





# Annual Report 2005/2006



## 2005 – 2006 Highlights

- We brought science, math and technology to 618,350 Albertans in 171 communities.
- Our Crate Program inspired 85,154 students in 3,554 classrooms from Fort Chipewyan to Fort Macleod.
- Our online learning environment, Wonderville.ca, experienced significant growth with 7,239,609 hits and 646,914 sessions.
- We reached 9,091 Albertans with our 12th Festival of Science in Grande Prairie and began planning our 13th festival in Edson/Hinton to be held in October 2006.
- We continued touring our alternative energy exhibition and modular exhibits reaching 75,698 Albertans.
- Our sponsors provided \$1,440,704 in project grants and an estimated \$211,275 of donations in kind; \$1,331,820 was spent on projects in the year and every dollar of the remainder will be spent to complete the sponsored projects.
- Our science and math stories, promotions and media coverage reached 786,517 Albertans.
- Our 2,103 volunteers enthusiastically gave 6,532 hours of their valuable time.
- We worked with 3,428 partners and collaborators to develop and deliver our programs.
- At the request of teachers, we developed and distributed Let's Do Science, an implementation guide for Alberta's elementary science teachers. This resource provides many suggestions on how to make science engaging and relevant.
- We delivered a media-rich program to celebrate 100 years of innovation in science and technology during the Alberta centennial.
- Funding was secured and Phase 1 of the Trajectory Project was completed. This project will act as a forum to envision what stellar science learning and promotion programs should be. The culmination of the project will be a gathering of international and local thought leaders in Banff.
- The Board of Directors and Staff embarked on an inclusive and robust renewal of our strategic plan.



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# A Message from the Board Chair and Chief Executive Officer

Science Alberta Foundation had another incredible year! The number of people served increased exponentially. We further decreased our cost per user ratio while increasing the quality, creativity and effectiveness of our programs. With a reach of 618,350, Science Alberta Foundation is one of the largest science learning and promotion organizations in Alberta.

We were created 15 years ago to encourage youth to pursue careers in science, math and technology. The severe shortage of workers that Alberta has experienced in the past year clearly demonstrates that what was a “should do” 15 years ago is a “must do” now, as our future knowledge workers are sitting in Alberta classrooms today.

This province must “home grow” our talent as we compete world-wide for highly qualified people (HQPs) in the technology intensive trades, science and math centric professions and research laboratories. We need today’s youth to aspire to work in these fields, to admire the people doing this work, and aspire to be like them.

We need a population that supports investment in research and innovation and is able to make informed decisions – this is critical to ensuring that Alberta remains a strong and prosperous province.

Science Alberta Foundation is in a healthy financial position. This is mandatory in the rapidly changing and unpredictable environment that not-for-profits operate in. Our Board of Directors is serious about ensuring that we are sustainable and will deliver on our mission and commitments. We do however urgently require an exponential increase in revenue to effect the changes necessary.

We are proud of our accomplishments but imagine what Science Alberta Foundation could do with a significant increase in resources. We invite you to join us in making a difference.



Ron Kuchinka  
Board Chair



Arlene Ponting  
Chief Executive Officer

# A Critical Investment: The Workforce of Tomorrow

Science Alberta Foundation's mission is to inspire communities, students, teachers, and families by creating and providing programs and services that promote the advancement, learning and valuing of science and technology in everyday life. For over 15 years, we have strived to make science, math and technology enjoyable and relevant.

With the growing complexity of science-related issues and their increasing environmental and social impacts, familiarity, ease and comfort with science and technology is crucial. Science literacy develops skills to support scientific inquiry – identifying problems, forming hypotheses, seeking evidence and reaching informed conclusions.

But science literacy is not enough! We live in a global economy, driven by science and technology. Alberta's continued prosperity depends on a well-trained workforce that is able to compete globally in a knowledge-based economy. With a projected shortfall of skilled science and technology workers, engaging students in science and technology is vital. We must foster a greater enthusiasm in these areas and expose students to the myriad of careers as we develop skilled workers for tomorrow. Alberta's economic future depends on our leaders of tomorrow! Thanks to our sponsors, volunteers and collaborators, Science Alberta Foundation is working hard to make Alberta's future bright.

Here's how:

## Our Amazing Science Resources

Our outstanding programs, outlined on the following pages, are designed to get children and youth excited about science, math and technology and to introduce them to the countless career opportunities in these fields. We show them how science, math and technology apply to their daily lives through these unique resources. With your support we are investing in our future.

**“I think it's a good way to get students involved and get them thinking on their own. I wouldn't change anything.”**

Student, Lethbridge













## Wonderville.ca

The future is technology – Wonderville.ca is a futuristic learning medium that appeals to today’s computer-savvy learners. Wonderville.ca has experienced a year of explosive growth – with over two-and-a-half times the hits and sessions over the prior year! Like all booming cities, infrastructure development is critical and we have been tending to the ‘behind the scenes’ needs of our virtual town.

We have also enhanced the teachers’ site on Wonderville.ca and have included teacher-developed lesson plans that explain how to integrate technology into meaningful learning for their students. The teachers’ forum has also been expanded to allow teachers to share their approaches and has been enhanced further with new information architecture.

In addition to the new infrastructure, three new interactive activities were added:

- The Great Pipeline Plan, made possible through the support of TransCanada Pipelines
- Energy Meter Madness, made possible through the support of Bell Canada
- Save the World, developed in conjunction with the Information Assurance: Electrical Principles crate with support of The Cadmus Foundation and the Cadmus Fund at The Calgary Foundation

Science Works Videos are a popular Wonderville.ca destination – they help children and youth see amazing science careers. New videos include:

- Network Designer, made possible through the support of Bell Canada
- Power Generation, made possible through the support of EPCOR
- Environmental Advisor, made possible through the support of TransCanada Pipelines
- Waste Water, made possible through the support of Alberta Environment
- Music Conductor, made possible through the support of TransCanada Pipelines

## Our Stellar, One of a Kind Crate Program:

For twelve years, Science Alberta Foundation has been providing stellar hands-on science and math activities to support teaching and learning in schools. Each crate in this popular program is a treasure trove of up to seven activities that use a different storyline or theme. Crates show children the countless science careers available by showcasing them in a tangible way.



This year, the development team focused on new crates for junior high and high school levels as well as extending our crate selection in elementary levels and camps. We now have a total of 330 crate copies – up from 64 only 4 years ago!

## New crate titles include:

- Collision Scene Investigation, made possible through the support of The Actuarial Foundation of Canada
- E-Factor, made possible through the support of EPCOR Utilities Inc.
- The Extreme Alberta Challenge, made possible through the support of Fred & Sandra Hemphill
- Information Assurance: Electrical Principles, made possible through the support of The Cadmus Foundation and the Cadmus Fund at The Calgary Foundation
- Making Waves: Hearing and Sound, made possible through the support of Alberta Innovation & Science and The Allard Foundation
- Team Aquatica: Fresh & Saltwater Systems, made possible through the support of ConocoPhillips Canada
- Camp ISS: Life on the International Space Station, made possible through the support of NSERC PromoScience Program and Merck Frosst Canada Ltd.

We depend on the hundreds of our passionate partners and collaborators to help develop dynamic crates. As a result of our strong relationships with our partners, we have been able to add the following:

- Information Assurance: Electrical Principles is our first fully-bilingual crate! Copies of Team Aquatica: Fresh & Saltwater Systems and The Extreme Alberta Challenge have also been produced in French.
- Both Making Waves: Hearing and Sound and Information Assurance: Electrical Principles include digital activities available on Wonderville.ca.

**This was a great way to get the kids involved with "real-life" hands on activities! The students were engaged and welcomed the break from "regular" class activities. I would recommend this crate to anyone and plan on using it again next year! Thanks!**

Teacher, Stony Plain Central School, Stony Plain



# Professional Development for Teachers

## School Science Leaders

With the support of Syncrude Canada Ltd, Science Alberta Foundation has launched an exemplar program to increase the availability of and access to award-winning, science-learning programming that will benefit children and youth in Fort McMurray and Fort McKay. One teacher from each local school serves as the science leader and facilitates best practices in science instruction. These teachers organize and coordinate bookings and rotations in their schools and mentor other staff members. As an incentive for participating in the program, these ‘science leaders’ attend special workshops and have opportunities to interact with teachers from other schools. These workshops focus on professional learning and examine strategies for instruction and student assessment that incorporate the use of our exemplar Crate Program and Wonderville.ca.

## Let’s Do Science

Let’s Do Science is an implementation guide for Alberta’s elementary science teachers and made possible with funding from ExxonMobil, Nickle Family Foundation and Brad and Tanya Zumwalt. Let’s Do Science provides new ideas for delivering science curriculum in engaging and relevant ways. By developing skills and understanding in teachers, we are able to impact countless students.

## Exhibits

### Plugging In

With the support of Enbridge and Suncor Energy Foundation, Science Alberta Foundation developed Plugging In: Explore the Potential of Alternative Energy, a travelling exhibition and three modular exhibits that examine alternative energy sources. In only two years, Plugging In visited 54 venues in 31 communities and reached over 104,000 participants, exceeding our original expectation of reaching 60,000 Albertans over three years!

## Grande Prairie Regional Festival of Science

With the continued support of Suncor Energy Foundation and 12 other local sponsors, the Grande Prairie Regional Festival of Science, the twelfth festival for Science Alberta Foundation, was a huge success. Held October 13 - 15, 2005 to correspond with Science and Technology Week, the festival featured tours of local companies, classroom presentations, and theatre performances as well as events in the community. Events included guest presenters (Dr. Roberta Bondar, Ben Gadd, and Dr. Margaret-Ann Armour), Science Alberta's Carniville of Wonders and Plugging In exhibitions at the local mall, Science at the Movies and a family fun science day with demonstrations of science at the Grande Prairie Inn by many local businesses.

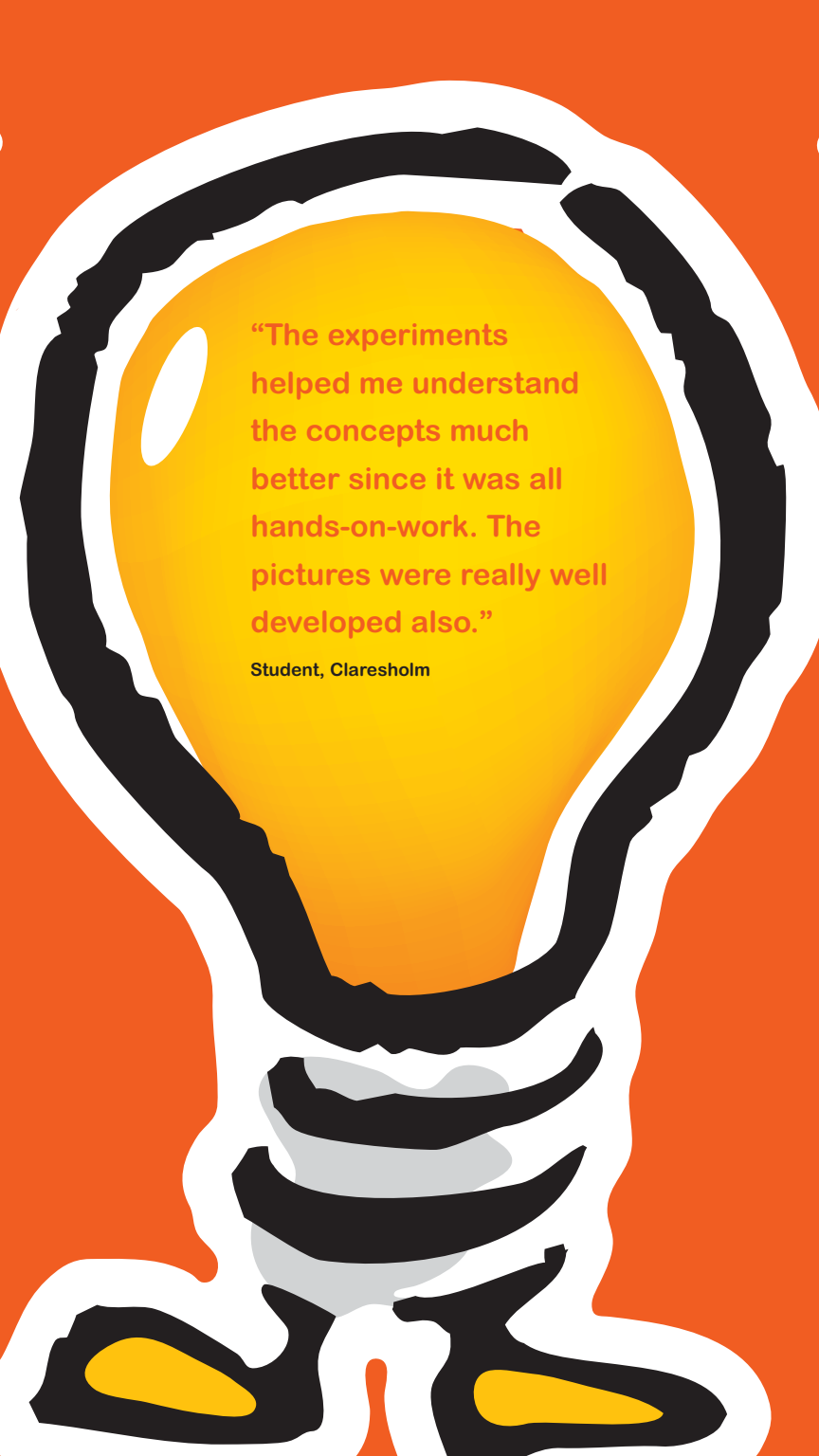
## Innovation 2005

INNOVATION 2005 was a multi-faceted program recognizing 100 years of Alberta-based scientific innovations that changed lives and made a difference in Alberta and around the world. Through a media campaign (television, radio, and newspaper), coupled with a website and a school program, Alberta innovators were featured to share the message that innovation is key to building a strong province and necessary for future prosperity. Topics showcased a range of careers: engineering, forestry, agriculture, information technology, and medicine.

**“What a great program! The relevance to our lives and the ability to learn about life 'hands-on' is what this program is all about. Thank you for the opportunity to incorporate this into our science program.”**

**Teacher, Tehr School of Learning, Linden**





“The experiments helped me understand the concepts much better since it was all hands-on-work. The pictures were really well developed also.”

Student, Claresholm

“FANTASTIC - very real life related activities that directly correspond with the curriculum. Students were engaged and inquisitive.

**THANK YOU!!!!”**

Teacher, Nickle Junior High School, Calgary

“This is an excellent program! My students learned so much from all the hands-on experience. The crate really met the needs of the curriculum! Thank you to everyone involved in producing this crate!”

Teacher, Edmonton Islamic School, Edmonton

“I love these crates! They are very helpful to small schools with no lab or supplies. They have been **INVALUABLE**. Thanks!”

Teacher, Koinonia Christian School, Red Deer

"Excellent resource. Really motivates students to learn and makes learning fun and interesting. Students really enjoy participating in hands-on activities. You've done excellent work putting this resource together! I know this has really helped my students understand these concepts. Thanks!"

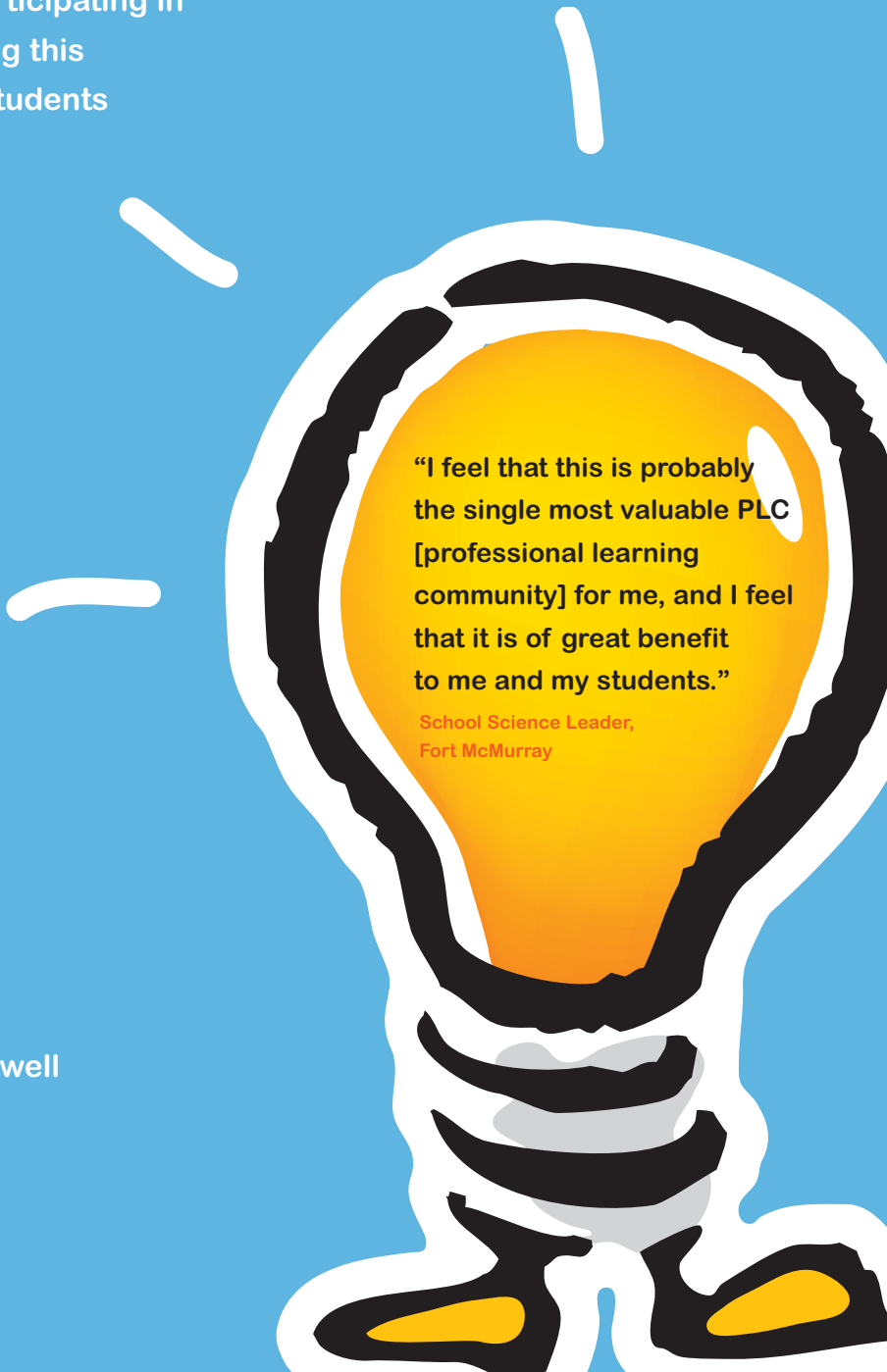
Teacher, Madeleine D'Houet  
Bilingual School, Calgary

"I really enjoyed the Catalyst for the Future materials and implemented my group work plan before starting with the crate. By discussing group work and assigning jobs, the students became responsible to one another, and they worked harder for each other as well as themselves.... Keep up the excellent work! Classrooms across Alberta are better because of your efforts!"

Teacher, Father Beauregard Educational Community  
Centre, Fort McMurray

"The screens and action are very engaging as well as informative to students...Glad someone is putting out quality science websites."

Campus Technology Coordinator, North Bridge  
Elementary, Weslaco, Texas



"I feel that this is probably the single most valuable PLC [professional learning community] for me, and I feel that it is of great benefit to me and my students."

School Science Leader,  
Fort McMurray



# Auditors' Report on Summarized Financial Statements

To the Directors of  
Science Alberta Foundation

The accompanying summarized statements of financial position, operations and net assets and changes in cash resources are derived from the complete financial statements of Science Alberta Foundation as at March 31, 2006 and for the year then ended on which we expressed an opinion without reservation in our report dated May 12, 2006. The fair summarization of the complete financial statements is the responsibility of management. Our responsibility, in accordance with the applicable Assurance Guideline of the Canadian Institute of Chartered Accountants, is to report on the summarized financial statements.

In our opinion, the accompanying financial statements fairly summarize, in all material respects, the related complete financial statements in accordance with the criteria described in the Guideline referred to above.

These summarized financial statements do not contain all the disclosures required by Canadian generally accepted accounting principles. Readers are cautioned that these statements may not be appropriate for their purposes. For more information on the Foundation's financial position, results of operation and cash flows, reference should be made to the related complete financial statements.

Calgary, Canada  
May 12, 2006

  
MACKAY LLP  
Chartered Accountants

## SUMMARIZED STATEMENT OF FINANCIAL POSITION AS AT MARCH 31, 2006 & 2005

	2006	2005
<b>ASSETS</b>		
Cash & Term Deposits	\$ 1,596,897	\$ 1,364,847
Other Current Assets	268,727	290,391
Property & Equipment	20,388	33,112
<b>Total Assets</b>	<u>\$ 1,886,012</u>	<u>\$ 1,688,350</u>
 <b>LIABILITIES &amp; NET ASSETS</b>		
Accounts Payable & Accrued Liabilities	\$ 218,938	\$ 229,469
Deferred Contributions	825,462	716,578
<b>Total Liabilities</b>	<u>\$ 1,044,400</u>	<u>\$ 946,047</u>
 <b>NET ASSETS</b>		
Invested in property and equipment	20,388	33,112
Restricted	550,000	350,000
Unrestricted	271,224	359,191
<b>Total Equity</b>	<u>841,612</u>	<u>742,303</u>
<b>Total Liabilities &amp; Equity</b>	<u>\$ 1,886,012</u>	<u>\$ 1,688,350</u>

## SUMMARIZED STATEMENT OF OPERATIONS AND NET ASSETS YEAR END MARCH 31, 2006 & 2005

REVENUE	2006	2005
Alberta Science & Innovations Grant	\$ 1,200,000	\$ 1,200,000
Grants Expended on Projects	1,331,820	1,006,218
Other Income	93,658	78,247
Total Revenue	<u>2,625,478</u>	<u>2,284,465</u>
<b>EXPENDITURES</b>		
Science Literacy & Learning	949,799	931,387
Science Awareness & Communications	995,850	726,151
Partnerships, Relationships & Collaborations	48,317	44,589
Resource Development	157,998	159,194
Administration	178,909	183,693
Infrastructure	106,506	107,719
Governance & Audit	69,694	49,343
Continuous Learning & Improvement	19,096	15,574
	<u>2,526,169</u>	<u>2,217,650</u>
Excess Revenue over Expenditures	99,309	66,815
Net Assets, Beginning of Year	742,303	675,488
Net Assets, End of Year	<u>\$ 841,612</u>	<u>\$ 742,303</u>

## STATEMENT OF CHANGES IN CASH RESOURCES YEAR ENDED MARCH 31, 2006 & 2005

	2006	2005
Cash provided by operating activities	\$ 243,938	\$ 127,233
Cash used to purchase property & equipment	(11,888)	(28,600)
Net Increase in Cash during the year	<u>232,050</u>	<u>98,633</u>
Cash & term Deposits beginning of year	1,364,847	1,266,214
Cash & term Deposits end of year	<u>\$ 1,596,897</u>	<u>\$ 1,364,847</u>



## Board of Directors

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