Classy Cyborgs team with VentureLAB to take innovation to next level

By Brock Weir

Innovations spearheaded by Grade 7 and 8 students at Lester B. Pearson Public School to halt a ?literacy crisis? among the visually impaired is set to be taken to the next level ? and to market ? with the backing of VentureLAB and technological leaders.

The Classy Cyborgs, one of the school's robotics teams, emerged victorious last year as the Regional Champs in the First Lego League.

The students recently travelled to St. Louis as the only Canadian team from amongst 527 submissions from 22 countries to pitch their products at the League's Global Innovation Award Competition in St. Louis, Missouri.

Although they didn't take the crown, they came back with the knowledge they now have the backing of York University and VentureLAB, who will now put their engineering resources behind the students' product to streamline it, develop software, and come up with a plan to take it to market.

Their innovation is an app, with a finger pad extension, to help youngsters learn to read braille through electronic pulses on the Leapfrog Learning Platform. The product originally started off as a glove with built-in pulses, but working with VentureLAB, as well as NASA scientists from Georgia Tech, they have honed it to a more practical prototype.

?The last time we made the pitch, it was a glove, but we realised because of all the mechanics and wires in the glove it would be too hard to wear,? says Cyborgs teammate Disha Prashar, a Grade 8 student. ?Our final pitch was the app and paired with different adventures, for kids to have a game and some fun, along with a little single cell braille tile [on which] they can feel little pulses of the dots going up and down.?

As some of teammates prepare for high school life in September, they are not going too far away, eagerly volunteering their time to help advise the remaining and upcoming crop on the robotics team, while keeping the pulse of their own creation as it continues its journey to market.

?We're hoping to expand it to something more compact that you can plug into a micro USB port on your phone,? says Grade 8 student Logan Maier of the future vision. ?We have a great team behind this and we're going to see how far we can get this to go.?

Adds Disha: ?It feels good, but it is kind of overwhelming at the same time because when we were younger we just thought we would be going into high school and nothing would really be happening. But even if this does go to market, our main focus really is

to help children who need to learn braille.?
For Lisa Andrade, the LBP parent and volunteer who mentors the team, the success of the Classy Cyborgs this year is a particular matter of pride.

?They started out at the beginning of the year not knowing each other and they have become the best of friends,? he says. ?They have gained the confidence that they can dream big, innovate, and put their ideas into something real, and that has given them a lot of skills they will bring forward into their future careers. As young people, they have seen firsthand their ideas matter and they are listened to not just by experts in the community, but leaders in the industry. They have rallied around an idea 12 ? 14 year olds have come up with.

?The team has definitely hit on something that is needed for the blind community. We have support from the CNIB and Perkin School for the Blind who have identified this as a critical aspect in improving literacy amongst the blind. Right now only 10 per cent of the blind population can read braille so our innovation, which is a gamification of a learning system with incentives to learn braille really is something that is a market failure in the marketplace right now. With the help of York University, if we can fill that gap we would have accomplished our mission.?

To keep up with the Classy Cyborgs, follow them on Twitter @classycyborgs.