### GRADE 6/7 ST. MARIA GORETTI SCHOOL ROMA JANVIER

Our students conducted five inquiry projects. Three groups worked on reducing the waste generated at the school. They began by doing audits to see what types of things were going into the trash and made an action plan to reduce this. One group will be looking at composting in our classroom. The other two groups will be putting up posters to raise awareness about reducing the amount of styrofoam cups being used in our school. Two other groups have been working on reducing energy in our school. The big question is, "How can energy be saved in our school?" They have been conserving energy in the school by promoting lights out in empty rooms. They will put up posters around the school to raise awareness and also record how much energy/watts they saved. The students have really taken ownership of their projects and are really excited about making a positive change in our school.

#### GRADE 7 SAGE GREYSTONE HEIGHTS SCHOOL SARA STONE

Our class learned about food production and the impact that transporting food goods has on the environment. We came up with different ways food miles could be reduced and looked at the impact that reducing food miles would have on carbon emissions. Each student in our class collected data regarding the food miles of 10 frequently purchased food items in their home. After finding out how many total miles these items travelled, the overall carbon emissions for the food was calculated. We then made commitments to reduce our families' food miles. We wanted the community to know about food miles too, so we started a social media campaign on Twitter and Facebook, made a You Tube video, created a lesson plan to teach all classrooms and our School Community Council about food miles, and created a poster awareness campaign around the school. After several months, we recalculated our families' food miles and carbon emissions based on our commitments to reduce food miles at home.



### GRADE 6/7 MOTHER TERESA SCHOOL SEB ROCK

Our class endeavor is to showcase a variety of ways in which sustainability can be integrated into the application of science and impact our society positively. Our projects cover diverse research curriculum related topics, with 21 projects, including:

- Clean energy solutions for home and transport (solar at home, solar thermal, solar airplanes)
- The impact of climate change, technology and resource extraction on ecosystems
- 3. Sustainability in space (ISS, Mars)
- 4. Sustainability in agriculture (GMOs)
- 5. Sustainability and waste management (recycling)
- 6. Air quality and greenhouse gases (air purification, CO2 extraction)

We also showcased some Tiny House models, with calculations based on KW energy consumption linked to market ready technology that could power each Tiny House.

### GRADE 7/8 ST. VOLODYMYR SCHOOL THOMAS BOYKO

Our students were eager to dive into four different projects. One group of students were appalled by the amount of waste being produced on a daily basis in our classroom. To combat this problem, they worked with Agriculture in the Classroom to start vermicomposting, as well as saved food scraps to feed a classmate's chickens. They revolutionized the way we did recycling in our room. Another group of students were distressed at the amount of energy that they are wasting at home. They borrowed equipment from Saskatoon Light and Power to measure the amount of energy used in their homes. They are working with their families and the school to eliminate their wasted energy. The third group of students are passionate about animals and the environment and they realized the toll that the consumption of beef has on the environment. They are trying to convince the school community to eat less beef in their regular diet. They also worked with Agriculture in the Classroom to build a micro garden to showcase other healthy forms of eating. The final group of students are working on using solar power to offset some of the energy used to charge the classroom iPad and netbooks. They met with the SES Solar Co-operative to discuss using solar panels and they fundraised enough to purchase a mini solar panel for classroom use. All of the students were enthusiastic to get involved in the inquiry projects and they hope to influence the school community to be conscious of sustainability.

The Student Action for a Sustainable Future program involves students from the Public and Catholic school systems in projects that reduce classroom, school, and household greenhouse gas emissions. Each project results in positive sustainability benefits in the areas of waste, water, energy, food, biodiversity and transportation.

The year-end showcase provides an opportunity for students to tell their environmental success stories, highlight the results of their projects, and demonstrate what's possible in terms of sustainable action.

Over the last four years, the program has involved 50 Saskatoon teachers, 36 schools, and approximately 1,250 students. Collectively, their initiatives have reached over 17,000 students via school displays, assemblies, newsletters, campaigns, and other activities.

#### For more information, please visit Saskatoon.ca/StudentAction.

has received international recognition as a feature case study by the Global Environmental Education Partnership, and has also been locally recognized through three awards: a Regional Centre for Expertise award for Education for Sustainable Development, the Saskatchewan Waste Reduction Council's 2013 Waste Minimization Award for Youth/Schools, and St. Anne school (SASF 2015/16) received the Rob Dumont Youth award for their commitment and leadership in the area of reducing energy consumption involving peers, school(s), neighbourhoods, and communities in conservation efforts.



### GRADE 8 ST.DOMINIC SCHOOL CHANTELLE KANE

Our SASF projects relate to our big inquiry question about why it is important to care about and conserve our water systems. This led to six different small group inquiries and projects focused on household water use and waste, ways water is consumed through the manufacturing process, water quality and its impact on communities and environments, and water pollution. A trek out to Chappell Marsh helped us see real-life impacts and to make connections about how our everyday choices can affect the environment. Students took action in their own households by educating their families on water waste. They also raised awareness in our school about the importance of water conservation through campaigns about simple ways to conserve water on a daily basis and by writing a children's book to share with the younger students. Through our projects, students have become advocates for water conservation and have built up their own and others' awareness of this precious resource.

# GRADE 7/8 BROWNELL SCHOOL CHRIS CLARK

We have been discussing and examining sustainability throughout the school year in a variety of ways, for example, watching videos like "The Story of Stuff" and conducting simulations. Before Christmas, all of the students, along with their personal households, participated in a two week "Decrease My Footprint" project that was designed to give them practice at carrying out a pre- and post-audit, reduce their ecological footprint at home in a measurable way (gas, electricity or water use), and practice analyzing data. After the Christmas break, our class undertook a number of different projects, including: focusing on waste and recycling related to school lunches; examining how much was being recycled and the total amount of garbage being produced at our school; increasing recycling opportunities in the school and community; looking at the power and cost ramifications of different types of lightbulbs, which included a student-built light demonstration setup; reducing the amount of power used through lights in the school; and examining solar energy and what it would take for a household to switch over to solar power.

### GRADE 11 ST. JOSEPH HIGH SCHOOL JASON FENRICHS

Our Environmental Science 20 students began their projects by choosing a theme to research and explore. After some preliminary investigation, student groups developed focus questions related to carpooling, electricity and water consumption, food waste reduction, food miles, water quality, and a zero waste lifestyle. Students diversified their research by conducting audits, simulations, and other methods of data collection, and followed these with the implementation of an environmental action plan. Students found that engaging in a thorough study of an environmental issue naturally compelled them to explore other environmental issues connected to their own project. Through these impactful learning experiences, students aim to promote sustainable change not only in their homes and school, but also within the greater community.

# GRADE 7/8 ÉCOLE ALVIN BUCKWOLD COURTNEY THORNHILL

How can our behaviour protect the environment? That is the question our class has been targeting. Throughout the year, we have focused on our energy use within our classroom and around the community. We have looked at how much electricity we waste by keeping our electronics plugged in at all times, keeping lights on, and being careless. Students then made changes within our classroom and around their homes to create a more energy efficient plan. In order to get others on board throughout our school, our class has planned an assembly to present their data to their peers, as well as an informational brochure for parents.



### GRADE 6/7 KING GEORGE SCHOOL CHRIS SCHMIDT-WATT

Our class takes on the responsibility of recycling at our school. This got us thinking, can we do more as a school to reduce the amount of stuff going to the landfill? Only one way to find out... GARBAGE AUDIT!

The most shocking part was the amount of edible food items tossed away in our school, such as apples, bread, yogurts, and stir fry. Through research and collaborative inquiry, our students were able to cook up some ideas to curb our edible food waste problem. First, we put together a documentary containing our information and field experience and showed the video to our whole school at a scheduled assembly. Second, we gathered reusable containers to provide leftovers from our lunch program to families in need. Third, we encourage all students in our school to adopt our mission statement, "Take what you need and eat what you take!"

Our work within the school prompted action from our school administrators as well as our community coordinator. Our lunch program has subsequently been altered to allow for minimal food waste and optimal food consumption for all students.

# GRADE 7/8 ÉCOLE HENRY KELSEY SCHOOL HEATHER LAKE

Our changing climate poses unique challenges for Saskatchewan's ecosystems. Our arts education class has spent the school year exploring these challenges, as well as our potential to either exacerbate the risks to planetary health or to learn about and foster ecological resilience. Focusing on water conservation and biodiversity, we have committed to building a permaculture (permanent agriculture) garden that harvests its own rainwater and utilizes plants that are native to our ecoregion, virtually eliminating our reliance on city water for irrigation. We have conducted an audit to determine the amount of water we will conserve every year as a result of the installation of our garden. Additionally, our garden will provide a healthy home and foraging area for beneficial insects and birds.

While we have explored themes of ecological risks and resilience largely through dance, drama, and music, we have also relied on the cooperation of our homeroom and science/math teachers to support our integrated learning. We will work closely with our garden club, all of our classrooms in grades K-8, and our school WE Day team.

### GRADE 6 DUNDONALD SCHOOL JENNA PERKINS

Our class has had a very busy and exciting year learning about all the different facets of creating a sustainable future in our classroom and community. Fortunately, we were able to work with Kenton Lysak from Meewasin, who helped us build bird houses at our school. After we added inspirational nature quotes on our boxes, we hiked the Northeast Swale and found fantastic places where some of our local birds will find their 'birdever' homes. Our projects ranged in a wide variety from creating model Earth ships and growing bee friendly flowers to curbing our water and energy consumption habits. We explored Vermi composting in our classroom and calculated water consumption in our homes.

# GRADE 11 MOUNT ROYAL HIGH SCHOOL LANCE MCQUEEN

Our Environmental Science 20 class uses a multidisciplinary approach to the big picture challenges of modern society's ever-increasing demands on the environment, including the finite limits of food, land, water, air, living organisms, and resources. The production of all forms of pollution has taxed our planet's ability to breakdown these wastes. The resulting build-up of greenhouse gases threatens to raise our average global temperatures, lead to extreme changes in local weather and agricultural food production, as well as cause serious damage to property and infrastructure.

In the midst of all this doom and gloom, SASF provided the impetus for us to challenge ourselves as a class to focus on the positive and develop proposals to "Take Action to Make a Difference in the World!" These tasks have proven challenging and, as of yet, the results are uncertain; however, the process has been extremely valuable in showing our class that each of us can make a difference. We can each take responsibility for our own personal impact on the planet, and with the power of social media, individual ideas can influence global changes in Earth stewardship!

