

## Women in Code

Branksome Hall has recently started developing its first ever STEM innovation program. This includes our STEAM lab which allows us to pursue science, technology, engineering, art, and math. We have resources such as 3D printers, robots, projectors, etc.



This has allowed us to dig deeper into the possibilities that this equipment and facilities have provided for us. With the help of our head of Innovative Technology (Michael Ianni-Palarchio), physics teacher and robotics expert (Ashley Boll), and one of our computer engineers (Donn Pasiliao), two of our peers (Madeleine Mackie and Kendal Christie), took the initiative to start Branksome's very first robotics team. Slowly but increasingly we had many of our peers follow their initiatives in STEAM and join our club to build a strong team of eager students.

This STEAM lab and club that our peers have initiated has not only given us new opportunities to reach different horizons in our future and education, but it has also revolutionized our learning, as an all-girl school, and given us an opportunity to show our strength within STEM, which is an opportunity to show how we are girl powered. This is the attitude of independence, confidence, and empowerment among young women. To us, Branksome robotics members, girl powered means much more than that. There isn't a simple definition to explain what this is, what it means to us, and how we incorporate it in our approach to robotics. Even so, when asking around and dedicating an afternoon to this discussion we discovered that, for our team, girl powered is: being comfortable enough to pursue your passions, having the confidence to take initiative, ensuring that girls can make more positive contributions to society, girls being strong in technology and being able to thrive without boundaries, as well as having to choose what you believe in without pressure. This was visible within our environment from the moment that our team was created. We carry these mottos with us during our day to day activities, our failures and our successes. Most importantly these mottos serve as our foundation to provide a STEM positive community, through our innovations, challenges, achievements, and collaboration.



Incorporating girl power into our approaches to robotics is a very key part in how we not only came to develop this club, but also how we keep striving for more accomplishments and learning opportunities. Along with this, something that makes our club inclusive and an effective working environment, is the diversity within our team. Branksome Hall is a community with a very diverse background as we currently have students from all over the world. Our VEX robotics team has participants from all backgrounds and cultures. Although we are an all-girls school we do not limit ourselves by working within the Branksome Hall community, we tend to widen our learning experiences as a robotics team by working with other schools, generally other all girl schools as well as all boy schools. This level of inclusivity helps us learn different approaches, learning techniques, and valuable information that allows us to improve our way of programming, building, and competing.

On a regular basis, when our team meets in our lab, we tend to split the group into smaller teams which are different each time to allow each person to take on a different role when we are dealing with assembling the robots; programming, organization of tools, building. This alters each time because although we would select each person to manage their strongest area during competitions, we would like everyone to have a sound understanding of every component of the process. During a competing scenario, the strategic planning is discussed as a group, including everyone to receive all kinds of possible strategies. Within this collaborative environment there come times when our different opinions can clash and create conflict of interest, when this happens, we allow the whole team to put in their opinions and come to a compromise as not to create a road blocker and prevent the team to continue developing and achieving our fullest potential.

Within our STEM community we have looked up to many STEM achievers that help us strive to accomplish such achievements, but someone that has struck us with amazement was Ashley Lewis.



Ashely Lewis spent over a year leading the ground-up development of Girls Learning Code; an attempt to encourage more young females to learn technological skills and help to close the



gender gap in the field. She has also designed educational new media content for the TIFF Bell Lightbox, including the digiPlaySpace, 50 Years of Bond, Maker March Break Camp and various ongoing programming, and was the winner of Toronto's Startup Weekend Maker Edition and runner up globally. This led Lewis and her team to create a product that makes reading more interactive for kids. She has become a role model for our team as we follow her achievements as a path for greater accomplishments. We managed to arrange to meet her to ask her questions about her experience in code and have her visit out lab. This was the most exciting part of the year so far. Our team had spent a while preparing for it and it turned out to be an incredible and inspiring session. Robotics has become something that is shaping female in STEM, our team plans to do just that in the years to come.