



Discovering Diversity

134H Team Discovery - Hotel
Pembroke Academy, Pembroke NH



vEX
ROBOTICS
COMPETITION



We are 134H.

Each member has their own unique set of skills. From our ages and genders, to our experience and ideas, we couldn't be more different.



Our Story

Beginning with Shyanne (class of '20) in 2016, the team quickly accumulated curious female members. Taylor and Haley ('18) joined shortly after, and the three spent the 2016-2017 season learning the basics of the game and the nature of VEX Robotics. In the 2017-2018 season, Alyssa and Katelyn ('19) approached the existing members after hearing about the all girls team. After the first two competitions of the season, Harry ('21) joined the Pembroke Academy Robotics program without an assigned team. We offered him a spot on our team, excited to hear his ideas. We now have a 6 member team, consisting of second and first year members of every grade level.

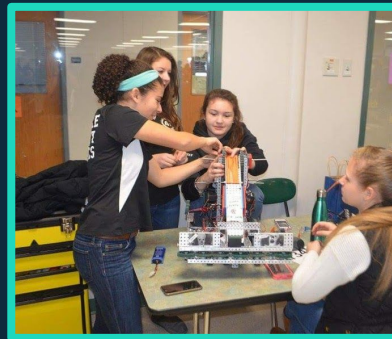




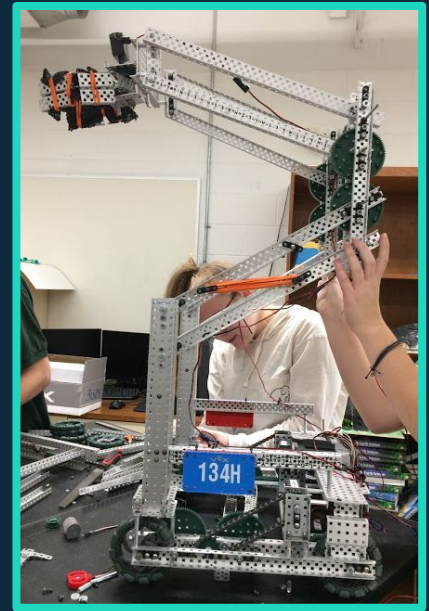
During the 2016-2017 season, we joined robotics to build robots. Plain and simple. We didn't realize how unusual it was until we quickly received a lot of attention for being the team of "all first-year girls." We didn't join to stand out or prove a point; we joined because we wanted to pursue something that sparked our interest. It should be normal for girls to participate in the STEM field, and the Girl Powered initiative is working to make this a reality.



Girl Powered encourages girls to take initiative and get involved in STEM to create more diversity in fields such as engineering and programming.



As a team with little experience but a strong desire to succeed, what we needed for this season was to think outside of the box. Having such a diverse team with males and females provided us with lots of creative ideas. Throughout this year, our team has built 4 entirely different designs, and qualified for the state championship once again. The idea process is where we thrive, because we have many different perspectives. In robotics, it's all about the quality of the ideas, not about the people who come up with them.



Team Roles

Because of the varied skill levels on our team, it's important that the experienced members guide and teach the new members. For this reason, our team's roles are very loosely defined. Haley Brown tends to be the team programmer, while Taylor Monterio mainly writes the notebook. Other than that, the designing and building processes are a collaboration of the whole team. Even these assigned roles are done together, so that everyone is involved in all aspects of construction. This way, we can utilize our individual strengths and improve upon our individual weaknesses, for an overall, well rounded team.





Being the only boy on 134H is an experience like no other. When I first joined the team only months ago I didn't really know what I was getting into. I also didn't have much experience working with girls. When we first started working together, I was worried I would feel out of place, but every idea I offered was always considered and explored. We were able to build off of each other and combine creativity and knowledge of the robot to obtain the results that we sought. As time went on, my knowledge of the robot grew, and working with the girls quickly became natural. Now, everyday I go to robotics, I am happy to be there and happy to work with my team. Our different ideas compliment each other and our levels of experience allow us to learn from each other. We work and we build, but most importantly, we get along together as a team. Being apart of 134H is something that I wouldn't trade for anything.

- Harry Army



Our STEM Role Model

Our club advisor, Karen Pringle, is our STEM role model for a number of reasons. She has over twenty years of experience of working as an electronics engineering technician and an electronics engineer. Ms. Pringle became a teacher because she wanted to impart her knowledge of engineering and STEM to students, especially females, to encourage them to pursue careers in the STEM field. She has experienced first hand how it feels to be one of the few females in a male dominated field. Her own coworkers have even doubted her abilities on account of her gender. Because of that, she works hard to give confidence to the people who need it most. Whether it's young girls struggling to find their place in the field or any student looking for confidence, Ms. Pringle always provides them with support and encouragement. "You deserve to have confidence and believe in yourself when no one else shows that they believe in you," Ms. Pringle said when we spoke with her about the Girl Powered initiative.



A New Environment

It's intimidating for women to join the male dominated STEM field, even on a small scale such as joining a high school robotics team. We have found that the rewards far outweigh the initial fears, and now we recognize the importance of diversity. This is why we have been working to make our robotics program more inclusive, and even spread the word to girls in our community. We have connected with a local Girl Scout Troop at their request to speak to the girls about robotics, and how fun it is to get involved at an early age. Right now, we stand out, because we are females. Our goal is to remove the need for initiatives like Girl Powered, by making it normal for males and females to work alongside each other.





More girls.
More diversity.
More ideas.
More **success.**



Credits

- ◇ Created by: Haley Brown, Taylor Monterio, and Harry Army
- ◇ Other Team Members: Shyanne LeSage, Katelyn Young, and Alyssa Lambert
- ◇ Team number: 134H
- ◇ Submission title: Discovering Diversity

