not always have the "bugs" worked out. But, your "teammates" can come along and help solve the problems. Like the old saying goes- 2 heads are always better than 1!
- As a member of the team, I felt working with others was a great impact on me. It helped me realize that it's a 2 way street. When communicating and sharing ideas with fellow members, one thinks of the positive solution. However, they never thought about the "what if" or have a backup plan if something did happen. As a member, working with my fellow teammates was very important.
- Going to Florida with my classmates and working together on our project as a team.
- Being able to work as a team, and getting to know my fellow teammates.
- Working in a team.
- I think the whole group work thing had the greatest impact on me. The most important part was getting together and deciding on the design because that's when the group really came together.
- Team experience.
- Our team discussions showed me that we could resolve issues and work as a team, moving towards a common goal and doing it with a strategy.
- Having such great teamwork, feeling like a family.
- Watching something you had worked on as a team succeed at performing the task for which it was designed; the feeling of pride associated with watching teamwork come to life.
- I loved traveling and being part of a team. The most important part of the FIRST experience for me was being able to meet new people, meeting friends, and learning something new.
- Teamwork was the aspect of FIRST that had the greatest impact on me. The most important part of the FIRST experience was the team experience.

Personal Connections (44)

- Overcoming obstacles on a team effort. Getting personal and interlinking with other crew members (doing activities I'm fond of is always more interesting with my friends; team).
- The camaraderie between teammates and coaches. The personal relationships that were built made a big impact on my life.
- Working on the team everyday with a tight group of friends, truly brought us together. Year after year we became more and more co-dependant of each other and learned to function as one. The determination we gained from each other was priceless.
- The greatest impact had to be the scientific experience; I now feel like I can fix things. And as a female many people think that we can not. The most important experience was working with and meeting a lot of different people. So the networking was the most important for me.
- The teamwork and team camaraderie.
- Being able to learn new way of problem solving and meeting new people.
- Undecided. A variety of experiences and other aspects have impacted me greatly. The most important part of the FIRST experience for me was getting to know others and how to successfully work in a different setting.
- The most important part of the FIRST experience for me was being part of a team and getting to know, meet and interact with new people in a personal and professional level.

- The time we spent after school and on weekends to get the robot build. Also seeing the finished robot after working on it for so long. The relationships I built while working on the robot.
- The life time friendships I gained.
- Meeting new people from various areas of the USA.
- Working as a team had a great impact. The friendships made were very important.
- Working as a team. Meeting new people with the greatest opportunity.
- Computer skills development and social aspects.
- The close bond I had with the adults and team members really helped push our way into regionals and the national championship. The bonding part was the most important part of FIRST.
- The most important aspect of FIRST for me was the friendships I made and developed while on the team. Three of my current best friends are friends I made on my PCHS/Delphi FIRST team.
- It was a great feeling when you walk into a competition - it gave me a boost of energy. Our team was also like a family and I felt like I belonged to a family away from home.
- Working with a group of people I wouldn't hang out with on a regular basis.
- I loved working with my team together in order to achieve a particular goal. The whole experience was fun! I loved being on the first team. I had so much fun at the competitions meeting new people and working with my own team.
- I think cheering in the crowd for my team had the most impact on me. Just to see the way people were coming together for their teams. It's amazing.
- The chance to present an award-winning to judges, the public, etc. I was able to gain confidence and to tell people things that I understood and to share my knowledge. The closeness of all that were involved.
- Hanging out with my friends and building the robot; something to do after school.
- FIRST had the greatest impact on me is building the robot and meeting so many different people from different places. Everything from build the robot, working with my team, traveling, and the people.
- The aspect that had the most impact on me was working with the engineers and the team to solve many problems. We were like a family.
- The most important part of FIRST to me was traveling across the country. Going to places I'd never been to before and meeting and be-friending new and fascinating people.
- I think just getting to know new people and using new tools was the most important experience.
- The people on the team.
- Being part of a winning team. Making friends with people from across the USA.
- Being part of team, developing relationships with engineers, teachers and other students. Developing school spirit, learning to support other teams and other schools.
- I think it had the biggest impact on working with other people. The most important part of the FIRST experience was getting involved with something I actually enjoyed.
- The most important part was getting to meet new and different people, also the chance to work on something with a purpose.
- The most important part for me was the competition. This is for many reasons. For example, the pressure it created on our team helped us to "congeal" more (that is to work more closely and bond more with one another), the cheering and chanting from the bleachers strengthened our self-confidence and tied our emotions together, urging us to unite behind the golden banner that was our success. Regardless of whether we won or lost the competition, we each felt like winners. We had all grown from this one experience, and best of all, we had all grown together.
- The most important part of the FIRST experience that has had the greatest impact on me was meeting new people.
- Being able to work as a team, and getting to know my fellow teammates.
- In FIRST I made so many friends. The people I met in FIRST have become an extension of my own family. Some of my biggest events in my life they have been there for or will be. Most of the friends that I had in high school that I still have now were on my FIRST team or other teams. These people, these FIRST-a-holics as we call ourselves are the greatest people I have ever met and my life is so much better because of every single one of them.
- Hanging out with my friends, while doing something positive.

- How friendly everyone was, gracious professionalism. Even though we were all competing against each other everyone was still very friendly and helpful, even by giving tools and supplies to other teams that were in need.
- Having such great teamwork, feeling like a family.
- I loved traveling and being part of a team. The most important part of the FIRST experience for me was being able to meet new people, meeting friends, and learning something new.
- Getting to know different people. Learn new things.
- The support system that the FIRST community provides is unbelievable. Before I joined a FIRST team I never even considered myself in the engineering profession and now I am at a college with a full tuition scholarship studying to become an engineer. The most important experience of FIRST for me was knowing that I could do anything I wanted to do in life and have 20 people there to back me up. Being a woman in the engineering profession is a breakthrough in itself and knowing that not only my team, but every other FIRST team shares the support system for women looking to make it as an engineer is something no one can take away.
- The fact that we had to come together with teams from all over the world in order to compete but on a friendly basis for a prize.
- Two things from the FIRST Robotics team had a huge impact on me which was the trips to the regionals out of my state (New York) and during the competitions both of these and here. To see how so many teenage students of many different races interact, on both a friendly and competitive way.
- I believe it was the ability for students from all over, came together, became a team and succeeded. Nationals.

Competitions (24)

- My senior year in high school was the first year that my school participated in FIRST. The greatest impact was probably being able to be a part of something new at the school and going all the way to a national competition.
- Going to the national competition.
- The greatest impact the FIRST experience had on me was during the competition, the entire team was unified, the robot was a real thing and the entire team got together to cheer on our bot. Some of us would analyze the other teams' strategies and we would all get together and work on a way of defeating them. It was a lot of fun.
- The competition. Seeing your hard work and time in action was very rewarding to me.
- The competitions.
- Going to the regional competition had the greatest impact on me. It was different being able to see something that has to do with science, math and building robots come together while being fun.
- Teamwork. Nationals at Disney.
- Two things from the FIRST Robotics team had a huge impact on me which was the trips to the regionals out of my state (New York) and during the competitions. Both of these and here. To see how so many teenage students of many different races interact, on both a friendly and competitive way.
- Competing.
- Being at competition - the thrill of the screaming crowd.
- I believe it was the ability for students from all over, came together, became a team and succeeded. Nationals.
- Going to the Nationals in Florida. Also being one of the key drivers for my team.
- I liked going to the competitions and it was fun building robots even though I didn't like my team.
- It was a great feeling when you walk into a competition it gave me a boost of energy. Our team was also like a family and I felt like I belonged to a family away from home.
- I loved working with my team together in order to achieve a particular goal. The whole experience was fun! I loved being on the first team. I had so much fun at the competitions meeting new people and working with my own team.
- FIRST had the greatest impact on me is building the robot and meeting so many different people from different places. Everything from build the robot, working with my team, traveling, and the people.
- Working in a team. Travel, designing the robot, working with professional people.

- I fully enjoyed the regional and national competitions. I also enjoyed all of the publicity our team received after winning the Chairmans Award.
- The most important part for me was the competition. This is for many reasons. For example, the pressure it created on our team helped us to "congeal" more (that is to work more closely and bond more with one another), the cheering and chanting from the bleachers strengthened our self-confidence and tied our emotions together, urging us to unite behind the golden banner that was our success. Regardless of whether we won or lost the competition, we each felt like winners. We had all grown from this one experience, and best of all, we had all grown together.
- Going to florida with my classmates and working together on our project as a team.
- The design of the robot was a great challenge. The regional and national competitions were exciting and the most fun part of the experience.
- I loved traveling and being part of a team. The most important part of the FIRST experience for me was being able to meet new people, meeting friends, and learning something new.
- The atmosphere of FIRST and a FIRST event is awe inspiring. Seeing all these people come together with a common interest, where for most of them in high school, they are the odd man out, it truly amazing. I will never forget seeing that first hand and participating in the event. I would have to say the most important part of the FIRST experience for me is seeing your creation work in competition for the first time. Operating this thing that you have spent weeks putting blood, sweat, and tears into, and seeing it work, is a really great feeling.
- The most important part of the FIRST experience was attending the National events. It showed how talented kids and engineers are.

Setting and Accomplishing Goals/Pride in Work (14)

- The aspect that had the greatest impact on me was the motivation and the "drive" to accomplish our goal. The most important part of the FIRST experience was the teamwork and being able to get hands-on experience.
- I believe that working with the guys and getting the robot to actually work was what had the most impact on me. The most important part of the first experience was team work, since we wouldn't have gotten anywhere without it.
- The time we spent after school and on weekends to get the robot built. Also seeing the finished robot after working on it for so long. The relationships I built while working on the robot.
- The feeling of accomplishment. Working day and night (literally) to design and build an ingenious designed robot and having it perform well was the most important part of my first experience. It just showed you that you can do anything that you put your mind to. Anything is possible.
- Seeing the final project that I personally worked on succeed. Working as a group.
- FIRST showed me that I could do something with my life and that if I worked hard enough anything was possible.
- The greatest impact was seeing professionals take out time to share their wealth of knowledge. The most important experience was when our team Pontiac Central Chief Delphi won second place and then the Chairman Award.
- I loved working with my team together in order to achieve a particular goal. The whole experience was fun! I loved being on the first team. I had so much fun at the competitions meeting new people and working with my own team.
- Working as a part of a team, working towards a common goal and actually succeeding in that.
- The aspect that had the greatest impact was building the robot, and knowing that I helped make it a success. It helped me decide what I want to have a career in also. The most important part was getting to know all the engineers on our team, and what their jobs were and helping me to decide my career choice.
- The most important part was getting to meet new and different people, also the chance to work on something with a purpose.
- Our team discussions showed me that we could resolve issues and work as a team, moving towards a common goal and doing it with a strategy.
- Watching something you had worked on as a team succeed at performing the task for which it was designed; the feeling of pride associated with watching teamwork come to life.
- The atmosphere of FIRST and a FIRST event is awe inspiring. Seeing all these people come together with a common interest, where for most of them in high school, they are the odd man out, it truly amazing. I

will never forget seeing that first hand and participating in the event. I would have to say the most important part of the FIRST experience for me is seeing your creation work in competition for the first time. Operating this thing that you have spent weeks putting blood, sweat, and tears into, and seeing it work, is a really great feeling.

Skill-Building (12)

- Learning how to present myself and our robot to the judges.
- Computer skills development and social aspects.
- I think the aspect of teamwork had the greatest impact on me. We had to work as a group in order to accomplish a common goal. Communication skills like this will prove helpful in the future.
- I was the video editor on my team and learning how to do that has helped me the most.
- Working with 3d max in developing a story line for the animation team. It's not as easy as it looks. A lot of hard work.
- It was the independent thinking and an interest in 3D rendering. Looking back there were a lot more lessons I could have learned.
- The chance to present an award-winning to judges, the public, etc. I was able to gain confidence and to tell people things that I understood and to share my knowledge. The closeness of all that were involved.
- I was a shy person and FIRST helped me to open up and talk to people.
- Competition made me more competitive and confident.
- Having to listen, depend and respond to my coaches calls. As the robot's driver, I had to trust my coach's decisions as well as my own instincts. I learned how to cope under a high pressure situation.
- I loved traveling and being part of a team. The most important part of the FIRST experience for me was being able to meet new people, meeting friends, and learning something new.
- Getting to know different people. Learn new things.

Learn about Engineering and related fields/Career guidance (11)

- Allowed me to grow and feel out engineering.
- The entire experience was all inspiring to me. I enjoyed actually being able to build a real working robot by hand. The teamwork and the leadership skills that I learned will help me throughout my career as an engineer.
- The whole experience of seeing how the robot was built and its outcome was a great one. It got me more interested in the technical side of things, which sparked my interest in Industrial Design.
- The opportunity to work in a team environment allowed me to learn to incorporate my ideas and those of other people to solve complex problems. The most important part of my FIRST experience is that it helped me decide what to do as a career.
- Being part of Chairman's Award team tapped into my creativity, allowing me resources to explore career options stemming from technological issues on this team.
- The leadership role I played helped me be unafraid in public. In general, the program helped me to choose a career.
- The setup of program itself - gave people opportunities to learn to work as a team and learn about technology in general.
- The aspect that had the greatest impact was building the robot, and knowing that I helped make it a success. It helped me decide what I want to have a career in also. The most important part was getting to know all the engineers on our team, and what their jobs were and helping me to decide my career choice.
- FIRST gave me an insight and connection to engineering, and an engineering company. I learned a little bit about the things an engineer does in his/her job and it made me want to pursue an engineering degree.
- The support system that the FIRST community provides is unbelievable. Before I joined a FIRST team I never even considered myself in the engineering profession and now I am at a college with a full tuition scholarship studying to become an engineer. The most important experience of FIRST for me was knowing that I could do anything I wanted to do in life and have 20 people there to back me up. Being a woman in the engineering profession is a breakthrough in itself and knowing that not only my team, but every other FIRST team shares the support system for women looking to make it as an engineer is something no one can take away.
- I became interested in obtaining a degree in a technical or science-related field.

Building Robot (9)

- Hanging out with my friends and building the robot; something to do after school.
- FIRST had the greatest impact on me in building the robot and meeting so many different people from different places. Everything from build the robot, working with my team, traveling, and the people.
- Working in a team. Travel, designing the robot, working with professional people.
- The aspect that had the greatest impact was building the robot, and knowing that I helped make it a success. It helped me decide what I want to have a career in also. The most important part was getting to know all the engineers on our team, and what their jobs were and helping me to decide my career choice.
- Definitely the whole building process. I learned a lot from that experience. That's what made the whole competition worthwhile, knowing that my team built this robot.
- The actual building of the robot.
- Building the robot.
- Learning how to machine parts.
- The design of the robot was a great challenge. The regional and national competitions were exciting and the most fun part of the experience.

Hands-on Activities (8)

- Working on a team with other students, building with our own hands a robot that functioned. Seeing our ideas come to life and how our math and science all helped.
- The entire experience was all inspiring to me. I enjoyed actually being able to build a real working robot by hand. The teamwork and the leadership skills that I learned will help me throughout my career as an engineer.
- Working with power tools and working with other people.
- The aspect that had the greatest impact on me was the motivation and the "drive" to accomplish our goal. The most important part of the FIRST experience was the teamwork and being able to get hands-on experience.
- Working hands on to build the robot.
- I believe it was the fact that I worked on the robot and projects directly hands on. It gave me the confidence and problem solving thinking that I lacked.
- Hands on building with real-life engineers and technicians.
- Hands on experience with mechanical applications. Constant encouragement and growth.

Problem-Solving (7)

- Being able to learn new ways of problem solving and meeting new people.
- The most valuable thing I can take from FIRST was the concept of problem solving by listening to others and weighing the pros and cons. I was able to see that the obvious solution was not always the best solution. I was challenged to think. The most important part of FIRST was the teachers and engineers who gave us the time and energy for this program to work. Without them I would have been lost in the giant world of FIRST.
- The most important part was teamwork. I learned how to better cooperate to solve problems.
- The strategic planning process that our team went through helped me make wiser choices in life by thinking more strategically too.
- I believe it was the fact that I worked on the robot and projects directly hands on. It gave me the confidence and problem solving thinking that I lacked.
- Tackling a large problem by systematically solving smaller challenges.
- Solving the challenge presented each year because that's what made me go into engineering to get a problem and have different ways of solving it.

Leadership (7)

- Learning how to work on a team, and then in my later years, becoming a co-captain of the team, and leading the rest of the team.
- The greatest impact on me came from the chance to get into a project that I really enjoyed and work with other people to develop teamwork and leadership skills. This has already helped me in college to be a leader in multiple groups around the campus.

- Giving me a chance to be a leader. Doing my best at everything.
- Going to the Nationals in Florida. Also being one of the key drivers for my team.
- The leadership role I played helped me be unafraid in public. In general, the program helped me to choose a career.
- A chance to be leader.
- FIRST made me realize that I wanted to major in engineering.

Fresh Perspective (6)

- FIRST above all else taught me that you have to do what you love in life, not what makes the most money.
- Knowing the fact that many companies out there reach out to help finance and teach many students like myself really impact a lot.
- That everything required team work. One wrong move from anyone can change your game from a win to a loss. Most important was to know having fun is better than winning.
- The most important of all was that they gave us the opportunity to be able to make decisions at an early age and the most important part of the FIRST experience was that we were able to use our imagination to build whatever it was we desired.
- The fact that we did everything and not the adults.
- In the FIRST program I was exposed to many different ways of life that I was blind to growing up in the inner city.

Obstacles/Challenges (5)

- Overcoming obstacles on a team effort. Getting personal and interlinking with other crew members (doing activities I'm fond of is always more interesting with my friends; team).
- The difficulty on building a robot.
- Working with 3d max. Developing a story line for the animation team - it's not as easy as it looks. A lot of hard work.
- Solving the challenge presented each year because that's what made me go into engineering to get a problem and have different ways of solving it.
- The most important impact FIRST had on me was when we were in Chesapeake regional, and our mentor wasn't able to make it because of some reason, and we had a lot of problems and me and the other 4 builders built a drive train and got the robot to work despite all the trouble we faced.

Math/Science Connection (5)

- Working on a team with other students, building with our own hands a robot that functioned. Seeing our ideas come to life and how our math and science all helped.
- The greatest impact had to be the scientific experience. I now feel like I can fix things. And as a female many people think that we can not. The most important experience was working with and meeting a lot of different people. So the networking was the most important for me.
- Going to the regional competition had the greatest impact on me. It was different being able to see something that has to do with science, math and building robots come together while being fun.
- The saying "When will I ever use this?" FIRST made and showed me that math, science, reading, all subjects are important in the real world.
- FIRST showed me how something that requires in-depth knowledge of math and sciences could be a pleasant and fun experience. I met and worked with intelligent students and very qualified professionals, which was an important aspect of transitioning into a new college environment.

Adult Leaders (5)

- The most valuable thing I can take from FIRST was the concept of problem solving by listening to others and weighing the pros and cons. I was able to see that the obvious solution was not always the best solution. I was challenged to think. The most important part of FIRST was the teachers and engineers who gave us the time and energy for this program to work. Without them I would have been lost in the giant world of FIRST.

- The greatest impact was seeing professionals take out time to share their wealth of knowledge. The most important experience was when our team Pontiac Central Chief Delphi won second place and then the Chairman Award.
- Working in a team. Travel, designing the robot, working with professional people.
- The aspect that had the most impact on me was working with the engineers and the team to solve many problems. We were like a family.
- The aspect that had the greatest impact was building the robot, and knowing that I helped make it a success. It helped me decide what I want to have a career in also. The most important part was getting to know all the engineers on our team, and what their jobs were and helping me to decide my career choice.

Personal Growth (4)

- Allowed me to grow and feel out engineering
- Joining FIRST helped me to grow as a person on many levels. I became more outgoing, responsible, knowledgeable, patient and understanding. The program really motivated me to become more involved at school and in the community.
- The most important part for me was the competition. This is for many reasons. For example, the pressure it created on our team helped us to "congeal" more (that is to work more closely and bond more with one another), the cheering and chanting from the bleachers strengthened our self-confidence and tied our emotions together, urging us to unite behind the golden banner that was our success. Regardless of whether we won or lost the competition, we each felt like winners. We had all grown from this one experience, and best of all, we had all grown together.
- Hands on experience with mechanical applications. Constant encouragement and growth.

Transition to College (4)

- FIRST showed me how something that requires in-depth knowledge of math and sciences could be a pleasant and fun experience. I met and worked with intelligent students and very qualified professionals, which was an important aspect of transitioning into a new college environment.
- The greatest impact on me came from the chance to get into a project that I really enjoyed and work with other people to develop teamwork and leadership skills. This has already helped me in college to be a leader in multiple groups around the campus.
- FIRST and the coaches on my team helped prepare me for the world I would soon be entering after graduation.
- The support system that the FIRST community provides is unbelievable. Before I joined a FIRST team I never even considered myself in the engineering profession and now I am at a college with a full tuition scholarship studying to become an engineer. The most important experience of FIRST for me was knowing that I could do anything I wanted to do in life and have 20 people there to back me up. Being a woman in the engineering profession is a break through in itself and knowing that not only my team, but every other FIRST team shares the support system for women looking to make it as an engineer is something no one can take away.

Time Commitment/Management (3)

- The jam-packed schedule of building for 6 days a week, 6 straight weeks, and still managing schoolwork and sports.
- The time we spent after school and on weekends to get the robot build. Also seeing the finished robot after working on it for so long. The relationships I built while working on the robot.
- The aspect that had the greatest in knowing we had a certain time to get things done. So that made me responsible and working with everyone as a team.

No Impact (3)

- There was no significant impact upon me. FIRST was fun, perhaps only because we got to go to Florida for the national competitions.
- Being part of a team. But FIRST should not get all the credit because I was also involved in many other activities like sports and other activities. I think this survey is biased.
- FIRST was a great program but it was just not for me. It was too strict for me.

Q 43. Can you give an example of how your FIRST experience has made a lasting impact on you (if it has) in the years since high school?

(Sample Answering: 143 Responses)

Relational Skills (32)

- I learned a lot about math and science and working together as a team. I met Dean Kamen in person and things like that made me feel like I could achieve something important in my life.
- I relate better to people who are my superiors in the workforce. I also apply the knowledge I learned in FIRST in my classroom as an elementary school teacher.
- I am more likely to follow advice from adults (professionals). I listen to supervisors now, rather than finding ways to do as little as possible.
- Learning how to work in a team and manage time was what FIRST taught me.
- I've learned how to work well with a group of people who all have their own ideas and solutions to problems, and to organize the situation in a productive manner. This has helped me in many different aspects including directing my theatrical productions.
- The lasting impact FIRST made on me is I love power tools, I love people and most importantly people love me.
- It made it easier for me to get my ideas and opinion across to others in a way that they can understand it like I want them to.
- The competition has shown me how to be receptive to others opinions and ideas.
- I now know that working as a team can make a task seem a lot less difficult and that meeting new people is a very good thing.
- FIRST has stayed with me past high school. I still go to regionals every year. My experiences gave me a better understanding on team work and "thinking outside the box."
- That I can work together with others on a common goal and know the ins and outs on a robot.
- My communication skills with other people - my peers and my elders has been strengthened because of what I learned while I was in the FIRST program.
- Wish I could do it all over again. Shows how many different kinds of people can learn to work together.
- To respect and listen to what other people's ideas are about how to do things.
- The college I go to has many students from different backgrounds. I am able to work in group projects very well because of all the teamwork I experienced during FIRST
- FIRST made me understand more about working in a team and having teamwork.
- It made me realize that doing everything yourself is not always the best way.
- I learned how to work with people and am more interested in math and science.
- Made me into a better team player in every situation where I've had to work as a team.
- Better networking skills.
- Helped me to improve my people skills as far as making presentations and talking with professional people.
- It's given me the confidence to try new things. I've gained an experience that I would never had thought possible. I work better with people and built a major interest in technology.
- During my Junior year of high school, it kind of made me realize that engineering was something that I wanted to do. Once I got to U of M, the math just about killed me my freshman year but FIRST taught me that I had to hang in there and keep trying. After my sophomore year of College, I ran out of money and I was also in a dilemma of not really knowing if I wanted to keep studying for an ME/EE degree or if I wanted to do something else. Long story short, my current job title requires me to work as a Team Leader and because of some of the influence of FIRST, I know that I need to really listen to my Team Mates and take them seriously and not be quick to criticize them for any ideas that they may have.
- Anytime I work in a group or team oriented project I always think about preparing for the FRC and how as a group we interacted and listen to each other in order to solve a common problem.
- In college we have lab project's designed for us to work in a team. Team containing 3-4 students. There was a project based on searching rocks within the campus that would identify its time and its type. Within the team, all members spoke and communicated to with one another on their observation. One persons' knowledge of the rock may not be correct if 2 disagree upon that 1 persons' explanation and observation.
- I found that it is easier for me to communicate with others when working on projects

- I am more willing to present ideas to others in a group project, and to consider their ideas alone and in combination with others.
- Yes, the FIRST experience gave me the "team player" skills that I needed to get the good job I currently have.
- It has made me a better person. I stop to think of consequences and the opinions of others before I decide to do something. I also learned to accept me as I am. I am someone and I do have an important role in this world.
- FIRST has impacted me in the sense that when I came here from Jamaica I never used to like to do team work because people would never do their part and with FIRST in the end everyone play their part and it turn out great so FIRST somewhat let me put trust back into people in getting what they have to do done.
- Although I had a lot of participation on my team one of the things I regret from high school is not getting involved. I have gone on to join a sorority at Kettering and get involved with other campus activities.
- It made me want to join more teams in high school

Interest in Technology and Other FIRST-Related Fields (27)

- Am more interested in A.I. Seeing Japan building an A.I. is very incredible.
- I think about technology in a new way now, thanks to the time spent on the robotics team with FIRST.
- The lasting impact FIRST made on me is I love power tools, I love people and most importantly people love me.
- By participating in FIRST, I realized that I enjoy solving problems using computers. Thus, I decided to become a computer scientist. Currently I am contemplating specializing in Software Engineering or Machine Learning.
- After the FIRST experience, I continued to look at more stuff involving that field.
- Interested in more technology.
- I was involved with drawing the robot and now I want to be an architect.
- F.I.R.S.T. has deepened my interests in robots (i.e. industrial automation).
- Decision to explore computer animation and other uses of computers in film and video production.
- I'm going into electrical engineering.
- I learned how to work with people and am more interested in math and science.
- I have retained interest in robotics and computers by pursuing a degree involving programming.
- I still have a profound interest in science and technology.
- Technology became a passion.
- I choose engineering major at my university. I would like to become someday like the teachers and/or the professional engineers that I got to work with in high school.
- I chose my major in college because of it. I joined Society of Women Engineers to get more women involved in engineering. I was one of the only girls on my FIRST team
- Even though I haven't done anything to show it I still am interested in it and try to experience as much robotic and technical information as possible.
- It made me decide to go to school and become an engineer, so that one day I might have the chance to come back to a team and help them the way my teachers and the team's engineers did for me.
- It's given me the confidence to try new things. I've gained an experience that I would never had thought possible. I work better with people and built a major interest in technology.
- During my Junior year of high school, it kind of made me realize that engineering was something that I wanted to do. Once I got to U of M, the math just about killed me my freshman year but FIRST taught me that I had to hang in there and keep trying. After my sophomore year of College, I ran out of money and I was also in a dilemma of not really knowing if I wanted to keep studying for an ME/EE degree or if I wanted to do something else. Long story short, my current job title requires me to work as a Team Leader and because of some of the influence of FIRST, I know that I need to really listen to my Team Mates and take them seriously and not be quick to criticize them for any ideas that they may have.
- My memories of FIRST still make me smile. FIRST was the reason I decided I was sure I wanted to do engineering. I am now entering my sophomore year in college and still have no doubts about my major (I'm sure you are aware of how amazing that is).
- Being in FIRST introduced me to individuals who ended up being my best friends. In addition being on my team's video team I learned that I have a passion for videography and photography.

- Being in FIRST has open up worlds to me. Because of FIRST, I became more interested in science and technology, so I attended a summer program about FIRST Robotics (Frontiers at Worcester Polytechnic Institute). While attending that program, I met new friends, and I made my decision to go to WPI for college. That was 3 years ago, and I think that it is the best decision I have ever made. FIRST helped me decide on a college, it introduced me to people with similar interests, and has given me a sense of where I belong.
- 1. I joined the military (Navy)- scored high on the ASVAB exam and engineering exam to enter the training as a Nuclear Technician. 2. When I was accepted to the US Naval Academy I decided to choose to major in Electrical Engineering.
- The whole experience of being a part of the first team has impacted my life. I learned so much from the engineers our team worked with and the teachers that helped as well. FIRST has helped me to appreciate math and technology better and has helped me to understand that I have to work hard in order to accomplish something great.
- I have a better understanding of what type of science and technology and have continued with engineering even though it has become less fun every year. I remember the excitement of competition, and it helps me keep going.
- I have a better appreciation for students interested in engineering.

Confidence/Inspiration (24)

- I learned a lot about math and science and working together as a team. I met Dean Kamen in person and things like that made me feel like I could achieve something important in my life.
- FIRST was a program that helped me, as a female, realize I was just as good, if not better, than the boys, and I could be an engineer. It is the part of high school I look back at and wish I could do over and over again, and it is where I met some of my best friends and mentors.
- If I see something that needs putting together, I do not try to find a guy to do it. I do it myself.
- I have a better understanding of what type of science and technology and have continued with engineering even though it has become less fun every year. I remember the excitement of competition, and it helps me keep going.
- My determination has increased greatly.
- It has made me a better person. I stop to think of consequences and the opinions of others before I decide to do something. I also learned to accept me as I am. I am someone and I do have an important role in this world.
- It has made me a way more outgoing person and broader thinker.
- It's given me the confidence to try new things. I've gained an experience that I would never have thought possible. I work better with people and built a major interest in technology.
- Strengthening my leadership skills and increasing my confidence and self esteem.
- I believe it had an excellent impact on me because it gave me the courage of who I am today.
- Being on a small team and accomplishing a great task enabled us to extend our thinking and discover our hidden capabilities.
- I personally have a speech impediment (stuttering) and FIRST has helped me to talk and associate with peers in discouraged times. After realizing it's all mental, I spoke freely from then on.
- Too many to mention.
- FIRST has taught not to give up on anything I want to achieve in life. It helped me to choose to go into the Marine Reserves even if most people's ideas were negative. FIRST gave me the strength to handle any situation that was put in front of me in boot camp, MOS schooling and Combat training. I've been taught that nothing in life is worth having if it is only handed to me. Plus it's much funner to have a challenge and find a way to get through it. It helps to build character. That is what FIRST is about to me. An organization that builds peoples character by having them look in themselves to see that they can do anything. It just takes a little work as well as some friends.
- There are times when things got rocky, but the worst never toppled the want to do more and work harder, FIRST is the reason for my want.
- Just the ability to easily approach problems in life.
- During my junior year of high school, it kind of made me realize that engineering was something that I wanted to do. Once I got to U of M, the math just about killed me my freshman year but FIRST taught me

that I had to hang in there and keep trying. After my sophomore year of College, I ran out of money and I was also in a dilemma of not really knowing if I wanted to keep studying for an ME/EE degree or if I wanted to do something else. Long story short, my current job title requires me to work as a Team Leader and because of some of the influence of FIRST, I know that I need to really listen to my teammates and take them seriously and not be quick to criticize them for any ideas that they may have.

- FIRST has literally changed my life. Now I know that you may be thinking how can something such as this change my life so significantly. Well all throughout my high school career I wanted to be a teacher. I never had a strong interest in math or science until my eleventh grade year when I joined a FIRST team. FIRST made me see that science and math are something that I not only am interested in but truly enjoy doing everyday. FIRST opened a door to a whole new world, a world that I wanted to stay in. I would have to say that FIRST is the reason why I will be an engineer someday and I owe millions to the founders, the FIRST community, and my team who have made me believe that I CAN do anything!
- I remember how to do a lot of work when everything is not going right.
- Never giving up, even when we knew there was no chance of winning the competition.
- One lasting impact the first competition had on me was that you can't wait on anybody to do things for you. This includes ideas of a group.
- FIRST taught me that kids are very intelligent and if you give them a chance to show their intelligence they will shine.
- Since 2002-2003 knowing what FIRST does and what they made people realize that everything that you learn in school is important and they are involved in FIRST and becoming an engineer it does take a lot of work to become but being anything is possible to be.
- The whole experience of being a part of the first team has impacted my life. I learned so much from the engineers our team worked with and the teachers that helped as well. FIRST has helped me to appreciate math and technology better and has helped me to understand that I have to work hard in order to accomplish something great.

Influence on Career (18)

- I relate better to people who are my superiors in the workforce. I also apply the knowledge I learned in FIRST in my classroom as an elementary school teacher.
- I am more likely to follow advice from adults (professionals). I listen to supervisors now, rather than finding ways to do as little as possible.
- FIRST was a program that helped me, as a female, realize I was just as good, if not better, than the boys, and I could be an engineer. It is the part of high school I look back at and wish I could do over and over again, and it is where I met some of my best friends and mentors.
- Got internship through team, which got other companies interested in me when only a freshman.
- It pointed me in the right direction in which type of college education and field of study I want to learn in.
- I've learned how to work well with a group of people who all have their own ideas and solutions to problems, and to organize the situation in a productive manner. This has helped me in many different aspects including directing my theatrical productions.
- FIRST continues to influence me because I am currently attending a college in pursuit of an engineering degree, something that I may not have been doing were it not for the influence that I got from being a member of FIRST. I feel that I have an advantage over the people that I attend school with because of the program. I am also currently helping another team that is near the college I attend.
- Because of my experience in FIRST robotics, I received an internship at General Motors after I got out of high school, which gave me good job skills and people interaction in a real career-type setting. It also allowed me to see what a real career in engineering is like. FIRST was able to show me to stay on top of my goals and keep focused.
- By participating in FIRST, I realized that I enjoy solving problems using computers. Thus, I decided to become a computer scientist. Currently I am contemplating specializing in Software Engineering or Machine Learning.
- Great story to discuss on resumes, interviews.
- Yes. Creating storyboards, being involved in team brainstorming and goals, led me to want to have a career in advertising that may include computer science.
- It helped me get a job as an apprentice machinist.

- It helped me weigh out my options in life and led me to choose the best career that would fit the person I am and benefit those around me.
- I learned in my freshman year of high school, doing public relations for Chief Delphi, that I needed to be approachable and knowledgeable. I was just that. I keep this in mind whenever I go on job interviews and I have gotten every job.
- Many things I learn from my job coincides a lot with what I've learned from FIRST.
- 1. I joined the military (Navy)- scored high on the ASVAB exam and engineering exam to enter the training as a Nuclear Technician. 2. When I was accepted to the US Naval Academy I decided to choose to major in Electrical Engineering.
- FIRST has opened a scope opportunities for me in college. I would have never been competitive if it wasn't for FIRST.
- It was the most fun I had in high school and I believe gave me a leg up when I went to college. It put us right in the industry and gave us a project that we could complete and call our own.

Friendships/Relationships Formed (16)

- FIRST was a program that helped me, as a female, realize I was just as good, if not better, than the boys, and I could be an engineer. It is the part of high school I look back at and wish I could do over and over again, and it is where I met some of my best friends and mentors.
- The Florida trip was nice in that I got to meet new people.
- I've had last relationships with peers and teachers that have made a lasting impact on my life.
- I met my girlfriend through the team and we dated for 2 1/2 years. I attended every regional that my former team participated in since I graduated.
- The relationships I built.
- From FIRST I made some great friends that are still my closest friends today. From the leadership experience I was able to jump right into the SAE program at college and in my second year be a vice president, and now the team leader for the aero program, and a member of my fraternity executive board. Without FIRST I know that I would not be as capable of an individual at this time, it gave me a great jump start.
- I meet so many other students over the three years on the Robotics team. It took numerous dedication and desire. I loved the long nights at Columbia University. I learned how to incorporate so many different ideas into one final idea.
- I have met other people who were in FIRST since attending college. I have come out of FIRST with some great lasting friendships.
- I made a lot of new friends. And a little smarter at school.
- The memory's still there and I fondly look back to the good times I had fundraising, bonding, working, playing and whatever else with my team. I'll never forget that, never. We had a strong spirit team spirit that is. The spirit and bonding is what makes you keep in touch with members. I still talk with a few of them.
- I'll always remember our Mentor Robert "Bob" Stark of Columbia University. He helped me both in school and in my personal life. A many worthy of admiration from all.
- I've worked with many team events but FIRST was different. I felt like we were a big family working together. The traveling together helped us to be closer.
- I still talk to some people that live in Florida and on the other side of MI and it's been three years since I've seen them.
- Being in FIRST introduced me to individuals who ended up being my best friends. In addition, being on my team's video team I learned that I have a passion for videography and photography.
- On my team I was a driver all three year as a student on Chief Delphi. As a driver I get to meet many other drivers from different teams, mostly boys haha. At my ever FIRST competition I met a driver from Rochester High (team 201) at Easter Mich. University. Together we won the competition, met up again in Florida that year. That was it to never see each other again, so we thought. He was a senior. But Kettering University has their 1st annual Kick-off. He came to see his old team and almost 4 years later we are planning to get married. He is my lasting impact.
- Being in FIRST has open up worlds to me. Because of FIRST, I became more interested in science and technology, so I attended a summer program about FIRST Robotics (Frontiers at Worcester Polytechnic Institute). While attending that program, I met new friends, and I made my decision to go to WPI for

college. That was 3 years ago, and I think that it is the best decision I have ever made. FIRST helped me decide on a college, it introduced me to people with similar interests, and has given me a sense of where I belong.

Influence on Academics (16)

- I learned a lot about math and science and working together as a team. I met Dean Kamen in person and things like that made me feel like I could achieve something important in my life.
- It pointed me in the right direction in which type of college education and field of study I want to learn in.
- FIRST continues to influence me because I am currently attending a college in pursuit of an engineering degree, something that I may not have been doing were it not for the influence that I got from being a member of FIRST. I feel that I have an advantage over the people that I attend school with because of the program. I am also currently helping another team that is near the college I attend.
- The FIRST experience is one of the reasons I'm going into mechanical engineering as a major in college.
- Because of my experience in FIRST robotics, I received an internship at General Motors after I got out of high school, which gave me good job skills and people interaction in a real career-type setting. It also allowed me to see what a real career in engineering is like. FIRST was able to show me to stay on top of my goals and keep focused.
- I made a lot of new friends. And a little smarter at school
- The FIRST experience provided valuable experience and credentials that made it possible to attend an excellent university. I went into my college excited about an engineering degree. While I ended up changing my major, I cannot doubt that FIRST got me through the admissions and scholarship door.
- It gave me a whole new perspective on how learning can be fun and exciting.
- Made school a lot more fun.
- If it wasn't for FIRST, I wouldn't be in engineering school now.
- Being on the robotics team helped me a lot when it came to my grade. In the 9th grade I messed up and had to go to summer school. After been on the team, I took school more serious than ever before.
- The experience that I received from FIRST will be with me forever. The technical and math skills that I had to use had the most impact on me. Due to these skills I was able to succeed in higher math classes such as AP calculus.
- It gave me a positive image of high school.
- FIRST has stayed with me past high school. I still go to regionals every year. My experiences gave me a better understanding on team work and "thinking outside the box."
- I meet so many other students over the three years on the Robotics team. It took numerous dedication and desire. I loved the long nights at Columbia University. I learn how to incorporate so many different ideas into one final idea.
- It made me a better thinker, gave me better ideas and choices in future life.

Skill-Building (10)

- Learning how to work in a team and manage time was what FIRST taught me.
- It has taught me to budget my time so that I can accomplish all of my work with less stress.
- Helped me deal with pressure.
- I was a part of the fundraising team, where I was expected to gather financial information and present it to members of the community and others along with a strong presentation of our need for money and the type of program such individuals would be impacting. The communication skills I have learned have since then helped in college with presentations I have been required to give in front of numerous strangers.
- Helped me to improve my people skills as far as making presentations and talking with professional people.
- I still like to build things
- FIRST gave me insight into the design process. I think about how everyday products are designed and tested. Also FIRST remains a landmark in a great time of my life.
- I am now familiar with various methods of machinery which I have used since high school.
- I still use the electronics skills I learned every day.
- I am very good at machining aluminum and steel from learning how to do it for FIRST

No Impact/Negative Impact (9)

- It hasn't.
- It didn't.
- No.
- It's made no lasting impact.
- Not just FIRST has played an impact on me as a person. But I would have to say the politics of being on a team led by people who let winning get in the way of what the real purpose of FIRST is. To sum it up, being told to do something with no control over what happens to me.
- Not really. College is a whole different experience in itself. FIRST didn't provide much.
- On national competition we were attacked and we lost on the first round. Nobody did anything - that was the sadness memories
- Not at all.
- My experience with FIRST did not have a lasting impact.

Memories (8)

- Pretty much I consider it my fondest high school memory.
- I have so many great memories from the Chief/Delphi team. These are memories that I can share with my little sister, who is a current member, and my children.
- The lasting impact of this experience is the memories of the hard work and the excitement of the competitions. Trying your best and having fun at the same time was a great experience.
- The memory's still there and I fondly look back to the good times I had fundraising, bonding, working, playing and whatever else with my team. I'll never forget that, never. We had a strong spirit, team spirit that is. The spirit and bonding is what makes you keep in touch with members, I still talk with a few of them.
- FIRST still stands as one of my best memories of high school. Through FIRST I was able to experience things that I wouldn't have had the chance to.
- My memories of FIRST still make me smile. FIRST was the reason I decided I was sure I wanted to do engineering. I am now entering my sophomore year in college and still have no doubts about my major (I'm sure you are aware of how amazing that is).
- FIRST gave me insight into the design process. I think about how everyday products are designed and tested. Also FIRST remains a landmark in a great time of my life.
- FIRST made me realize how much more there was out there. The people who are part of FIRST robotics are an elite few, and I have some GREAT memories...that has been the longest affect.

Leadership (6)

- From FIRST I made some great friends that are still my closest friends today. From the leadership experience I was able to jump right into the SAE program at college and in my second year be a vice president, and now the team leader for the aero program, and a member of my fraternity executive board. Without FIRST I know that I would not be as capable of an individual at this time, it gave me a great jump start.
- FIRST molded and shaped me into a leader.
- Became more of a leader and mentor.
- Strengthening my leadership skills and increasing my confidence and self-esteem.
- I became an assistant to my supervisor at work and became a good team leader.
- By accelerating myself in other organizations in leadership positions.

Continued Involvement in Program (4)

- After I graduated from H.S. I found a way to still get involved in the FIRST competitions as well as the LEGO LEAGUE. In my first year of college as an Entertainment Technology student I helped set up the sound system for the LEGO LEAGUE competition. The same year (2004) I attended the NY Regional like my previous four (4) years in High School, but this time (2004) I was a referee. I think that even if I tried I wouldn't be able to get away from FIRST. I feel like FIRST and FIRST teams are part of a very special family which I'm also part of.
- Each time I hear about the competition, I try to help and if possible attend the competition.

- FIRST has stayed with me past high school. I still go to Regionals every year. My experiences gave me a better understanding on team work and "thinking outside the box."
- I have been inspired to mentor a team next year as a result of my experience.

Pride in Achievements/Program (3)

- I've seen FIRST specials on TV and am proud to say that I was a member of the FIRST team.
- I usually only think back to the memories of the build season and working with the few dedicated team members, teachers, and the school's dean to accomplish such a mechanical marvel.
- I really can't say except that I'm glad that I was part of FIRST for 3 years. I'm proud of that fact.

Q 44. What did you enjoy least about your time in FIRST? What would you change?

(Sample Answering: 133 Responses)

Nothing (23)

- When FIRST changed its seasonal term. I wouldn't change anything. The experience is life changing.
- Nothing.
- I was happy with everything. I can't really say I would change anything.
- I don't think I would change anything because everything is part of the experience.
- Everything was super!
- I cannot complain about anything regarding my time in FIRST. I always say it was the best activity I did in high school.
- Nothing.
- I wouldn't change anything. I had lots of fun.
- I couldn't say there was anything about FIRST I didn't enjoy, in retrospect.
- Nothing. I enjoyed everything.
- Nothing - No Comment.
- I love the competitions and meeting all the other teams. I am not sure what I would change.
- Nothing! I loved my time in FIRST!!!!
- Nothing.
- Nothing - Loved it all!!!
- It was a great experience.
- There's nothing to change, everything was great. If I could relive that part of my life over I would, the people and everything wonderful.
- I liked working with my fellow teammates and I wouldn't change anything.
- Nothing, absolutely nothing. Enjoyed every single moment of it.
- Truthfully, I would change nothing. Everything - for me - happened as it should have.
- Nothing.
- I wouldn't change a thing. I loved everything about it...traveling, the competition, the people. The only thing I would have changed would be I would have joined the team MUCH sooner
- Nothing!

Adults (Parents, Teachers, Advisers) (22)

- The adults hoarding the robot's time. They monopolized the design and construction of the robot
- There could have been more adult/teacher help.
- The demands from the adults.
- I would change some of the people advisors judges etc. These people play favorites. What does not kill you only makes you stronger.
- Getting disqualified for one of the rounds. I would not have taken Ms. Miller to be our coach.
- My teachers did not make correct reservations and it was a hassle.
- I didn't like my teammates. The adults assumed we didn't know anything.
- Teams that allow adults to do everything.
- It was difficult to drive to meetings every other day. I would change some of the managerial aspects in terms of the adults.
- Frustrating because most people had parents or team (more the team itself-not FIRST).
- Advisors had too much control over robot build & design.
- The adults did too much work. It should be the kid's way to learn, not who would win.
- Being told by the adults to act a certain way when we really weren't. Not allowed to be ourselves.
- The strict teachers.
- I didn't really care for the overpowering adults. The adults, (teachers in particular) would always tell us how important winning was. I didn't look at it that way. I looked at the skills that I was gaining, the people I was getting to know, and fun that I was having while learning new things. In fact, I would be willing to say that most of our team at that time felt that way.

- I didn't enjoy the fact that other teams had more professional help than other. One thing that I would change would be the student should not only take the credit for the work but they should do it themselves.
- What I enjoyed least about my experience on FIRST is that sometimes the adults forget that FIRST is not just educational and it is not just a competition, but it is supposed to be fun as well.
- The only thing that I would change would be the adults. I felt that sometimes they didn't let the kids do as much hands on work as possible.
- The adults on teams doing so much and the costs are too high.
- Occasionally, one teacher "muscles" his way in and takes over the design and building process.
- I would have to say that my least favorite experience in FIRST would be having to deal with the adult members on the team that didn't quite grasp the goals of the FIRST program. They never acted like they wanted to be there, and they did not listen to the students ideas. I realize this is strictly a team issue, but it was something that I wish I could have changed.
- Not having overall charge of the project. I believe the teachers should be mentors and should not try to do most of the work.

Team Problems/Conflicts (12)

- We split our team in parts to build and design our robot since we teamed up with a vocational school nearby and everyone had a hard time sometimes getting in touch with one another and working together instead of taking everything and collaborating at the end.
- Group conflicts. More team building skills.
- When the team first started out, it was a partnership and there were some hostilities between the students between the two different schools. Although I'm not sure I would change that, since after all, we overcame it and I think it actually made us stronger as a team.
- I disliked the way the team operated. Most of the power was concentrated in the hands of a few, and these people weren't very pleasant nor cooperative. It didn't feel like a team; instead it felt like the adults and their favorite students called all the shots and the rest of us were along for the ride.
- The team I was on was not the best. We always did very well at competitions but behind the scenes it was run very poorly.
- Conflicts between the advisors and team members.
- The first FIRST team I was on was so divided into groups. I wasn't able to participate in things I wanted to, but I was a rookie so I dealt with it.
- I didn't like my teammates. The adults assumed we didn't know anything.
- Even though it helped me later in life, I did not enjoy the conflict/resolution part of dealing with a large group of people with differing ideas.
- The mechanical and electrical components of our team were not very unified.
- Our team wasn't always wanting to work together in cheering. Sometimes others wanted to use different strategy. Better team skills.
- Non-workers.

Money/Funding (11)

- The rather large and expensive fees for entering competitions, as well as parts.
- Not being able to go to has more regionals. I would not change anything I just wish my team would have been able to afford for us to attend more.
- I enjoyed being recognized for my hard work and dedication. The only thing I would change is the amount of money needed to get into nationals.
- The downtime, waiting for parts, not being able to raise enough money to go to Nationals.
- What I enjoy the least about my time in first is that my team G-FORCE (Samuel Gompers H.S.) never got a chance to attend the Nationals, many teams can't afford to go and for four years I thought that many teams with that opportunity took it for granted. I would make the trip to the Nationals more affordable or just allow more slots for first time teams to compete in the nationals.
- Raising \$, but it's a reality of life.
- How difficult it was to gain money from companies well to get sponsors. I guess you can say it was a learning experience in itself.

- I was in charge of telling people that we didn't have enough money to take all the members of our team to the different regionals and telling people they were not selected to go. That sucked a lot.
- It was hard to find funding when we got started.
- The adults on teams doing so much and the costs are too high.
- There should be more funding for students involved so that they can attend the national convention.

Student Involvement in Project (11)

- Not involved enough, would like to participate longer so I could get to be one of the students working on the robot more.
- I would make students do more work on the robot.
- The fact that students didn't do all work.
- Sponsors did most of the work. I would encourage more student input.
- The adults did too much work. It should be the kid's way to learn, not who would win.
- I felt most of the students were not that much involved in creating the robot physically with the technology. I recall the student's giving ideas and feedbacks on how the robot would look physically. But in terms of using the electronics to construct the robot, I was not involved.
- I didn't enjoy the fact that other teams had more professional help than other. One thing that I would change would be the student should not only take the credit for the work but they should do it themselves.
- All the problems that came up with our team robot towards the end. My involvement.
- Not having overall charge of the project. I believe the teachers should be mentors and should not try to do most of the work.
- What I enjoyed least was not getting a wider range of the hands-on experience that I would have liked but due to the time constraint, I was able to get sufficient experience in certain areas. However, what I would change is that teams should have more communication within in their groups and less "favoritism" towards students and certain positions within the teams, like team captain, etc. because other students deserve a chance to take turns in those areas and have more responsibility so they can broaden their experience and knowledge.
- I think the students on the teams need to get more hands on experience other than watching the "engineers" build and fix their machines. That's the problem with engineers today; it might look good in CAD but they need to know how to really go about building and assembling their designs. I think more hands on could help this. I also think the robots should be able to be worked on between competitions. Continuous improvement isn't a bad thing. It allows the students to get involved more and receive more hands on experience.

Politics (8)

- Politics... and favoritism.
- What I enjoyed least was not getting a wider range of the hands-on experience that I would have liked but due to the time constraint, I was able to get sufficient experience in certain areas. However, what I would change is that teams should have more communication within in their groups and less "favoritism" towards students and certain positions within the teams, like team captain, etc. because other students deserve a chance to take turns in those areas and have more responsibility so they can broaden their experience and knowledge.
- I disliked the way the team operated. Most of the power was concentrated in the hands of a few, and these people weren't very pleasant nor cooperative. It didn't feel like a team; instead it felt like the adults and their favorite students called all the shots and the rest of us were along for the ride.
- The politics over who was in charge, and the arguments included.
- I would change some of the people advisors judges etc. These people play favorites. What does not kill you only makes you stronger.
- The politics between teams and within the adults on teams are not always fair to the kids.
- Toward the end of my participation in FIRST I feel things became too political. Overall it just felt like it was no longer about the kids learning but about fame and sponsorship for the program. Dean really messed things up.
- Every experience has its ups and downs. The only thing that I would change would be the politics that rest on certain teams. My team for instance was sponsored by a well known corporation and they sponsor

several nation winning teams. It was hard though on the adults on my team to keep "impressing" the corp when there was nothing they could do. Too many politics means not enough work getting done.

More Time (8)

- We should have spent more time doing it.
- Time pressure.
- Build time should be increased, high school was hectic enough.
- The FIRST season is too short.
- The crunch time during competition. I would like to change the time to make it longer.
- More time to build.
- The short amount of time we had for the projects.
- The time constraints.

Not Going to Competitions/Having to Choose Team Members to Go (5)

- Not being able to go to has more regionals. I would not change anything I just wish my team would have been able to afford for us to attend more.
- What I enjoy the least about my time in first is that my team G-FORCE (Samuel Gompers H.S.) never got a chance to attend the Nationals. Many teams can't afford to go and for four years I thought that many teams with that opportunity took it for granted. I would make the trip to the Nationals more affordable or just allow more slots for first time teams to compete in the nationals.
- I was in charge of telling people that we didn't have enough money to take all the members of our team to the different regionals and telling people they were not selected to go. That sucked a lot.
- Wish I had more time to interact with other teams and also had gone to the nationals.
- There should be more funding for students involved so that they can attend the national convention.

Time Commitment (5)

- Being early at the competitions.
- The long hours building the robot (but it was worth it).
- I hated the early mornings that we had to travel on the plane or bus.
- It was difficult to drive to meetings every other day. I would change some of the managerial aspects in terms of the adults.
- The traveling was the least. I wouldn't change it much.

Started Earlier (5)

- I would have started in the 9th grade, not the 12th.
- I would have wished it was around when I was a freshman in high school. It would let me feel more ready for a leadership position in my senior year.
- That I didn't have more time. I came in when I was a senior and I wish I had started when I was a freshman.
- I feel that I missed out on new opportunities such as learning how to weld. Everyone who already had the skill was able to weld, but there wasn't time to teach everyone. Welding is a real example, but I'm sure that there are other skills as well. I would have joined FIRST my freshman year in order to have more of a leadership role on the team and more great experiences.
- I wouldn't change a thing. I loved everything about it...traveling, the competition, the people. The only thing I would have changed would be I would have joined the team MUCH sooner.

Support/Sponsorship (5)

- The only thing I found disappointing was the school's support of the team. We were not given the enough space because the Robotics Team was not a priority in the school.
- Big money sponsors designing too much of some teams projects or having too much money/supplies to spend on "high-tech" items.
- Sponsors did most of the work. I would encourage more student input.
- Community's lack of involvement. The community needs to be more involved and supportive.
- Trying to get support for our team.

Roles on Team (4)

- Robot building...sometimes seemed too technical.
- The whole design process for the robot. I wasn't very interested.
- I enjoy pulling up the motors in the 2003 competition cause they were that bad, what I don't like is the motor that was given.
- Being on the photography team.

Rules (3)

- The thing that I enjoyed least about FIRST was how confining the rules were regarding the build of the robot. I feel that if FIRST is truly trying to inspire creativity and innovation then they should widen the boundaries and allow for more creative thinking. I realize that there are certain safety concerns and that is why many of the rules are in place; however I would like to see some of the restraints on creativity removed.
- I enjoyed FIRST overall, but would change the way the assignments were arranged.
- Some of the rules for the games. I would change the rules for some of the games.

Downtime/Waiting (3)

- The downtime, waiting for parts, not being able to raise enough money to go to Nationals.
- The least I enjoyed of the time in FIRST were waiting for the robotic parts.
- What I enjoy least about my time in FIRST is that I can't really think of it right now but sometimes standing around and doing nothing I feel weird because being involved is helping put together, not just being there.

Miscellaneous (8)

- All the problems that came up with our team robot towards the end. My involvement.
- I didn't like that my school had to work with another school. I would change the fact that each team would get its own robot.
- I loved everything about FIRST. I still talk about my experiences to people but one thing that I didn't like too much was that some kids were there because they use FIRST as a social event where they could flirt when it is a learning educational opportunity.
- I think the program should consider slowing its growth. If it gets too large, its structure could become sloppy and slapdash.
- It was Florida 2002 I played my last match. I felt like a BIG piece of my life was taken from me. That is one of the worst feelings. After that I was looking for the right support group haha. Driving for my team was my best and worst memories. I still get a tear in my eye when I see our robot go out to the field and know I will never drive in competition again.
- There were many times girls were not allowed to do things. I was on the pit crew but was not allowed to go up for the practice the day before because they would have to get another hotel room. It made me mad that any guys could go but since I would have cost them a hotel room I wasn't allowed.
- I should have taken better advantage of scholarships available to me from FIRST.
- That not all schools are aware of FIRST. I would like to expand it to more areas.

Q 61. Any other comments about your experiences in FIRST and/or its impact on your life?

(Sample Answering: 30 Responses)

Positive Experience (18)

- I'm glad I participated in FIRST. I wish I could have done it throughout high school but it began at my school when I was a senior. Nonetheless, I learned a lot and still have pictures, paraphernalia, and many memories from the team, and the regional and national competitions.
- Good shiznit.
- FIRST is an excellent program unlike any other and I'm truly happy I've been a part of this program.
- FIRST is an outstanding program and I personally support and applaud all that it offers students pursuing engineering, science and technology.
- I think it's an experience that everyone who is even remotely interested in the science or math should experience, all schools should participate.
- I am so glad that I was given the chance to be in my robotics team. I had a lot of fun and got to know a lot of great people, whom I learned from. There were some problems and hard times that we went through but I'm happy that we got through them together.
- It was great.
- It's a great experience for everyone involved you should keep this program going for all kids in the future.
- FIRST was my favorite extracurricular activity in high school.
- FIRST was the best thing that ever happened to me in High School after love.
- FIRST is one of the many programs I've done in high school. FIRST is the only one that taught me to think outside the box. Usually the best answers are the ones we're not seeking. Everyday, every competition, and trip was a challenge in some way. No one had a complete easy job. It took the whole team to get where Delphi-I and Pontiac Central are to this day. Thank you FIRST for such a great motivating program. I've met so many friends from other teams who I still talk to. Thanks again.
- Wish I could still be able to be on a FIRST team!
- The FIRST experience is wonderful and I would recommend everyone to be a part of it.
- FIRST is a very great program for high school students. I have learned a lot from it. It also changed me to where I'm today. Keep up the great work.
- It was an experience that I would never trade for anything else.
- I wish that every kid in school could have the opportunity to experience FIRST. It is the best thing to change a kids' outlook of life for the better.
- It was an awesome experience and I recommend it to everyone.
- FIRST is the best thing I had done in high school. I loved it so much, that it determined where I went to college. I still participate in FIRST on the college level with WPI (team 190). I have also worked on the other side of a FIRST event, as a staff member for BattleCry@WPI (an annual off-season robotics competition held in June) and as a result of that, I have a new appreciation for the dedication and hard work put in by volunteers every year at all regionals and at the championship. It is because of these dedicated volunteers that people like me were able to participate and have such great memories of a program called FIRST.

Personal Growth (7)

- Honestly, FIRST brought out a part in me I always knew I had. Being a leader, also knowing when to follow and support. One important factor was the equalness of everyone, from the mentors, operators, and newest members.
- The FIRST team made a huge impact on my life. It changed the way I viewed math and science. I loved every minute of it!
- FIRST is one of the many programs I've done in high school. FIRST is the only one that taught me to think outside the box. Usually the best answers are the ones we're not seeking. Everyday, every competition, and trip was a challenge in some way. No one had a complete easy job. It took the whole team to get where Delphi-I and Pontiac Central are to this day. Thanks you FIRST for such a great motivating program. I've met so many friends from other teams who I still talk to. Thanks again.

- FIRST is a very great program for high school students. I have learned a lot from it. It also changed me to where I'm today. Keep up the great work.
- If I was not involved in the FIRST program I would have not graduated high school.
- FIRST is the best thing I had done in high school. I loved it so much, that it determined where I went to college. I still participate in FIRST on the college level with WPI (team 190). I have also worked on the other side of a FIRST event, as a staff member for BattleCry@WPI (an annual off-season robotics competition held in June) and as a result of that, I have a new appreciation for the dedication and hard work put in by volunteers every year at all regionals and at the championship. It is because of these dedicated volunteers that people like me were able to participate and have such great memories of a program called FIRST.
- Thank you very much for continuing this program in less than stellar high schools in NYC. It has made me concentrate most of my time and effort to grow as a person, as a leader, and as an engineer. God Bless!

Academic Growth/Guidance (5)

- The FIRST team made a huge impact on my life. It changed the way I viewed math and science. I loved every minute of it!
- FIRST was a good building block to work from in college and allows for more exploration than most other activities.
- Shifted me to a technology field of study.
- FIRST is the best thing I had done in high school. I loved it so much, that it determined where I went to college. I still participate in FIRST on the college level with WPI (team 190). I have also worked on the other side of a FIRST event, as a staff member for BattleCry@WPI (an annual off-season robotics competition held in June) and as a result of that, I have a new appreciation for the dedication and hard work put in by volunteers every year at all regionals and at the championship. It is because of these dedicated volunteers that people like me were able to participate and have such great memories of a program called FIRST.
- If I was not involved in the FIRST program I would have not graduated high school.

Everyone Should Participate (5)

- I think it's an experience that everyone who is even remotely interested in the science or math should experience, all schools should participate.
- The FIRST experience is wonderful and I would recommend everyone to be a part of it.
- I wish that every kid in school could have the opportunity to experience FIRST. It is the best thing to change a kids' outlook of life for the better.
- It was an awesome experience and I recommend it to everyone.
- I think that every child in America should be able to experience what FIRST has given to me. As I moved to college, in a somewhat desolate location, it amazed me that the Upper Peninsula of Michigan has Lego League Teams and FIRST Robotics teams. I was able to volunteer for both the high school team and run my own middle school Lego team. Next year I will be helping to coordinate the Upper Michigan Regional Tournament for the Lego League Teams in the UP. I feel that if I keep giving back to the FIRST community maybe I can help give someone else what FIRST has given to me.

Thank you (3)

- Thank you very much for continuing this program in less than stellar high schools in NYC. It has made me concentrate most of my time and effort to grow as a person, as a leader, and as an engineer. God Bless!
- Thank you for making FIRST possible.
- FIRST is one of the many programs I've done in high school. FIRST is the only one that taught me to think outside the box. Usually the best answers are the ones we're not seeking. Everyday, every competition, and trip was a challenge in some way. No one had a complete easy job. It took the whole team to get where Delphi-I and Pontiac Central are to this day. Thank you FIRST for such a great motivating program. I've met so many friends from other teams who I still talk to. Thanks again.

Lessons Learned (2)

- Treat people the way you would like to be treated. Never assume the other person is not as smart as you are.

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People Met (2)

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- I am so glad that I was given the chance to be in my robotics team. I had a lot of fun and got to know a lot of great people, whom I learned from. There were some problems and hard times that we went through but I'm happy that we got through them together.

Continued Involvement (2)

- FIRST is the best thing I had done in high school. I loved it so much, that it determined where I went to college. I still participate in FIRST on the college level with WPI (team 190). I have also worked on the other side of a FIRST event, as a staff member for BattleCry@WPI (an annual off-season robotics competition held in June) and as a result of that, I have a new appreciation for the dedication and hard work put in by volunteers every year at all regionals and at the championship. It is because of these dedicated volunteers that people like me were able to participate and have such great memories of a program called FIRST.
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Miscellaneous (2)

- If I could do it all over again, I'd be a lot more active in FIRST and I would make sure that my thoughts and ideas were given a floor. Unfortunately, that wasn't a huge concern at that age, so I didn't bother. I think making the best out of FIRST is heavily reliant on the individual, not the program as a whole.
- I wish there was more ways that FRC itself, could find a way to give money to the less fortunate teams for competition. Such as my team that was located in the poorest congressional district in the U.S.