

## CQI Competition Report 2015

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## **How has this experience enhanced your engineering skills/knowledge?**

As four mechanical engineering students, this experience has not only enhanced our skills but revealed a certain hidden potential in creativity and teamwork. Through the different processes of pre-competition, trainings and the competition itself we learned to know each other, even though we did not have much in common. We were able to adapt to the different situations that we encountered: misunderstandings, miscommunications and disagreement about the different projects that we had to build, much like the types of situations that we can and will face working in the industry. People do not necessarily know each other, nevertheless they have built bridges, airplane and other astonishing feats. In addition to that, we met so many engineers currently employed by companies such as Bombardier Transport and MDA, to name a few, as well as our judges. They shared many of their experiences, ranging from school and academic curriculum to their careers. Not to forget, our fellow students from different universities with who, separately, we spent hours struggling and brainstorming to find the perfect idea, the perfect design, the perfect prototype, and on the day of the competition revealed their vehicles to illuminate Le Complexe Desjardins.

One of the key engineering skills focused on in this competition is organization; the ability to manage time wisely, distribute roles, prepare for the presentation and to work as a team. Our group was actually very organized, as all members were working on a specific part of the project, and our time was spent properly. Many of the judges that circulated by our table commented that we were handling the competition quite well. A notable example of this is that fact that we were one of the first groups to prepare our PowerPoint presentation. The notion of being organized when working on these kinds of projects was something picked up from the pre-competitions we had in months leading up to the QIC Junior challenge. Working in an organized manner, is definitely something we will all apply in any project we have as future engineers.

### **What does this competition mean to you?**

Since I am a first year student, I want to use this competition to be more involved, generally speaking, into my department and to meet other students, but now that I have lived the whole experience I believe it is much more than that. I met so many great people either from Concordia or beyond in other Universities, and I feel like I belong to another and bigger family which is willing to help me and advise anytime and so do I.

- Hedi Rais

For me as a second year engineering student, this competition was an opportunity to apply my first year engineering knowledge in a competition setting and see how I compare to other engineering students. The competition from some of the other schools, like ETS was very strong. I learned that there is still a lot for me to improve on if I am to become a well-rounded engineer.

- Hamza Ettaleb

This competition is yet another great opportunity to get out there, experience challenges outside of the classroom and get to know so many other people. Competitions such as CQI are much different than anything that can be done in the classroom. The various competitors have the same goals as yourself, they want to have a good challenge and they would like to win. It is no longer about getting the grade you need in order to move on, but being the best.

Even though it is a competition, everyone is friendly and are ultimately there to have a good time and meet new people. Events such as the wine and cheese on the first day as well as the banquet on the last, enforce this notion of the competition being a social event. Meeting future colleagues,

employers as well as representatives from engineering firms who are present is such a great opportunity that should not be overlooked.

- Christopher Corsi

For me, competitions such as the QEC are an opportunity to get involved. I was already a part of the Quebec Engineering Games and I wanted to get a different experience through QEC. I participated in the Junior design competition, which required us to build a boat with the materials provided to us within 7 hours. The competition itself was described to us the day of, so quick decision making was part of the challenge. I have never experienced this kind of competition, so I wanted to test myself and see if I would be capable to do so. This was the main reason I wanted to take part in this competition. However, QEC is also about teamwork and bonding. Most engineering projects are accomplished in teams and working with other people can sometimes be a challenge in itself. By working with people right from the beginning of your degree, you will be much more prepared once you get your first job. There is also a lot of networking involved in engineering, and this competition allows you the opportunity to meet many other engineering students as well as employers who are present as judges or sponsors.

- Nicole Boucher

### **What are the lessons learned and how can we improve upon them?**

One of the most important lessons learned, was to not change the design for a project in the last few minutes without testing. When we saw that the vessel was splashing water everywhere in our trial, we were forced to come up with a solution. A plastic barrier was immediately created to limit the expelled water from the water wheels. We did not test this solution afterwards, until the day of the competition. The following day, the boat did not perform as was expected. It was much slower due to the last minute adjustments. The lesson learned, is to always test beforehand, instead of hoping our idea will work.

### **What would you like the ECA to improve upon next year?**

CQI was fantastic this year, however it can always be improved. The ECA can help us out quite a bit. This year, being a delegate was not that difficult. It was not a challenge being on the team because there were not that many people trying out. If the competition was promoted much more, there can be more choice of who to send to the competition as well as a better chance of winning. This is not the only benefit from a more aggressive promotional campaign, CQI can also benefit from being known by everyone. It can gain more respect in the eyes of other students and faculty as faculty. With more people aware of the competition and what it represents, the more apparent the benefits of such a competition are to our future.