



Grades 4–6
Curriculum Connection: English Language Arts,
Mathematics, Social Studies and Science

Developing
Self-Esteem

Living
Respectfully

Unit 11: Our Local Footprint

Contributor

Tracy Lyons, Program Manager, SACSC
Pembina Hills Regional Division No 7 (Secondment)

Unit Objective

Through a variety of activities, students will become more aware of the importance of becoming active global citizens where learning occurs in an atmosphere that reinforces and models a collective global responsibility. The challenge moves away from individuals and into neighbouring schools and school divisions.

🕒 Time

This unit will take approximately two weeks to complete, depending on the activities for extension chosen. It comprises three lessons. Each lesson builds upon the previous, so the unit should be delivered in ascending order.

Note: This unit is designed to follow Unit 10: BIG Feet although both units can be taught independently.

Lesson 3: Students in Motion

Objective

Through a ‘whole’ school focus, a global perspective will be integrated into large school activities and core curriculum to attain a comprehensive school wide theme that will ignite cohesion (belonging/attachment) and growth – social, emotional and spiritual. Respect, responsibility, ownership and action in global projects will create enthusiasm and excitement; create community connections and help build strong character.

🕒 **Time** This lesson will take approximately three class periods, depending on the extension activities chosen.

✂️ Materials

- Computer and Internet access
- Student/Teacher Handout: Environmental Websites
- Proxima/LCD Projector
- Large screen
- Post-it notes (various colours)
- School bus (field trip)

Getting Started

Knowledge Now

Students brainstorm in groups (or as a whole class) about environmental problems they have heard about. Have groups bring their ideas to the large group by presenting them orally and keeping a list on poster paper, or students can bring each idea on a sticky note to the front of the class. Each student can read the idea they place on the board, or one student or the teacher can read all the ideas out. Similar ideas are grouped together.

Engaging Interest

- Whole-school kick off in the gymnasium or auditorium.
- Students watch the video clip *Understanding* (see Supplementary Resources). Ensure that equipment is set up prior to the gathering.

Using the results from Lesson 2, students will present their findings to the rest of the school community (peers, teachers, administration, support staff, parents). This includes the informal observations, the teacher student meeting and the poster-size footprint with the description/explanation. The purpose of the Global Footprint Challenge will be to begin moving toward responsible citizenship through social, global and ecological awareness and action.

Learning Activities

Activity—Around the World (see URL under Supplementary Resources)

- Share with students
In February 2003, the Governing Council of UNEP (United Nations Environment Programme) adopted a long-term strategy for engaging young people in environmental activities and in the work of UNEP. The strategy was entitled the TUNZA Youth Strategy. TUNZA means “to treat with care or affection” in Kiswahili (a sub regional language of Eastern Africa). The overall TUNZA concept is built around this theme. It is an initiative that is meant to develop activities in the areas of capacity building, environmental awareness and information exchange, with a vision to foster a generation of environmentally conscious citizens, capable of positive action.
- Begin by sharing stories of youth from around the world. Kids (and adults) can easily become overwhelmed with where to begin—How often have we heard “I’m only one person—what can I do?” Sharing stories helps young people believe that they can make a difference and may fuel the fire to take action.
 - More than 20 stories are on the website. It is inspiring when young people from around the world use their knowledge, sense of motivation and energy to bring about action for the environment. Young people bring a fresh outlook to environmental activism. Young people from India, Australia, Nigeria, Vietnam, Lebanon, Sweden, Britain, Peru, Guyana and the United States share their stories. It is important to note that there are no stories from Canada—thus an opportunity is created!
 - This will be up to the discretion of the teacher(s) involved. One suggestion is to have each class present/share one of the stories. This depends on school size and number of classes involved. If each class focuses, on one of the stories, the culmination could be a large school assembly where these stories are shared in a creative way (readers’ theatre, role playing, visuals, PowerPoint, dance/tableau; art and so on).

- A list of all the actions and projects of these young people will be created. This can act as a starting point for students.

Activity—Whole School

- Students are provided with a list of websites where various environmental activities are highlighted.
- Since most schools have a limited number of computers, a suggestion could be that different classes complete the investigation at varying intervals.

Note: This is a joint effort for teachers and students. There are too many variables that may affect planning and organization. Each school will have to figure out how to make this project ‘fit’ their setting. Size of school and elementary, junior high or high school levels will also affect these efforts.

- Another possibility is that students could be partnered cross-grade, thus strengthening interpersonal skills, acceptance and perspective.
- Once all students have had the opportunity to see what’s out there, each person will sign up for a particular project. This should not be mandatory. Encourage students to take action, to become involved, to become responsible citizens and leaders.
- This objective could also be achieved via individual classrooms. Each class would take on their own environmental project.

Activity—Celebration

- The school community can share their successes with the larger community.

Assessment/Analysis

- Keep track of student and adult involvement. Surveys can be created and used to measure pre and post involvement and the positive changes that follow.
- Ongoing journal activity be done regularly in English language arts, in homeroom or for homework. Students can first design a plan for how they will attempt to reduce their global footprint, what things they will do differently. Additional journal entries on a daily or weekly basis can keep track of what changes students actually made and whether they noticed any differences in their lives or their home as a result of their behaviour (less garbage being thrown out, less money spent, doing more family activities, more bike rides and exercise, more aware of what is happening).

Application

- Students will write articles/editorials to the local newspaper sharing their school’s accomplishments.

Note: If you live in a small community there is a very good chance that the local newspaper will give the school three or four pages and insert it as a pullout section (I did it for three consecutive years!). This is an excellent opportunity to connect school and community, and these pages may be offered by the local paper annually and free of charge!

- Students will write a letter to the mayor or town council requesting that they conduct an ecological footprint analysis of the local municipality.

Activities for Extension and/or Integration

Once the entire school has taken on the challenge of reducing their global footprint, taking part in Edmonton Earth Day may encourage greater action. The school may be able to show the general public what the school has contributed through action and ownership. The Edmonton Earth Day coordinator, Janice Boudreau, can be reached at edmontonearthday@shaw.ca.

Other possibilities:

- Native American talking circles
- Earth Day in a Box (see Supplementary Resources)
- Planting trees or a school/community garden
- Students may want to contact UNEP and share their success story—how they made a difference (which may be added to the Website!)
- Become a Green School (see URL under Supplementary Resources)
- Field trips to local nature centre to learn how to compost, or to a local eco house/exhibit to learn about simple things to do around the house to conserve energy

Subject and Level Learner Outcomes for Subject and Level

Grade 4 Science

Specific Learner Expectations

Students will ask questions that lead to exploration and investigation

Reflect and Interpret

- communicate with group members, showing ability to contribute and receive ideas
- Record observations and measurements accurately, using captioned pictures and charts, with guidance in the construction of charts
- state an inference, based on observations
- Identify possible applications of what was learned
- Identify new questions that arise from what was learned
- Communicate with group members, showing ability to contribute and receive ideas

Students will show growth in acquiring and applying the following traits:

- A willingness to work with others in shared activities and in sharing of experiences
- Appreciation of the benefits gained from shared effort and cooperation
- A sense of responsibility for personal and group actions
- Respect for living things and environments, and commitment for their care.

Topic A—Waste and Our World

- Recognize that human activity can lead to the production of wastes, and identify alternatives for the responsible use and disposal of materials.

Grade 4 Social Studies

Core concepts of citizenship and identity

The goal of social studies is to provide learning opportunities for students to:

- Individual and collective rights
- Understand the commitment required to ensure the vitality and sustainability of their changing communities at the local, provincial, national and global levels

Grade 4 Mathematics

Strand: Statistics and Probability (Data Analysis)

- Students will collect, display and analyze data to make predictions about a population.

General Outcome

- Collect first- and second-hand data, assess and validate the collection process, and graph the data
- Construct a bar graph and a pictograph, using many-to-one correspondence, and justify the choice of intervals and correspondence used
- Discuss the process by which the data was collected

Grade 4 English Language Arts

General Outcome 1

Students will listen, speak, read, write, view and represent to explore thoughts, ideas, feelings and experiences.

1.1 Discover and Explore

- Compare new ideas, information and experiences to prior knowledge and experiences
- Ask questions, paraphrase and discuss to explore ideas and understand new concepts

1.2 Clarify and Extend

- Use talk, notes, personal writing and representing to record and reflect on ideas, information and experiences
- Explore ways to find additional ideas and information to extend understanding

General Outcome 2

Students will listen, speak, read, write, view and represent to comprehend and respond personally and critically to oral, print and other media texts.

2.1 Use Strategies and Cues

- Use ideas and concepts, developed through personal interests, experiences and discussion, to understand new ideas and information
- Comprehend new ideas and information by responding personally and discussing ideas with others

2.2 Respond to Texts

- Develop own opinions based on ideas encountered in oral, print and other media texts

2.4 Create Original Text

- Use a variety of strategies for generating and organizing ideas and experiences in oral, print and other media texts

General Outcome 3

Students will listen, speak, read, write, view and represent to manage ideas and information.

3.1 Plan and Focus

- Focus topics appropriately for particular audiences

3.4 Share and Review

- Communicate ideas and information in a variety of oral, print and other media texts, such as short reports, talks and posters
- Select visuals, print and/or other media to add interest and to engage the audience

General Outcome 4

Students will listen, speak, read, write, view and represent to enhance the clarity and artistry of communication.

- Experiment with combining detail, voice-over, music and dialogue with sequence of events

4.3 Present and Share

- Present to peers ideas and information on a topic of interest, in a well-organized form
- Add interest to presentations through the use of props, such as pictures, overheads and artifacts
- Adjust volume, tone of voice and gestures appropriately, to suit a variety of social and classroom activities
- Connect own ideas, opinions and experiences to those communicated in oral and visual presentations

General Outcome 5

Students will listen, speak, read, write, view and represent to respect, support and collaborate with others.

5.2 Work within a Group

- Take responsibility for collaborating with others to achieve group goals
- Use brainstorming, summarizing and reporting to organize and carry out group projects

Safe and Caring Topics and Concepts

Living Respectfully

- Examining methods that help us deal with conflicts and problem solving
- Working cooperatively in groups
- Helping others learn or attain a goal
- Developing positive interdependence and relying on each other to complete tasks
- Giving and receiving help
- Respecting and appreciating others' ideas, insights, solutions and contributions

Developing Self-Esteem

- Striving for competency builds self-esteem
- Taking responsibility for our actions
- Communicating thoughts and feelings

Teaching Strategies

Go to www.sacsc.ca Click on Resources, Strategies for strategy descriptions	Cooperative Learning	Inquiry Learning	Direct Instruction
	<ul style="list-style-type: none"> Planning and organizing presentations 		

Generalization and Transfer	Peer Teaching	Empathy/Affective Education	General Teaching Activities/Ideas
<ul style="list-style-type: none"> Literature Art 	<ul style="list-style-type: none"> School assemblies 	<ul style="list-style-type: none"> Readers' theatre Role playing Tableau 	

Supplementary Resources

- www.earthday.net/resources/2006materials/EarthDay-in-a-Box.aspx Earth Day in a Box
- www.takingitglobal.org Taking it Global
- www.unep.org/tunza/youth/Action_Around-the_World/index.asp UNEP Youth Action Around the World
- www.seedsfoundation.ca/greenschoolslistingab.html Green School
- www.web.ca/acgc Alberta Council for Global Cooperation
- www.ccic.ca Canadian Council for International Cooperation
- understanding.takingitglobal.org/understanding/environment *Understanding* video clip
- www.ualberta.ca/~ersc/Handbook/section4.htm Reducing Ecological Footprints
- www.ualberta.ca/~ersc/Handbook/section2/ecohouse.htm Environmental Research and Studies Centre, University of Alberta
- www.unep.org/tunza TUNZA

Environmental Websites

The following sites have many ideas for environmental projects. Once you have finished surfing the sites, please write down the name of the project you want to do. Place an X beside the URL where you found the information and hand this paper in to your teacher.

Name of Project

Summarize project

- ____ www.cause.ca/projects/current.htm
- ____ www.earthday.net/resources/2006materials/EarthDay-in-a-Box.aspx
- ____ www.takingitglobal.org
- ____ www.unep.org
- ____ www.seedsfoundation.ca/greenschoolslistingab.html
- ____ www.web.ca/acgc
- ____ www.ccic.ca
- ____ www.unep.org/tunza
- ____ www.makepovertyhistory.ca
- ____ www.acdi-cida.gc.ca
- ____ www.ilearn.org
- ____ Other