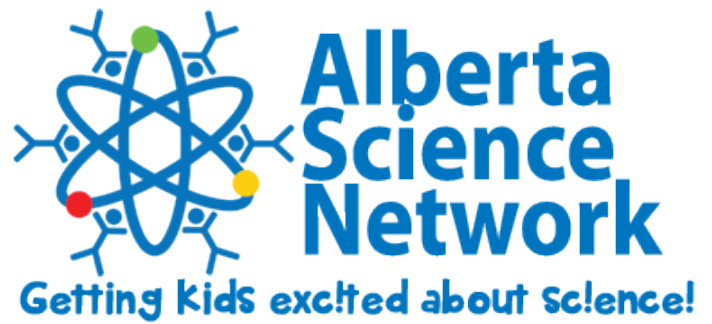


Report to the Community 2015



Highlights 2014-2015

*53,310 students,
teachers and general
public reached*

*1,101 Scientists
& Engineers-in-
the-Classroom
presentations to
30,475 students*

*4,597 students
experienced a
Chemistry All Around
You presentation*

*Walk through the
Forest for 745 students
over 3 days*

*1,716 students received
a presentation and a
tree on Arbor Day*

*32 teacher professional
development science
workshops to 755
attendees*

*Science resource kits
went out 354 times
and impacted 9,736
students*

Alberta Science Network
AlbertaScienceNetwork.ca



Another terrific year!

In our first full year as Alberta Science Network we reached over 53,000 students, teachers and the general public with hands-on science. Topping the list of programs was Scientists & Engineers-in-the-Classroom with 1,101 presentations to 30,475 students in six regions throughout the Province - the Capital Region, the Peace Region, Central Alberta, Calgary and Area and via our two affiliates, Medicine Hat and Lethbridge. Our Teacher Science Workshops program continued to grow with "Science 101" workshops held for the first time in Grande Prairie and Red Deer. Chemistry All Around You reached 4,597 students in the Edmonton area. The weather wasn't kind to Walk through the Forest in Grande Prairie however we still had 745 grade 6 students out for a full day of discovery. Arbor Day saw classroom presentations and tree seedling delivery to 1,716 grade 1 students in Grande Prairie.

We are also very pleased to report to you our stakeholders that the provincial reorganization that we completed in early 2014 has generated **significant operational and financial efficiencies**. We've not only been able to reach more students and teachers with SEitC but we've been able to increase our focus on volunteer recruitment, reduce our overall level of administration, and standardize our operational processes including our teacher feedback process. And teacher feedback continues to be tremendously positive!

On behalf of the students and teachers that we serve, thank you to all of our volunteers, donors, partners and other supporters.

Provincial programs!

SCIENTISTS & ENGINEERS-IN-THE-CLASSROOM

Scientists & Engineers-in-the-Classroom is now available in all six regions in which we and our affiliates operate. Practicing professionals volunteer their time to visit classrooms and deliver hands-on interactive presentations to grade 1 to 12 students. **Presentations are available at no cost to schools and subject only to volunteer availability.**

While our volunteers come from a wide variety of careers and are members of many professional associations, we would like to recognize the **Association of Professional Engineers & Geoscientists of Alberta (APEGA)** whose members comprise over 30% of our SEitC volunteer base. The Association regulates the practice of engineering and geoscience in Alberta and we are very proud to have so many APEGA members who give of their time to inspire kids with their passion for science.

The program is closely monitored with teacher feedback. In response to ten "statements" in respect of the presentations, teachers respond with five options from "strongly agree" to "strongly disagree". In response to the statement "the presenter was effective and well prepared", 99% of teachers strongly agreed (85%) or agreed (14%). To the statement "my students now have a better understanding of this science topic", 97% either strongly agreed (65%) or agreed (32%).

Over 85% of our classroom presentations are for students in grades 1 to 6 (ages 6 to 11) and yet 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", 71% of teachers either agreed (40%) or strongly agreed (31%). **Clearly in the opinion of teachers, Scientists & Engineers-in-the-Classroom does indeed inspire the next generation of scientists and engineers.**

TEACHER SCIENCE WORKSHOPS

Volunteer scientists and experienced educators co-lead 90 minute to 3 hour interactive workshops that provide teachers with accurate science and classroom ready demonstrations and experiments. Our goal is to provide teachers with clarity about the science and give them increased confidence in teaching it to their students – in the current and future years.

We held 32 workshops for 755 attendees and as with SEitC, the teacher feedback is excellent. Teachers responded with 68% strongly agreed and 24% agreed to the statement "the presenters were effective and well prepared". To the statement "my students will have a better understanding of the science topic as a result of this workshop" 52% strongly agreed and 32% agreed. And to the statement "I will be more confident doing hands-on science with my students as a result of this workshop", 51% strongly agreed and 30% agreed.

Most workshops cover one of the 45 grade 1 to 9 curriculum topics. "Science 101" is a multi-topic, multi-grade level workshop that was developed recently to allow us to take the program to teachers at their schools, at teacher conventions and at science conferences. And this October we will be launching an expanded program in the Capital region.

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

Affiliate Networks

Praxis (Medicine Hat) www.praxismh.ca
Southern Alberta Technology Council (SATC) www.satclethbridge.ca

Regional programs

WALK THROUGH THE FOREST

Every year with the tremendous support of the Grande Prairie Environmental Science Education Society and the Forester Resources Improvement Association of Alberta, ASN coordinates full day environmental sciences education events for grade 6 students on three consecutive days in May. 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

Each year 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 one step further as over 100 volunteers individually sort each tree and hand deliver it to each grade 1 student in their classroom. Prior to giving the trees to the kids, the volunteers provide a 30 minute classroom presentation to the students on the needs of trees, where to plant them, how to plant them and how to care for them.

CHEMISTRY ALL AROUND YOU

A very popular Edmonton based program that astounds students with gymnasium delivered, booming presentations. Our volunteers 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 in-class instruction.

MORE PROGRAMS

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

"As a minority in the Engineering field, being both Female and Metis, I feel I have a responsibility to let others see that perceived barriers can be broken. For several years, APEGA has known that Natives and Females are underrepresented in the engineering field. I've seen this to be true, and strongly believe that this will only change if Female and Native youth perceive that Engineering is a possible career option for them. ASN offered me the opportunity to reach out to youth and inspire a more diverse working environment for engineering in the future. ASN also allowed me to choose a topic that was relevant to both my work and my daughter's grade, so I could show her what her mom does at work."
Tammy Kehl P.Eng. ASN classroom volunteer Grande Prairie



"I really enjoyed the activities we did with the scientist because it felt like I was a scientist too!" Student after a classroom presentation



"I believe that it is essential that we spark the interest and curiosity of the next generation about science. Students who are inquisitive and eager to explore will become the scientists and engineers of the future."
Ken Kernaghan P.Eng. ASN classroom volunteer Calgary



Thank You!

Partnerships, government funding and donations are critical to ensuring that we can continue to offer programs and services to Alberta students and classrooms at no charge. The lack of financial barriers to our programs ensures that students across the Province benefit from hands-on, minds-on activities in science.

ASN recognizes the important contributions that our partners, donors and sponsors make to bringing science to life in Alberta classrooms and communities. We thank the following corporations, organizations and many individuals for their support!

 Alberta Government

Alberta Innovation and Advanced Education

Alberta Lotteries



The Association of Professional
Engineers and Geoscientists of Alberta



Edmonton
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To find out more about 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, Executive Director at ekusmirski@albertasciencenetwork.ca.

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