Annual Report
2012–2013
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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INTRODUCTION

Colleen Flather, P.Eng led WISE Kid-Netic Energy for the past 14 years. She passionately grew the program to the largest outreach initiative housed at the University of Manitoba. She has moved on to pursue a Master’s in Civil Engineering and we wish her nothing but the best. She has left huge shoes to fill and I can only try to honour her efforts. I worked for WISE when I was an undergraduate student pursuing a Computer Engineering degree at the University of Manitoba. It was a meaningful experience for me. I saw Manitoba as I presented and developed my public speaking and I gained more confidence and poise with every classroom of students I won over. I have since completed a Master’s degree and worked at a start-up company in Ottawa and am happy and enthusiastic to be given an opportunity to come back home to Manitoba and lead WISE Kid-Netic Energy. This fiscal year was a transition year for us and we did amazing thanks to all of our student and full-time staff. I would like to acknowledge the support and guidance of Dean Beddoes from Engineering and Dean Whitmore from Science, both of whom are passionate about science and engineering outreach. I hope you enjoy our annual report and share it with others.

Nusraat Masood, BSc, MSc
Program Administrator
WISE Kid-Netic Energy
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, gender or socio-economic status are enriched in their science, math and technology education. The young people today will become Manitoba’s vibrant and diverse workforce of leaders tomorrow; these youth will be empowered by their knowledge and appreciation for science, engineering and technology.

Meaghan Turpin, Grade 1 teacher at Jack River School, Norway House, MB
OUR INSTRUCTORS

Our instructors are our champions. All of our instructors are pursuing degrees in science and engineering; most of our instructors are young women. We also hire men who are visible minorities or from northern communities. Each is trained to deliver all of our Manitoba science-curriculum based workshops. They also receive classroom management and Indigenous cultural training. We provide meaningful employment for our instructors to develop strong leadership and presentation skills.

During the fall and winter our instructors work part-time and deliver outreach close to Winnipeg to accommodate their classes and labs. In spring and summer they work full-time and travel extensively to all corners of our province including northern Manitoba (Churchill, Dauphin, Flin Flon, etc.), southern Manitoba (Steinbach, Brandon, Morden, etc.) and First Nations communities (Hollow Waters First Nations, Skownan, Norway House, etc.). We consciously encourage small age gaps between our instructors and their grade Kindergarten to grade 12 audiences to help their audiences relate. We also believe having female and visible minorities as ambassadors of science and engineering in classrooms dispels barriers associated with underrepresented groups excelling in technical fields.
Showcasing a variety of science and engineering topics, our workshops are highly interactive, and bring technology and hands-on activities to classrooms.

wisekidneticenergy.ca/workshops
OUR WORKSHOPS

We offer over 20 different hands-on workshops and we had another tremendous year in workshop delivery. Between April 1, 2012 and March 31, 2013 we saw an outstanding 34,656 students. Our hands on, Manitoba science curriculum based workshops for grades Kindergarten to grade 12 are a hit in classrooms all over the province of Manitoba. Teachers have enthusiastically invited us in their classrooms and we could not be more excited to be working with passionate educators. We offer a wide variety of choices for budding scientists and engineers. We facilitate dissections, design-build-test challenges and plenty of fun educational games. We bring all the supplies and clean up afterwards. We charge minimally and offer the same rates for schools within and outside the city of Winnipeg. We strive to spark curiosity and build momentum towards positive experiential learning. In fact, many schools fund our workshops using the Manitoba Experiential Learning grant. Please go to our website to view our current workshop catalogue in French and English.

FUN FACTS ABOUT WORKSHOPS

- Total audience of 34,656 from nursery school to grade 12
- 1,349 workshops delivered

Such a fun time! The students really enjoyed themselves

Julie MacKenzie, Grade 5 & 6 teacher at Kleefeld School, Kleefeld, MB
## Workshop Delivery Broken Down by School Division

<table>
<thead>
<tr>
<th>Division</th>
<th>Kids per Division</th>
<th>Division</th>
<th>Kids per Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garden Valley</td>
<td>385</td>
<td>Red River Valley</td>
<td>360</td>
</tr>
<tr>
<td>Hanover</td>
<td>3995</td>
<td>River East-Transcona</td>
<td>1246</td>
</tr>
<tr>
<td>Interlake</td>
<td>320</td>
<td>Seine River</td>
<td>340</td>
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<tr>
<td>Kelsey</td>
<td>500</td>
<td>Seven Oaks</td>
<td>2529</td>
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<tr>
<td>Lakeshore</td>
<td>210</td>
<td>St. James-Assiniboia</td>
<td>245</td>
</tr>
<tr>
<td>Lord Selkirk</td>
<td>470</td>
<td>Sunrise</td>
<td>1210</td>
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<tr>
<td>Louis Riel</td>
<td>1322</td>
<td>Swan Valley</td>
<td>500</td>
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<tr>
<td>Mountain View</td>
<td>1390</td>
<td>Turtle Mountain</td>
<td>160</td>
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<tr>
<td>Mystery Lake</td>
<td>2600</td>
<td>Western</td>
<td>565</td>
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<tr>
<td>Pembina Trails</td>
<td>2360</td>
<td>Winnipeg School Division</td>
<td>3956</td>
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<tr>
<td>Portage la Prairie</td>
<td>555</td>
<td>Other/Private in Wpg</td>
<td>2066</td>
</tr>
<tr>
<td>Prairie Rose</td>
<td>655</td>
<td>Other/Private out of Wpg</td>
<td>2450</td>
</tr>
<tr>
<td><strong>Total Students</strong></td>
<td><strong>34656</strong></td>
<td><strong>Total Students</strong></td>
<td><strong>34656</strong></td>
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</table>

Excellent presentation! Students loved it. They were motivated.

**Rosalie Muswagon,**
Grade 3 teacher at Helen Betty Osborne, Norway House, MB
OUR 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.

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

Frontier School Division Career X camper, 14 year old boy
CAMP LOCATIONS SINCE 2001

1. CHURCHILL
2. BROCHET
3. GILLAM
4. SHAMATTAWA
5. THOMPSON
6. FLIN FLON
7. FRONTIER SCHOOL DIVISION’S CAREER X
8. THE PAS
9. CROSS LAKE
10. NORWAY HOUSE
11. WASAGAMACK
12. GARDEN HILL
13. SWAN RIVER
14. SKOWNAN
15. DAUPHIN
16. PEGUIS
17. HOLLOW WATER FIRST NATION
18. LITTLE BLACK RIVER FIRST NATION
19. PINAWA
20. TYNDALL
21. WINNIPEG
22. PORTAGE LA PRAIRIE
23. VIRDEN
24. KILLARNEY
25. CLEARWATER
26. MORDEN
27. WINKLER
28. CARMAN
29. STEINBACH
30. FALCON LAKE
31. KENORA

Highlighted locations received week-long camps in Summer 2012
SPACE ADVENTURE CAMP

WISE Kid-Netic Energy continues to provide the promotional and administrative support for the Manitoba Space Adventure Camp, a Manitoba Aerospace initiative. The enrichment camp designed for students in grades 9-11 explores various aerospace, flight, physics and space topics. Students participate in hands-on activities such as rocket builds, extensive lab tours in the Faculty of Engineering and drive a race car—a simulator of course!
OUR 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.

wisekidneticenergy.ca/clubs
Girls Club was more than I ever imagined. The quality was wonderful and the diversity of the topics was great.

Sharon Sankar (parent)
OUR OUTREACH

WISE Kid-Netic Energy is dedicated to inspiring all youth to Science and Engineering. We have special initiatives to provide outreach to underrepresented groups.

wisekidneticenergy.ca/outreach
ADOPT-A-CLASS

By far the most meaningful new project we started in September 2012 was our Adopt-a-Class program. We recognized that we could do more to make our workshops accessible in areas of Winnipeg with socio-economic challenges. We asked the Boys and Girls of Winnipeg and ENGAP (Engineering Access Program provides students with Indigenous ancestry prepare for, and succeed in Engineering) to nominate schools which would receive our workshops at no cost. The schools are Dufferin, Norquay, David Livingstone, Niji Mahkwa, William Whyte, Children of the Earth, Gordon Bell, Sisler High School and Elmwood High School. Between September 2012 and March 2013 we had already seen 2448 students. We are passionately developing this project further. We are so grateful to Actua and NSERC Chair of Women in Science and Engineering (Prairie Region) Dr. Annemieke Farenhorst for supporting this new initiative. Mr. Robert Kennedy, a philanthropist and University of Manitoba Engineering alumni has committed funds to this project for the next four years. Find out more online. We hope you are as excited as we are.

wisekidneticenergy.ca/adopt-a-class
INDIGENOUS OUTREACH

In the fiscal year of 2012-2013 we were very engaged on First Nations reserves. We delivered week-long science and engineering camps for local youth in four fly in communities: Shamattawa First Nation, Garden Hill First Nation, Brochet and Wasagamack First Nation. We also delivered our science and engineering camps in Skownan First Nation, Norway House Cree Nation, Hollow Water First Nation, Cross Lake First Nation and Little Black River First Nation. Prior to the camps, in spring, we delivered our hands-on science and engineering workshops to many of the communities as well. In total we saw over 2100 Indigenous youth in their home reservations.
INNER-CITY GIRLS CLUB

In the fall of 2012 we started our second girls club in partnership with the Boys and Girls Club of Winnipeg at the Freight House location. During the school year, on Saturday afternoons, 34 girls met to prepare and share healthy meals with female students pursuing science and engineering and mentors already practising as professionals in those fields. The girls also played sports and participated in science and engineering activities each and every week. It was a safe and fun environment for all participants.
OUR FINANCES

REVENUE: $400,000

University of Manitoba – 33%
Sponsors – 33%
Income Generated – 20%
Federal Government – 8%
Provincial Government – 6%

EXPENSES: $410,000

Student Wages and Benefits – 36%
Full Time Staff Wages and Benefits – 30%
Materials and Supplies – 18%
Travel – 16%
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 SUPPORTERS
2012-2013 FISCAL YEAR FUNDERS

We have many generous supporters that make our work possible.
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
OUR FUTURE

WISE Kid-Netic Energy looks forward to maintaining close ties with the Faculty of Engineering and the Faculty of Science at the University of Manitoba and aligning ourselves closely with their strategic outreach objectives. We look forward to strengthening our ties with teachers and schools within the province so we can continue to support efforts to attract more youth into careers in Science, Technology, Engineering and Math. Our province has a bright future ahead and we know our talented youth are the conduits to our joint success.