Message From The Director

In 2016 DiscoverE continued to inspire and empower youth in science, technology, engineering, math, and computer science.

2016 was a tough year for our partners, friends and families in Fort McMurray and surrounding areas. May 2016 saw Northern Alberta, specifically Fort McMurray and surrounding areas, hit by major fires. More than 80,000 residents had to evacuate during this period. The University of Alberta took in many of these families, and DiscoverE offered free programming events to explore engineering and science in our EnggZone and learn how to code apps and videogames in our CodeZone. These events were our way of giving back and letting evacuees have some time to regroup and have fun.

We had to cancel many of our workshops and camps planned for the area. To compensate we offered more relaxed bursaries to displaced families. This way they could come to camp in Edmonton if they were unable to return home. In 2017 we plan to work closely with the communities, where we had to cancel programming, to be able to house and offer our programs to these residents again.

While this report represents the highlights from the year, we believe that the full impact of DiscoverE is impossible to be summed up in facts and numbers. Rather it is seen in the classroom during a workshop, the excited voices of our campers sharing their day with their guardians, or the pride shown when they complete a project in our clubs.

DiscoverE would like to thank our supporters and extraordinary staff for their assistance. Your continued support allows us to do what we do best: make STEM fun! We look forward to continuing to break down barriers, expand our outreach, while maintaining our award winning programming.

Ilana Crawford
Outreach Coordinator of DiscoverE

Objectives

- Make STEM fun, interesting, and relevant to students through classroom workshops, summer camps and clubs
- Inform students about post-secondary education and careers in STEM based fields and encourage them in these
- Provide positive role models in engineering and science who inspire and educate students promote a positive image of engineering and science professions
- Ensure accessible programing for as wide an audience as possible by removing all barriers to participation whether related to financial circumstances, geographic location or disability
- Encourage women and other under-represented groups to pursue engineering by providing targeted opportunities for skill development, mentorship and confidence building.

Mission

To have children and youth recognize the value and importance of engineering, science and technology in today’s world and consider the pursuit of related fields a fun, interesting and rewarding option for their future.
Acknowledgements

Faculty Of Engineering And The University Of Alberta

We would like to extend a special thank you to all of our friends in the Faculty of Engineering Dean’s Office, Student Services, CO-OP, Career Center, EnggIT, Facilities, Marketing, Advancement, Human Resources, and Financial Services. We would also like to thank Parking Services, Room and Lab Bookings, IST, Central Advancement, the Faculty of Education, and everyone who makes what we do possible. Thank you from the bottom of our hearts.

Community Partners

Amy Johnson
Ann McLean
Christine Gullion
Danielle Leckie
Donna White
James Randall
Jason Jacobson
Jeff Seabrook
Jessica Walsh
Jodi Campbell
Jordan Anderson
Julia Soucie
Kate McConnell
Kelaine Brand
Kelly Smith
Leah Lizotte
Loretta Marshall
Marie Howse
Marie Jackson
Michelle Richardson
Pauline Mawer
Phil Gorman
Robin Hengel
Saddle Lake Boys & Girls Club
Shelley Stevenson
Sheri Cumby
Tegan Vacheresse
Velma Memnook
Wade Johnson
Walter Rogers

Mentors

Adrienne Wright
Alaina Terpstra
Ashley Dalrymple
Ashly Boivin
Clara Fallone
Craig Heinke
Eman Aldabbas
Ernest Kipling
Heather Capel
Janine Woo
Katherine Evans
Kim Nguyen
Nick Klose
Nick Kwan-Wong
Nina Plummer
Patrick Crosman
Rachel Brown
Robert Cassidy
Sara Kاردash
Sarah Beck
Sharon Morsink
10 Years Of Growth

2016
- 23,390 Youth reached
- 48% Female enrolment
- 53 Instructors

2006
- 10,180 Youth reached
- 33% Female enrolment
- 14 Instructors
"I never really thought about how nanotechnology related to nature. Also, it was fun trying to make a creature that had the powerful toes of a gecko. I like DiscoverE presentations and projects. They make school so interesting!"

- Grade 8 student

15 all girls clubs & camps
78 Communities visited
25.5 Indigenous Camps

0 All girls clubs & camps
6 Communities visited
3 Indigenous Camps
Geographic Reach

12,137 youth in remote communities

78 unique communities reached

62 remote communities
Summer Camps

At DiscoverE’s award-winning camps, participants complete exciting projects and challenges across engineering, science, technology, and math. Our camp curriculum is designed to be a grade or two ahead of where the students are, so they will enter their next year at school with confidence and excitement to apply their new knowledge and skills.

We ran our camps through July and August for a total of 8 weeks, delivering a total of 127 camps to 2486 youth. Our camps really benefit from mentor participation. Mentors from many different STEM fields are invited to present to our campers throughout the summer. Not only does this allow students to see where STEM can take them in the future, but it also fosters positive interactions with industry.

Become a mentor today!
discovere.ualberta.ca/en/mentoring

Classroom Workshops

DiscoverE delivers engineering and science classroom workshops in a fun and interactive way! Each of our workshops is designed to enhance Alberta Learning Curriculum topics through exciting demonstrations, interactive experiments, and a fun hands-on activity. In 2016, DiscoverE delivered 990 workshops and engaged over 19852 youth through them. Workshops are presented by a pair of enthusiastic, highly-trained instructors who bring in all the materials and take care of the clean-up. Our instructors also act as role-models in higher education to the youth in workshops.
Camp Stats

97.5% fill rate in Edmonton
89.26% in total

2491 Total youth reached in camps

1132 girls in camps
15 all girls camps

43.68% female enrollment

Workshop Stats

990 workshops delivered compared to 861 in 2013

140 schools visited

19852 youth who attended workshops
Indigenous Youth Outreach

Alberta and the Northwest Territories are among the provinces with the highest rate of non-completion of high school. This number decreases even more in our Indigenous communities. DiscoverE is working one camp and workshop at a time to change this. Our programing aims to bridge the gap and make sure students get excited about STEM and stay excited. We work with communities to find relevant topics to their lives, this is where we see the real engagement with youth attending our workshops and camps.

DiscoverE programs increased the scientific literacy, critical thinking, creativity, curiosity, and confidence of 3920 FNMI (First Nation, Metis, and Inuit) students in 2016. Our mission is to show all children that science, technology, engineering and math are viable options for their future.

Compared to 3 Indigenous camps in 2006

3920 Indigenous students reached

21442.9 Hours of face to face time

* FNMI communities visited
“After giving our presentation to the entire student body during the school’s science fair, a student presented us with a painting and a pair of earrings, each embroidered with traditional first nations designs. The high school students had created them for us, sharing a part of their culture with us as a thank you for us sharing our knowledge with them.”
- Natalie Hervieux, Spring 2016 during a special event at Alexis First Nations
In 2016 DiscoverE delivered 18 unique events reaching 755 youth, 398 of which were girls. Our Special Events focus on diverse projects that have been specially developed or adapted so they can be taught in gymnasiums, classrooms, teepees, or even outside. They are designed to inspire and engage everyone from beginners to the most savvy science lover. We keep an open mind with all requests, making sure kids come first and we are able to find innovative ways to deliver high impact content. A few of the events we participated in were the Faculty of Engineering’s Eng Expo, WISEST conference, National Childs Day, Science Nights, and Tech Shows.

921
youth reached through special events
DiscoverE offers after school clubs throughout the city, and focuses on working with high-risk youth audiences. We also continued our Girls, Engineering and Mentorship (GEM) Club. This club provides young women with an opportunity to experience the excitement of engineering, science and technology in a fun, hands-on, inclusive environment. We were also excited to bring back our Girls Coding Club for its 6th term. Girls Coding Club is for girls in Grades 3-5 and Grades 6-9. The opportunity to connect with these youth on a weekly basis for two to three months allows our instructors to act as mentors by modeling positive behaviors such as excitement at new challenges and resiliency in the face of new problems.

“The best part of the club was to play the game I built,”
- 11-year-old Girls’ Coding Club fall graduate and an avid gamer.

“I tried the game and I’m happy she made it. The club gave a good base for her to know what’s behind computer games,”
- Parent of Club Attendee
### Financial Statement | October 1, 2015 - September 30 2016

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<tr>
<th>Revenue</th>
<th>Actual 2016</th>
<th>Budget 2017</th>
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<tr>
<td>Program Registrations</td>
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<td>Donations from Individuals</td>
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<td>University of Alberta</td>
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<td>Actua</td>
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<tr>
<td><strong>Total Revenue</strong></td>
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<td><strong>$1,214,000.00</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Expenses</th>
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<td>Advertising/Promotion</td>
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<td>Travel and Accomodations</td>
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<tr>
<td><strong>Total Expenses</strong></td>
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