



**African-Canadian Christian Network**  
Nurturing Promise. Harvesting Potential.

## 7013 – ACCN Techtronix



A FEW MEMBERS OF OUR TEAM



2018 was the rookie year for 25 young men and women whose lives were changed as they engaged in building their robot.

The group did not know what to expect at the beginning of the build season and was pleasantly surprised at the end of this experience.

### What Went Well:

- First Robotics Canada is great at offering supports to all teams so that they all can win
- The spirit of cooperation is embedded in the culture of the organization
- Random teams offered their help and were truly genuine in their outreach, especially to rookie teams. This video is an example of the kindness of a more established FRC team that chronicled part of our journey [Click here to see our journey to date.](#)
- The mentor assigned to 7013 was available at the other end of a phone call or at an arranged face to face meeting, and was a tremendous source of support
- Staff members at First were all helpful and supportive of the team
- The Argosy Foundation grant was a significant factor in the experience of this Rookie Team. Without this support, the team would not have been able to register for the initial competitions
- Girls in Stem weekend left the girls in awe. When asked what could be changed about the weekend, the resounding response was “the event should have started on Friday”. They wanted more

- Microsoft’s grant was also instrumental in the success of the team.
- The day at Microsoft left the students saying “it will be so cool to work at an organization like this”
- The students enjoyed every moment of the day including:
  - The time of coding
  - The awe-inspiring presentation by Gladstone Grant. They left with quite a few “ah ha’s”
- The ambiance and the ability to ask Microsoft employees questions, which were instrumental in influencing the career aspiration of these young people in the field of STEM
- The experience during the build season influenced several students to consider a career and studies in Engineering. The stated objective of ACCN is to pique the interest of this segment of the population to come to the STEM table; to encourage them to take more STEM related courses; influence post secondary studies in STEM
- The students learned to collaborate as they worked toward a common goal of building a robot that would maximize the ability to increase points scored
- The students learned marketing and branding skills as they created the brand, name and logo for the team
- New skills were acquired as they learned Java script, Solid Works, machining, strategizing, and much more
- The ability to house and build the robot at Ryerson was a tremendous help to this community team
- Having the Engineering students at Ryerson as mentors was amazing
- The exposure on Breakfast Television was an inspiration to other students, especially those who self-identify as a visible minority, letting them know that they too can be involved in STEM. [Techtronix Appearance on Breakfast Television](#)
- Competition and the three awards received empowered these students to want more, and pursue more in this area of education
- Access to scholarship money for those in grade 12 was a tremendous incentive to continue post secondary
- Referencing involvement in FRC bolsters the resumes of the students
- All the exposure from their involvement in First, gave these students a peek into what is available in their future. They have all made shifts in thinking, and:
  - those who never contemplated post secondary are now seriously making changes for this to happen
  - many of them are turning their attention to STEM studies and careers
  - the mentors were instrumental in reaching out and inspiring these young people to pursue STEM education, and offered them moral and social supports
  - Minority student are inspired and realize that they belong at the STEM table, making a difference in the statistics that speak of their under representation in STEM

The STEM learning is not just for build and competition season but must continue all year round with supports in coding, modelling and STEM related learnings.

The organization is committed to taking the robot in areas of the community where more boys and girls will have an opportunity to learn all the fun ways in which they can become involved in STEM.

ACCN’s objectives for the 25 students were met. Going forward, we realize that it is important to start with younger students with FLL so that STEM involvement is a natural part of their learning.

The organization understands that many kids just need a boost to be placed on the right trajectory so that they can unleash their untapped potential. Involvement in FRC is just one example. This video is an example of why we do what we do [\\$100 Race](#)

#### **What Could Have Been Executed Better:**

- As a Rookie team, it was a bit difficult to envision all the pieces, hence Project Management was a bit of a challenge. Lesson learned – take the time to learn the time sensitive and important steps of the First journey
- The team could have benefitted from more parental involvement, especially on game day to demonstrate support. The take away lesson here is that more needs to be done to impress upon parents the importance of STEM learning for the children's future
- As a community team, a more stringent recruitment process should be used, with both students and parents
- A robust fund-raising strategy should start early with commitment from parents and students
- Parents must assume a role to support their children during build and competition period, meals, transportation, training, et al
- As a community team, most individuals came from across the GTA because of the lure of building a robot – the hands-on approach. As rookies, they were uncertain of the role that best complemented their skill sets. Keeping 25 students engaged each week was a challenge. Building 2 robots will help by allowing more hands-on activities and will serve the team well when the robot must be bagged.
- Description of roles could have been more clearly defined for the students. This is one example of where parental involvement would have been beneficial as they shared their areas of expertise to develop the skill set of the students in areas like project management, accounting, to name a few

***A Great big Thank you to the Argosy Foundation for making this happen. You have changed the lives of many students. In turn they change their families, their sphere of influence, their communities, and the world.***

Parents Testimonials:

*"It is a tremendous opportunity to have our daughter involved in TECHTRONIX. The experience is helping her to expand her passion for building, strengthening her ability to work within a team, and helping to prepare her for a future career in electrical engineering. It is an invaluable life experience that is helping to inspire and equip her to be a leader in the field of science and technology. We encourage every parent to consider getting their children involved in this program, and to watch with excitement the tremendous difference it makes in their lives. **Walter & Erica**"*

*"As a fierce advocate of STEM learning in my children, through University camps, private programs, tutors and enriched programming at home, I am acutely aware of the unique benefits the Techtronix program has to offer.*

*Throwing money at issues in the black community will not work without a principled based approach that imprints pathways to success in young minds. The many sub-cultures in the black community often focus on arts and entertainment, leaving vast swaths of brain power under developed. My pre-teen is thriving in this type of program.*

*In Daniel Pink's 2005 book 'A Whole New Mind' both right and left-brain thinking are key to future success. This is evidenced by self driving technology, electronic assistants, and artificial intelligence, it's the quintessential marriage of art and technology.*

*This program provides a hands-on introduction into problem analysis, strategizing for problem solving, design and execution, manufacturing, assembly, critical thinking and project management through doing right from the start. A healthy by-product of all this are engaged parents who themselves may be learning more about how to shape their child's learning opportunity.*

*The intersection of ACCN with First Robotics and Ryerson creates a deep and interactive learning experience that also encourages personal growth in our young people and the exploration of their ability; this is preparation for a future that won't leave them marginalized but guided on how to achieve their potential.*

*ACCN's forward thinking and collaborative partnerships is an excellent principle-based model designed for successful outcomes and should be shared with other community based groups that are similarly aligned."*

*Thank you, **Arlene** .*

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