



# Annual Report

2010-2011



## OUR MANDATE

WISE Kid-Netic Energy works to ignite an interest and life-long passion of science and engineering in all Manitoba youth.

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Découvrir pour demain.

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## A MESSAGE FROM COLLEEN FLATHER THE PROGRAM MANAGER

WOW! What an exciting year! Each year I marvel at the growth and expansion of WISE Kid-Netic Energy; we keep offering more and the teachers, students, campers and club members keep coming! This tells me that WISE Kid-Netic Energy is wanted, is needed and is valued in Manitoba.

Let's start at the beginning, shall we? To kick off our year we began by offering nine new workshops! Workshops got off to a great start in the fall with 10 new staff members, eager to deliver our 19 curriculum-based, hands-on workshops. Fall also includes the launch of our clubs, Kid-Netic Energy Girls and Kid-Netic Energy Saturdays; each celebrated their own successes this year.

In February we officially launched our new logo and combined name: WISE Kid-Netic Energy...no more confusion about whether a program falls under WISE as outreach or Kid-Netic Energy as a camp – it's all one big family and we're thrilled with the result!

Workshops ended in June after an exhausting year – we broke our record for most workshops delivered in one year! Thanks so much to our Program Coordinator, Ilene Blayden and the students who helped her keep up – we couldn't have done it without you!

After all this – finally, camp starts! Our last two months of our fiscal/reporting year are our busiest! With camps in 22 locations and a 97% fill rate you can imagine our joy at the overwhelming

success. What a great summer! New locations included Brochet (Barren Land First Nation), Garden Hill First Nation, Wasagamack First Nation and Helping Hands Immigrant Resource Centre. A big welcome to our new partner communities!

## OUR VISION

We envision the youth of Manitoba inspired and empowered by the possibilities of science, engineering and technology. We envision a Manitoba where all youth, regardless of background, ability or socio-economic status are enriched in the science, math and technology education. The young people WISE Kid-Netic Energy reaches today will become Manitoba's workforce and leaders of tomorrow; these youth will be empowered by their knowledge and appreciation for science, engineering and technology.



WISE is a very child friendly program that keeps the students engaged.

**Meaghan Turpin**, Grade 1 teacher at Jack River School



# WORKSHOPS

Showcasing a variety of science and engineering topics, our workshops are highly interactive, and bring technology and activities to classrooms not always available.

## ABOUT WORKSHOPS

Of all of the successes of 2010-2011, our biggest success was in our workshops. We began the year with offering six new workshops: Science of Music (grade 4), Mythbusters (grade 4-6), Human Computer Interaction (grade 5-6) and Stars and Constellations (grade 6). To offer our newly expanded workshop menu and meet our goal of delivering 1000 workshops, we expanded the WISE Kid-Netic workshop instructor team from 12 to 20!

By January 1st, 2011 we had delivered 450 workshops. By the end of the year, August 31st, 2011 we had delivered a staggering 1291 workshops! Our biggest ever total for workshop delivery! We are ecstatic to report such a success and grateful, of course, to the hundreds of

Manitoba teachers who continue to invite us into their classrooms each year. We are honoured to be part of the education and development of Manitoba's youth.

### FUN FACTS

#### ABOUT WORKSHOPS

- Total audience of 27, 285 from nursery school to grade 12
- 1,291 workshops delivered
- 40 communities, 9 First Nations in 36 school divisions
- Over 50% delivered outside of Winnipeg



Such a fun time!  
The students really  
enjoyed themselves

**Julie MacKenzie**, Grade 5 & 6 teacher at Kleefeld School

## OUR WORKSHOPS

Chemistry/Physics  
**Roadshow**

Ecology  
**Living Tree**

Zoology  
**Baby Animals**

Senses  
**The Senses Game**

Health  
**Keeping The Bugs Away**

Electricity  
**Squishy Circuits**

Physics/Engineering  
**Build-A-Car**

Structures/Engineering  
**Bridges / Straw Towers**

Sound  
**Science of Music**

Chemistry/Physics  
**Mythbusters**

Geology  
**Rocks and Minerals**

Physics  
**Simple Machines**

Biology  
**Under The Sea**

Weather  
**Extreme Weather**

Health  
**What's In My Food?**

Computer Science  
**Human - Computer  
Interaction**

Physics/Engineering  
**Robotics**

Astronomy  
**Stars and Constellations**

Electricity  
**Tesla Coil**

Flight  
**Forces of Flight**

Matter / Forces  
**A Matter of Forces**

Electricity  
**Optics**

Biology  
**Open Heart Surgery**

Biology  
**DNA Detection**

Water  
**Water Quality**

Intro to University  
**University Talk**

Neuroscience  
**Left and Right Brain**

Excellent presentation!  
Students loved it.  
They were motivated.

**Rosalie Muswagon**, Grade 3 teacher at Helen Betty Osborne



## CAMPS

Camp programming is fun, interactive, hands-on, indoors and outdoors and incorporates everything from large muscle group physical activities, to design build and creative activities.





## ABOUT OUR CAMPS

WISE Kid-Netic Energy strives to provide accessible programming to all Manitoba youth, especially those in under-represented populations in science and engineering. Of particular interest in Manitoba is reaching Aboriginal youth and youth marginalized by poverty. Another goal of WISE Kid-Netic Energy is to provide workshop and camps where no other programming exists for science

and engineering enrichment. The wide diversity of our camp locations reflects our commitment to reaching these goals. Each day of camp explores a different theme of science and engineering. This year's camp theme days were: How It's Made, Famous Scientists, Forensic Science, Marine Biology and Natural Disasters.

I learned that science is really not that boring. There were a lot of epic things to do at this camp.

**Simonhouse Camper**, 14 year old boy

## INNER CITY CAMPS

Through a grant from the Winnipeg Foundation and the support of Actua we were able to provide five weeks of camp in Winnipeg's inner city. Camp locations were: Helping Hands Immigrant Resource Centre (new partner), Boys & Girls Club of Winnipeg – 3 locations (Sierra Leone Refugee Resettlement Program (new location), Sister MacNamara & Norquay clubs and Victor Mager Club (new location)). Our fifth location was Rossbrook House Youth Drop-in Centre. These camp locations were extremely rewarding for the camp instructors. Each camp location

expected 20 youth per week, in all cases attendance was good, but at Rossbrook House, attendance was at capacity, at Helping Hands attendance peaked at 63 campers one day! Word spread in the area about WISE Kid-Netic Energy and campers literally poured into the camp held at Knox United Church on Edmonton Street. Helping Hands services new immigrants to Canada, the majority of campers were youth from Africa with little to no English. Despite language barriers the campers fully enjoyed camp and were helped along by volunteer translators.





## FIRST NATION CAMPS

Beginning in 2007, WISE Kid-Netic Energy has provided camps to First Nation communities as a way to reach out to Manitoba's Aboriginal youth and inspire a love of science, engineering and learning as a whole. Since our first Aboriginal camp at Peguis First Nation in 2007 we have expanded to eight First Nation locations in 2011 including: Brochet (Barren Land First Nation) <sup>NEW</sup>, Norway House Cree Nation, Cross Lake First Nation, Wanipigow (Hollow Water First Nation), Wasagamack First Nation <sup>NEW</sup>, Garden Hill First Nation <sup>NEW</sup>, Peguis First Nation and Skownan First Nation. With two weeks of camp offered in

Peguis First Nation and Cross Lake First Nation there was a total of 9 camp weeks offered in Manitoba's First Nation communities, for a total possible 180 campers. We are thrilled to say that of the 180 possible campers, WISE Kid-Netic Energy welcomed 182 campers! To meet the needs of Norway House Cree Nation, WISE Kid-Netic Energy provided a drop-in style camp during the community's York Boat and Treaty Days. The event attracted over 500 visits from local youth, during a five day period. First Nation camps are made possible by Engineers Canada, Manitoba Hydro and support from Actua.



## RURAL AND REMOTE LOCATIONS

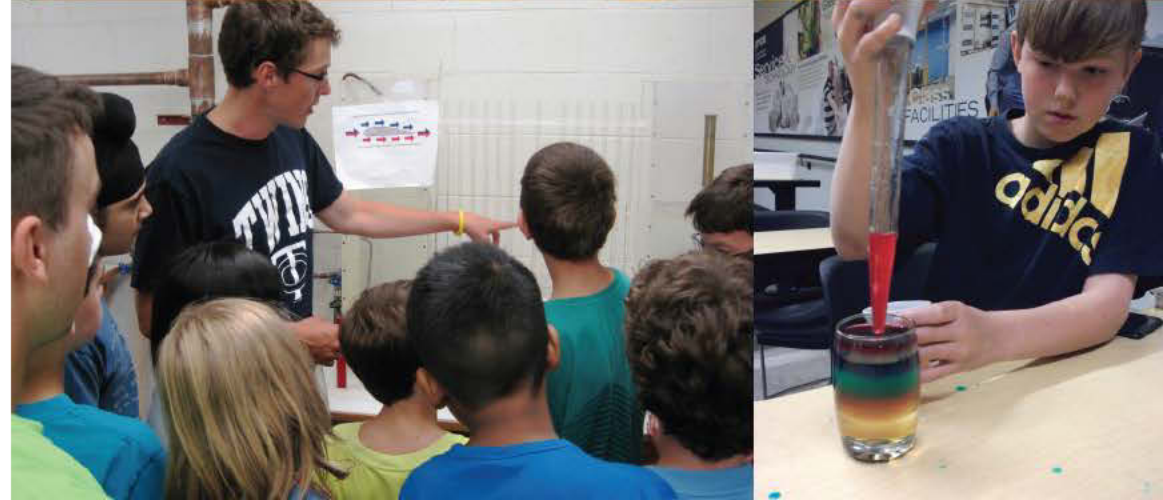
Additional locations held outside Winnipeg were: Carman, Churchill, Flin Flon, Steinbach (2 weeks), Thompson (2 weeks) and Virden. Many of our rural and remote locations have partnered with WISE Kid-Netic Energy for many years. With consistent science and engineering outreach in many Manitoba communities it is possible to effect real change in the attitudes and perceptions of Manitoba youth. Camps were preceded by visits to each community

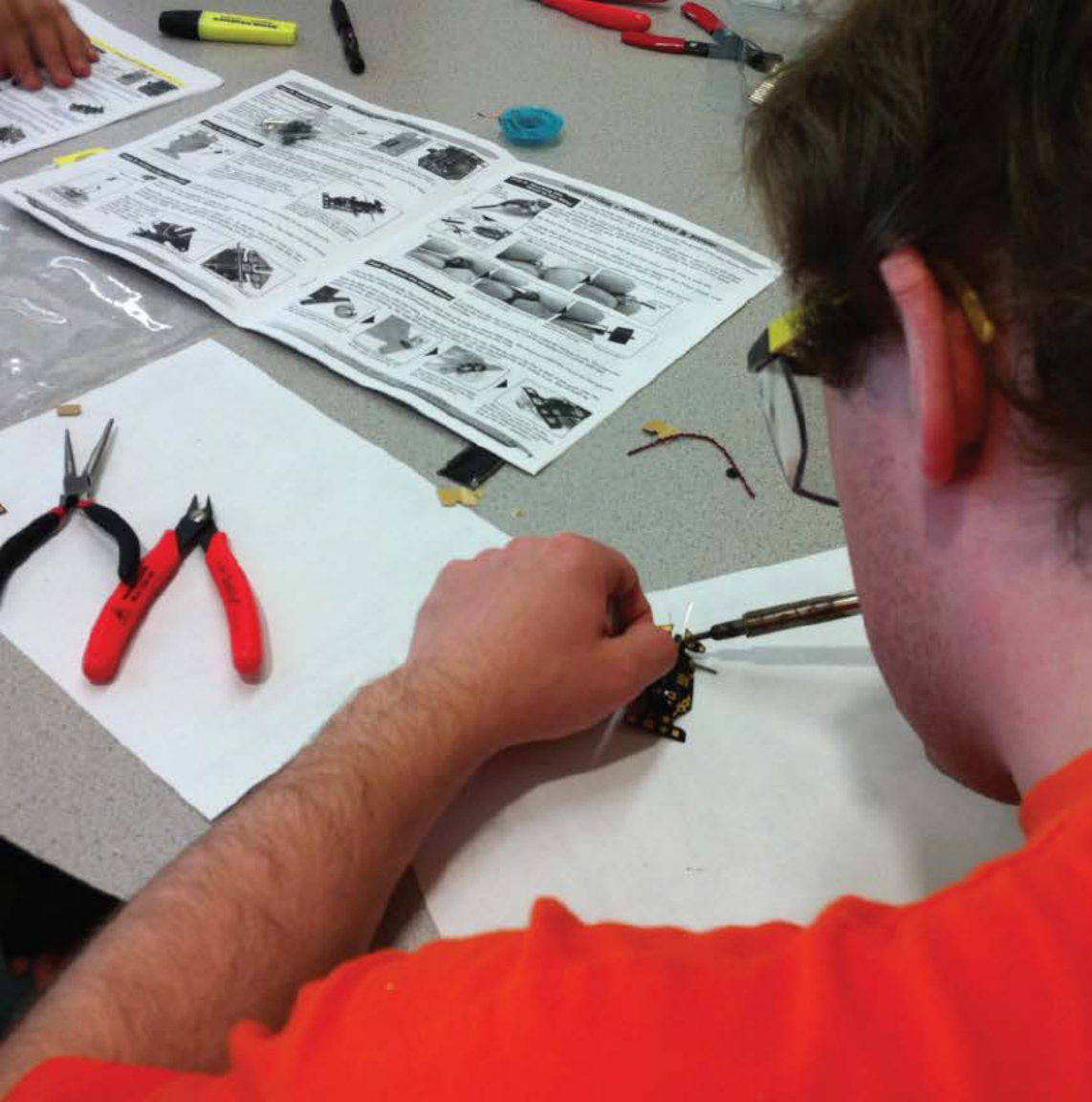
to deliver hundreds of workshops province-wide. Camps were successful with 175 campers out of 182 spots or 96% participation! Average female participation in rural and remote camps was 41%; another great success for WISE Kid-Netic Energy. In every camp location we were able to offer subsidized camp fees! A big thank you to Monsanto Canada (Carman, Steinbach & Virden), Vale (Thompson), the Flin Flon School Division (Flin Flon).

## MINI U

WISE Kid-Netic Energy celebrated its third season as a specialty camp for mini U. As in other years, campers attended WISE Kid-Netic Energy for a half of each day and did recreation and fitness activities for the other half of the day. New to WISE Kid-Netic Energy's mini U offering were

lab tours. Every camp group participated in a lab tour in the Faculty of Engineering, visiting either the CAD Design Lab or the Hydraulics Lab. What a great way for campers to see engineering and engineering education in action!





## SPACE ADVENTURE CAMP

For the third consecutive year, WISE Kid-Netic Energy has provided the promotional and administrative support the Manitoba Space Adventure Camp. This year 19 high school students participated in the enrichment camp exploring various aerospace, flight, physics and space topics. Students participated in hands-on activities such as rocket builds, went on extensive lab tours in the Faculty of Engineering and drove a race car – a simulator of course! The culmination of the camp was a one hour conversation with CSA & NASA astronaut Chris Hadfield!





## CLUBS

Each week exciting hands on activities, tours, field trips and mentor events are hosted. Club members have the opportunity to interact with professionals, see the “heart” of the University of Manitoba and explore science and engineering on a more in-depth level.

My daughter said she'd rather go to girls club rather than her dance classes!

Parent

## ABOUT CLUBS

WISE Kid-Netic Energy offers two clubs each year: Kid-Netic Energy Saturdays and Kid-Netic Energy Girls. Kid-Netic Energy Saturdays is a five week club held in both the fall and the winter semesters. The club is open to both genders and is for grade 4 – 6 students. Kid-Netic Energy Saturdays takes place for five Saturdays from 12:30 – 3:30 in the Faculty of Engineering. Club participants explore many science and engineering themes through hands-on activities, tours and mentors from industry. Kid-Netic Energy Saturdays has been operating since 2005 and offers a great enrichment experience for children enthusiastic about exploring science and engineering outside of the classroom setting.

Kid-Netic Energy Girls is a girls only club offered to grade 3 – 7 students. The club runs from October through March with 18 meetings. Kid-Netic Energy Girls is an enriched environment for girls to really explore their interest in science and engineering. Because the club runs for an extended period, the members are able to participate in multiple tours, lengthier projects, a regular “current events in science and engineering” program, a community action project and a year-end science fair. Kid-Netic Energy Girls launched an ambitious community action project this year, called Canstruction. Canstruction, is a popular competition in the U.S. for college students and involves designing and building a large structure out of canned



food. Kid-Netic Energy Girls designed and built a globe out of canned corn. The club members collected cans and donations and spent many hours on the project. Construction was a wonderful learning experience, and helped Winnipeg's hungry as all cans and proceeds were donated to Winnipeg Harvest.



Club was more than I ever imagined. The quality was wonderful and the diversity of the topics was great.

**Sharon Sankar (parent)**





## **SPECIAL PROJECTS**

Showcasing a variety of science and engineering topics, our workshops are highly interactive, and bring technology and activities to classrooms not always available.

## ABOUT OUR SPECIAL PROJECTS

Each year WISE Kid-Netic Energy selects, and sometimes is presented with, projects outside of our regular deliverables of workshops, camps and clubs. This year we were fortunate to be able to participate in four such projects: Engineering IS for Girls, Simonhouse Enrichment Project, “Flood Camps” and a Canada Day celebration.

Engineering IS for Girls was a newly developed seminar presented by the Faculty of Engineering and WISE Kid-Netic Energy. This was a half-day event held in the Faculty of Engineering in mid-April. Female, high school students from Winnipeg and the surrounding area were invited to participate in tours, a presentation about the Engineering

profession and participate in a panel discussion. Panelists were female engineers representing many engineering disciplines and career stages. The event was very successful with 38 participants. Engineering IS for Girls will be offered annually, with the next event planned for November 2011.

The Simonhouse Enrichment Project is an annual week of enrichment and career information for grade 8 students of the Frontier School Division. Approximately 100 students from almost 20 Northern communities travel to Simonhouse Camp near Cranberry Portage, Manitoba, each year to participate in the project. This year WISE Kid-Netic Energy was honoured to be





This is the funnest camp  
I have ever been in.

Camper

asked by Frontier School Division to provide science and engineering programming. For five days, the grade 8 students, their teachers, parents and chaperones participated in theme days such as astronomy & light, alternative energy and Special F/X. Along with dynamic, hands-on activities, students were given information about post secondary education and career options related to each theme.

“Flood Camps”; with the horrible flooding in Manitoba this spring hundreds of families from St. Martin, MB and Peguis First Nation were evacuated and housed in hotels in Winnipeg. To alleviate some of the monotony of hotel life, WISE Kid-Netic Energy camps managers and instructors volunteered their time to

deliver “mini-camps” at two Winnipeg Hotels. The camps were met with enthusiasm and appreciation from the children and their parents. After months in a Winnipeg hotel some Peguis First Nations families were allowed to go back to their homes in August. One “flood camp” participant came to WISE Kid-Netic Energy camp in Peguis, inspired by her great camp experience in Winnipeg, and was eager to share her knowledge and experiences with other campers.

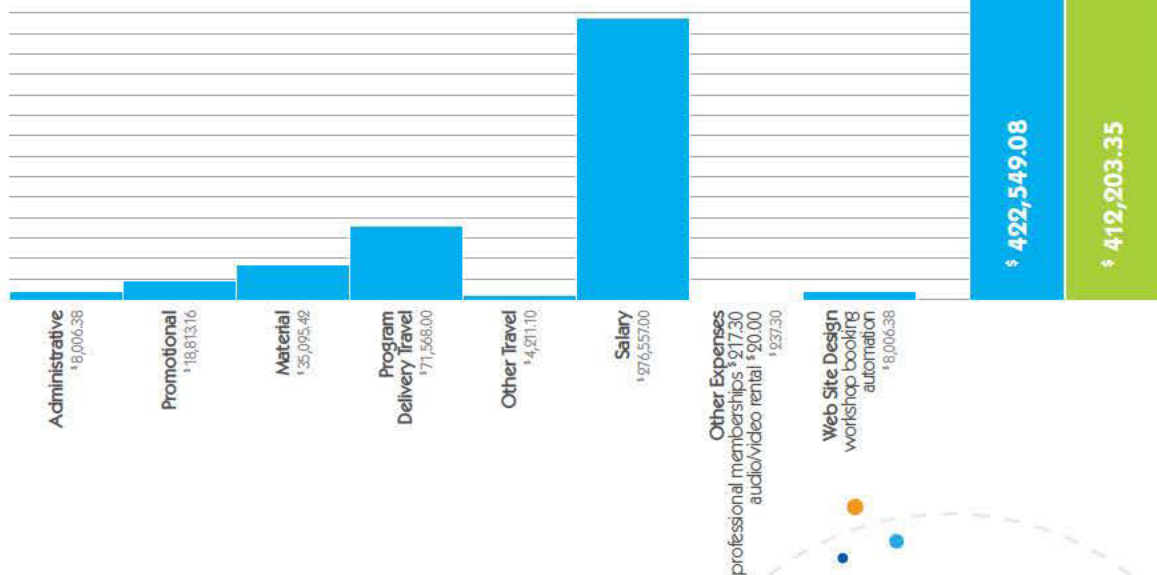
WISE Kid-Netic Energy was also fortunate to participate in the Canada celebrations at the Sunova (Community) Centre in West St. Paul. Instructors provided camp activities for children and their families to try together.



# FINANCES

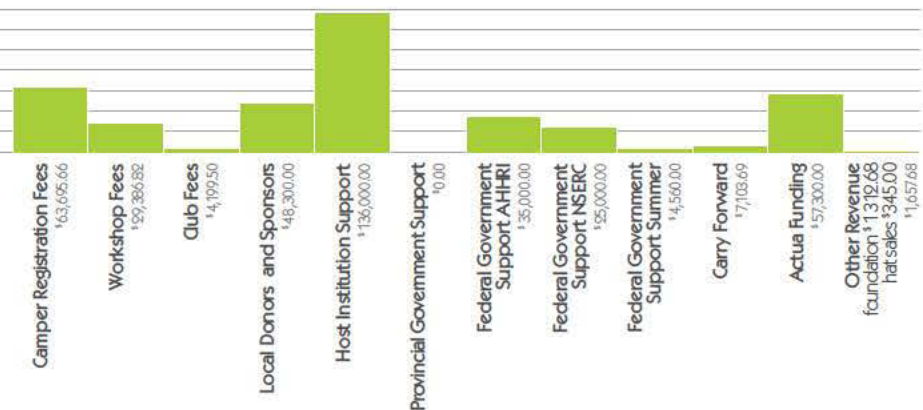
## EXPENSES

90% of WISE Kid-Netic Energy expenses went directly to the delivery of camps, clubs and workshops (65.4% wages, 16.9% travel, 8.3% equipment & supplies for deliverables). With less than 10% of WISE Kid-Netic Energy revenue going to other expenses such as promotions and advertising, office operation, travel for conferences and meetings, and website development; WISE Kid-Netic Energy is being run as efficiently as possible, maximizing deliverables to the youth of Manitoba.



## REVENUES

WISE Kid-Netic Energy biggest funder remains the University of Manitoba, specifically the Faculty of Engineering, at 33% of the funding. Our next three largest sources of funding are: camper registration fees (15.5%), Actua funding for specific programs (13.9%) and corporate support (11.7%). Federal government support comes from NSERC PromoScience (our second year of a three year grant) and new for this year a Health Canada AHHRI (Aboriginal Health and Human Resources Initiative) grant. The AHHRI grant was available for 2010 and allowed WISE Kid-Netic Energy to travel to four new First Nations to deliver health workshop and camp content. As part of the grant received we also delivered health workshops and a health theme day at camp in the five First Nation communities with previous partnerships with WISE Kid-Netic Energy.





I learned a lot at this camp, thank you for teaching us everything and I hope to see you guys soon!

**camper**, 9 year old girl

## OUR PARTNERS: THANK YOU FOR YOUR SUPPORT

Without the strong commitment and hard work from so many partners, WISE Kid-Netic Energy could not offer the scope and depth of science and engineering enrichment to the youth of Manitoba that we do each year. Our community partners help to ensure the smooth and successful operation of workshops and camps, providing hosting facilities and often accommodations for WISE Kid-Netic Energy instructors. Corporate sponsorship and grants make affordable programming a possibility for all Manitoba youth, regardless of geographic location,

or socio-economic status. Our partnership with Actua helps to not only provide programming resources, but also invaluable support from the other 33 member organizations across Canada. Lastly, we are fortunate to have an exceptionally good relationship with our host institution the University of Manitoba, and specifically the Faculty of Engineering. We are extremely grateful for all of these relationships and the enrichment they allow us to bring to the youth of Manitoba.

## 2011 WISE KID-NETIC ENERGY FUNDERS



## 2011 ACTUA NATIONAL FUNDERS

Actua provides training, resources and support to a national network of local organizations offering science and technology education programs. Actua members reach over 200,000 youth per year. Please visit Actua on the web at [www.actua.ca](http://www.actua.ca)



SUNCOR  
ENERGY  
FOUNDATION





# Amazing Program! Excellent connection between University and elementary students.

**Monique Russell**, Grade 4 teacher at Lord Nelson School

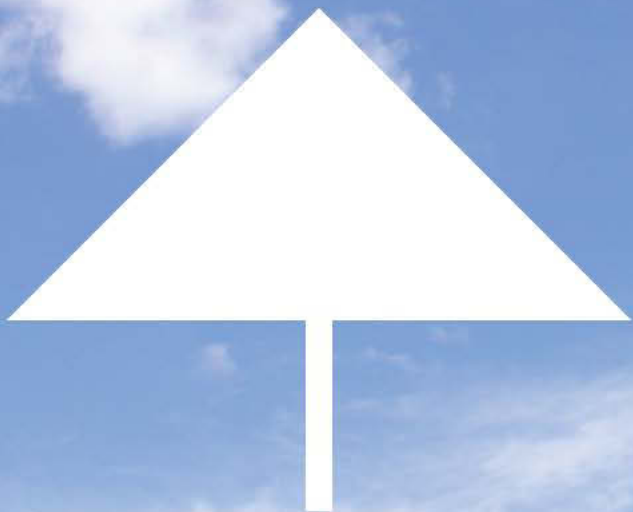
## GET INVOLVED

WISE Kid-Netic Energy is a non-profit, community outreach program, working diligently to create and maintain an interest in science, engineering and technology in the youth of Manitoba. Why do Manitoba youth need to be interested in these subjects? As Manitoba moves forward in the twenty-first century our economy becomes increasingly technology based. Without a workforce to fulfill our future needs Manitoba will not be able to compete in the national or global economy. The youth of Manitoba, especially currently under-represented groups – women, Aboriginal, impoverished and new immigrants – are our future workforce. Instilling a passion for a science, engineering and

technology, making lifelong learning fun and interesting will best position our province for the future. To achieve our goals and really make a difference in the lives of Manitoba youth, we need support. Support from communities, teachers, families, government and business are critical to the future success of WISE Kid-Netic Energy.



Like us on Facebook at  
[facebook.com/wisekidnetic](https://facebook.com/wisekidnetic)



## LOOKING AHEAD: GOALS FOR 2011-2012

With such a successful year behind us, it's hard to imagine an improvement! We have many new offerings and ideas for 2011-2012 that will continue to allow WISE Kid-Netic Energy to grow and strengthen. To help focus our efforts and resources, the administrative and management staff of WISE Kid-Netic Energy has been working on a three year strategic plan to help strengthen our infrastructure, improve efficiencies and increase accountability. Plans for 2011-2012 are a reflection of the strategic plan.

To begin 2011-2012, we will be offering NINE new workshops! The new workshops are: Keeping the Bugs Away (Health, grades 1-4), Squishy Circuits (Electricity, grades 3-4), Simple Machines (Physics, grades 4-8), Extreme Weather

(Weather, grade 5), What's in my Food? (Health, grade 5), Forces of Flight (Flight, grade 6), A Matter of Forces (Matter/ Forces, grade 7), DNA Detection (Biology, grade 8), and Water Quality (Water, grade 8). As always, our workshops continue to be curriculum-based and hands-on. An additional dimension to the workshop catalogue is take home projects for several workshops; allowing participants to share their experiences with family and friends. Besides the new workshops, we are also partnering with the Faculty of Engineering's ENGAP (Engineering Access Program) to deliver information and more workshops in First Nations communities and Aboriginal schools in Winnipeg and within a 200 km range of the city.





To help us meet and exceed our outstanding success of delivering 1291 workshops last year, we will be implementing an automated workshop booking system. The system has been custom designed and built by Freeform Solutions and will decrease administrative tasks associated with scheduling a workshop, help the tracking and reporting of workshops for instructors, and increase the depth and flexibility of our database.

Last year we were able to expand both inner city camps and First Nation camps. Camps in 2012 will continue to be offered in the 2011 communities, with the additional goal of increasing camps in the inner city.

New initiatives started last year: Engineering IS for Girls and Simonhouse Enrichment project will continue to be offered in 2011-2012. A new initiative for this year will be themed birthday parties for 5-10 years olds. Parents will be able to book one of several science and engineering based theme birthday parties for their child. Parties will be held in the Faculty of Engineering or off-campus and will feature hands-on activities and loads of fun!



All in all we are gearing up for another action-packed and exciting year. We are grateful to the many partners who support WISE Kid-Netic Energy on so many levels, our dedicated administrative and instructing staff, the support of Actua and our national member network and the committed support of the Faculty of Engineering and the University of Manitoba. Each part of WISE Kid-Netic Energy is the result of dedication and hard work to bring science and engineering enrichment to the youth of Manitoba. As we go into our 22nd year, we are as committed and energetic as ever!





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