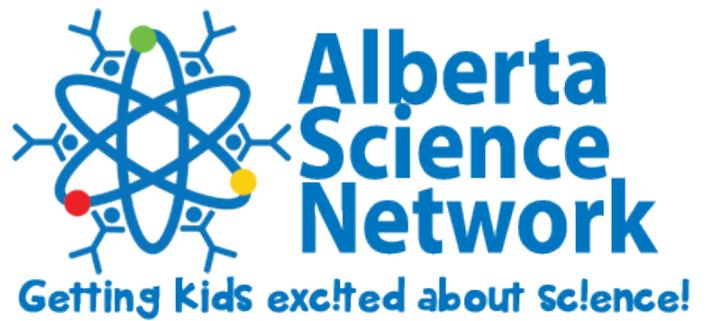


Report to the Community 2017



Highlights 2016-2017
Year ended June 30, 2017

*Reached 68,239
grade 1 to 12
students and their
teachers*

*1,144 Scientists
& Engineers-in-
the-Classroom
presentations to
29,865 students*

*21,720 students
awed by Chemistry
All Around You
presentations*

*All day Walk through
the Forest for 1,041
grade 6 students*

*1,710 grade 1
students were given
a tree and learned
how to care for it on
Arbor day*

*Delivered 41 science
PD workshops to 623
teacher attendees*

*8,440 students
used our science
equipment kits*

Alberta Science Network
AlbertaScienceNetwork.ca



Bringing science to life!

Alberta Science Network makes science fun for students and their teachers. Practicing scientists, engineers and other experts volunteer to deliver our signature Scientists & Engineers-in-the-Classroom program across the province and get rave reviews from teachers and students. We reached 29,865 students with face-to-face, hands-on science through 1,144 Alberta Education curriculum linked presentations.

Chemistry All Around You is a high excitement, large format presentation, where loud and thrilling chemical reactions are demonstrated, typically in the school gym. The setting allows greater attendance while our passionate volunteers create and maintain high interest that is not easily forgotten. CAAY reached an additional 21,720 students.

Teacher Science Workshops provide science curriculum linked teacher PD. We held 41 workshops for 623 attendees, and in Edmonton's second year of offering the program average attendance rose by 20%. New partnerships with Alberta Education Regional Consortia in Central and Southern Alberta expanded ASN's reach in rural communities.

Grande Prairie's Walk Through the Forest program runs in May. On three consecutive days, a total of 1,041 grade 6 students participated in day-long forestry education at a wilderness area. Arbor Day volunteers delivered 1,710 seedlings to grade 1 students, along with 30 minute presentations on planting, feeding and caring for the trees.

On behalf of the over 50,000 students and teachers that we reach annually, a huge thank you to all our volunteers, donors, partners and other stakeholders.

Provincial programs

SCIENTISTS & ENGINEERS-IN-THE-CLASSROOM

Scientists & Engineers-in-the-Classroom is managed by Program Co-ordinators based in Grande Prairie, Edmonton, Red Deer, Calgary, Lethbridge and our affiliate in Medicine Hat. Presentations are typically one hour, available at no cost to schools and subject only to volunteer availability. While most take place in urban centres we are recruiting volunteers in rural areas to present in their local schools.

Alberta Education's science curriculum contains five diverse curriculum topics in each of grades 1 to 9. They range from traditional disciplines such as electricity, chemistry and mechanics to environmental themes like wetlands, forests, and plants & animals, and topical issues like weather, forensics, and waste & recycling.

Given that most elementary grade teachers have no post secondary science experience, over 85% of our SEitC requests are for grades 2 to 6 (students aged 7 to 11). This age groups fits our preferred reach as we believe that engaging students at a young age is the best way to teach them that science is fun and easy to learn.

Many science outreach organizations focus on older students about to make decisions for College or University. While this inevitably impacts career choices many kids are left out because of biases created in lower grades. Alberta Science Network inspires kids with science in those important early years.

The program is closely monitored with teacher feedback. Over 80% of teachers responded online. Qualitative feedback is obtained through ten "statements" in respect of the presentations. Each statement has five options from "strongly agree" to "strongly disagree". In response to the statement "the presenter was effective and well prepared", 98% of teachers either strongly agreed (77%) or agreed (21%). To the statement "my students now have a better understanding of this science topic", 95% either strongly agreed (67%) or agreed (28%).

In response to the extremely forward looking statement "In future years my students are more likely to pursue science topics and potentially science careers as a result of this presentation", 97% of teachers either agreed (36%), strongly agreed (36%) or were neutral (25%). Clearly in the opinion of teachers, Scientists & Engineers-in-the-Classroom does indeed inspire the next generation!

TEACHER WORKSHOPS

Teacher Science Workshops was created in 1997 to provide curriculum linked science PD for teachers. Volunteer scientists and experienced educators explain the background science and give teachers classroom-ready experiments that they can easily use. The understanding and added assuredness teachers gain addresses ASN's goal that students are more inspired by science and have fun learning it.

Feedback results are positive. To the statement "the presenters were effective and well prepared", 97% of teachers either strongly agreed (77%) or agreed (20%). To "my level of understanding of the workshop's topic has increased", 93% either strongly agreed (68%) or agreed (25%). And to the statement "I will be more confident doing hands-on activities on this topic with my students", 93% either strongly agreed (63%) or agreed (29%).

Noteworthy is that 51% of respondents had already taught the workshop unit. Even experienced educators appreciate new knowledge, confidence and clarity to bring to their classrooms.

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ASN Regional Branches

- Calgary and Area
- Capital Region
- Peace Region
- Central Alberta
- Lethbridge Region

Affiliate Network

Praxis (Medicine Hat)
www.praxismh.ca

Regional programs

WALK THROUGH THE FOREST

With the tremendous support of the Grande Prairie Environmental Science Education Society and the Forest Resources Improvement Association of Alberta, ASN coordinates full day environmental sciences education events for grade 6 students on three consecutive days. Forest industry volunteers and Ministry of Environment & Sustainable Resource Development staff take the students through a series of interactive displays and guided forest tours at a local woodland recreation area.

ARBOR DAY

Every grade 1 student across the Province receives a tree seedling from the Ministry to take home and plant. In Grande Prairie we take the program a step further as over 100 volunteers individually sort the tree saplings and hand deliver them to students in Grande Prairie and surrounding area classrooms. Prior to giving the trees to the kids, the volunteers provide a 30-minute classroom presentation on the needs of trees, where to plant them, how to plant them and how to care for them.

CHEMISTRY ALL AROUND YOU

Originally based in Edmonton, we have now expanded CAAY to deliver presentations in Grande Prairie, Red Deer and Calgary. Our volunteer scientists engage the students with chemistry related demonstrations and experiments in an informative and safe environment. Although the presentations are delivered to 200 – 300 students at a time, the nature of the chemical reactions and student interaction with the scientist volunteers makes them extremely impactful.

SCIENCE RESOURCE KITS

The teaching of many science curriculum units can be enhanced with specialized equipment or supplies that cannot reasonably be expected to be available in schools for teachers. Our Edmonton office and our affiliate in Medicine Hat makes science resource kits available for teachers to sign out for a period of time to help with in-class instruction.

MORE PROGRAMS

Family science nights, Science Olympics, Rock 'N' Fossil Road Shows, Science Roadshows and Astronomy nights are just a few more of the events that ASN delivers in the communities that we and our affiliate serve.

"Lisa did a wonderful job of engaging students by showing them real world examples of why light and shadow is important and how we use light to see our world. She demonstrated important parts of the curriculum and allowed time for hands on activities and questions from the students. I was very impressed with her presentation and feel it really contributed to our learning".

Teacher, following grade 4 Light and Shadows presentation



"Having a scientific understanding of the world is fundamentally about how you judge which information to trust."
Atul Gawande, MD, MPH, surgeon, writer, and public health researcher



"Excellent. Bob was wonderful! He obviously had extensive knowledge in this subject area, which he enthusiastically shared with the kids. I was impressed with how he made it easy for them to understand, but did not "dumb it down" in any way. Several parents commented to me after how much their kids talked about it that night."

Teacher, following grade 5 Electricity and Magnetism presentation



Thank You!

Ongoing partnerships, grants and donations allow us to continue to offer our programs to students and their teachers at no cost to schools. We would like to recognize one partner in particular whose members comprise over 30% of our SEITC volunteers. The Association of Professional Engineers and Geoscientists of Alberta regulates the practice of engineering and geoscience in the Province. Access to APEGA member media at the Provincial and Branch level is a valuable resource in the recruitment of new volunteers and as we expand our classroom program into rural Alberta.

We thank all of our partners, sponsors and stakeholders for their tremendous support.



Alberta Economic Development and Trade
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To find out how you can be a supporter of ASN and its programs, or to receive a copy of ASN's financial statements, please contact Ed Kusmirski P.Eng., Executive Director at ekusmirski@albertasciencenetwork.ca.

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