



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

Developing
Self-Esteem

Respecting
Diversity

Unit 10 BIG Feet—Lesson 3 Sharing Our Knowledge

Contributor

Tracy Lyons, Program Manager, The Society for Safe and Caring Schools and Communities, Edmonton, Alberta, Pembina Hills Regional Division No 7.

Unit Objective

Through various activities students will increase awareness and get a better understanding of how their actions (or inactions) may have a much greater effect on the larger world. Only through our awareness of the microsystem (ourselves) can we begin to positively affect the macrosystem (world).

Note: This unit should be introduced near the beginning of the school year, so students have an opportunity to affect change and share acquired knowledge with others over an extended period.

🕒 Time

This unit will take approximately two weeks to complete

Lesson 3 Sharing Our Knowledge

Objective

Through involvement in the process students will take ownership and responsibility toward teaching their peers and the larger school community about their new knowledge, skills and attitudes concerning global ecology. Students will create a brief (3-5 minute) presentation to share with the larger school community during an assembly.

Note: This objective also aligns with the Aboriginal Medicine Wheel and the four A's of Safe and Caring Schools and Communities: Attachment (belonging); Achievement (mastery); Autonomy (independence) and Altruism (generosity).

🕒 Time

This lesson will take approximately three or four class periods

✂️ Materials

- Simple props
- Student-created materials (for example, scripts, captions and so on.)
- Power point materials (computer, LCD, screen)
- Art paper, shading pencils, pastels and backdrop for art display
- Water Paint, roll of white banquet paper
- Student Handout 1
- Teacher Handout 1

Getting Started

Knowledge Now

Activity—Think-pair-share

- Students will refer back to their personal ecological graphs and the strategies they are using to reduce their footprint. Is it working? Do I need to alter my plan of action?
- Share thoughts with a partner.

Engaging Interest

- How can this class inform the rest of the school community about the importance of stepping lightly? What can we do as a class? As a school?
 - Brainstorm ideas as a whole class. Teacher will record onto white-board or chart paper.
 - Explain to the students that before the school community chooses to act, their curiosity and interest must be piqued. How can this be achieved?

Learning Activities

School-Wide Activity

All students in the school will take the Ecological Footprint Quiz (see URL under Supplementary Resources).

Note: All school personnel will have to be active in this project for it to work. A whole-school graph should be posted in a busy area. The results can be averaged and graphed showing each classroom (as opposed to individual students) thus creating an opportunity to work as a team. The school focus will be on stepping lightly. Depending on the size of the school, this activity could take a good deal of time. The original group of students who started this unit will be responsible for completing the school graph. If this is not possible (for any number of reasons), one of the teachers or support staff may volunteer for this role.

Activity—Planning for a Cross-Grade Peer Presentation

1. Wall Mural (to be set up in the gymnasium or where assemblies take place)

Students will begin planning the creation of a visual depicting the *average* number of earths' the school requires. They will use the information gathered from the Ecological Footprint Quiz. Students will also decide on a caption for the visual. Students with competency in this area will work together from the planning stage to the finished product. The teacher is addressing multiple intelligences.

2. Student Handout: Skits (attached)

- Students who are not involved in the mural creation will be placed into four groups: food footprint; goods and services footprint; shelter footprint, and mobility footprint. These headings are taken from the Ecological Footprint Quiz (see URL under Supplementary Resources).

Each group will write, plan, practise and present three-minute skits in front of the entire school during an assembly.

- Teacher Handout
Review Tableau and Reader's Theatre with students. They may choose to use these strategies in their performances (attached). Modelling and practising would help students feel more confident.
- Give a copy of the Student Handout (attached) to each student. While students are in their groups go, through the expectations. This is an excellent opportunity to ask questions, make suggestions and share ideas.

Assessment/Analysis

Reflective Writing Activity

Students reflect on their learning experience about this topic.

- What did we do—how did we learn and what made our learning important, interesting and meaningful

Application

- Students will continue monitoring their global footprint.
- Three minute skits during a school assembly.
- Survey your school. After the presentation(s) students perform and ask students how the school can become involved.
- When the data is gathered, invite the principal to a meeting. At this meeting, share the results with him or her. Submit a list of the possibilities for global responsibility and action.

Activities for Extension and/or Integration

- Division wide Global Footprint Challenge
- Write a letter to your MLA concerning Canada's responsibility and commitment to meet the Millennium Development Goals (see URL under Supplementary Resources)
- www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/REN-21813049-P72 CIDA website; Youth Zone—Climate Change. Individual students and/or the entire school could research the issue and find out: How can I get involved?
- www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/REN-218125537-Q2B CIDA website; Youth Zone – Water. Individual students and/or the entire school could research the issue and find out: How can I get involved?
- Only With Your Voice: Millennium Development Goals Youth Action Guide
http://tig.phpwebhosting.com/themes/mdg/en_action_guide_bw_tig.pdf

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:

- Demonstrate a critical understanding of 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"> • Group work • Think-pair-share 	<ul style="list-style-type: none"> • Problem solving • Metacognitive activity 	<ul style="list-style-type: none"> • Reader's theater • Tableau

Generalization and Transfer	Peer Teaching	Empathy/Affective Education	General Teaching Activities/Ideas
<ul style="list-style-type: none"> • Integrating experience and personal understanding with new information • Role play • Reinforcement • Writing letter to MLA 	<ul style="list-style-type: none"> • Group presentation at assembly (other students; multiple grades) 	<ul style="list-style-type: none"> • Reflective writing—journalling 	<ul style="list-style-type: none"> • Brainstorming • Mind mapping • Mural • Graphing

Supplementary Resources

List texts (provide complete bibliography), websites and other sources that support this lesson or unit plan.

- <http://ecofoot.org/> Earth day Network—Ecological Footprint Quiz
- www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/REN-21813049-P72 CIDA Youth Zone—Climate Change
- www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/REN-218125537-Q2B CIDA Youth Zone
- www.newdream.org/cnad/user/turn_the_tide.php Turn the Tide
- www.takingitglobal.org
- http://tig.phpwebhosting.com/themes/mdg/letter_to_parliamentarian_north.pdf Letter to MLA template

Tableaux

A tableau is a frozen picture. A tableau represents a group's interpretation of a particular moment in time or an abstract feeling or idea. Students collectively freeze in character while depicting a conflict, problem or issue. The tableau or picture tells a story and should provoke questioning for both participants and observers. The process of creating a tableau requires students to explore a conflict by exploring the roles that portray various characters' relationships. Students need to identify a crucial moment that shows all of the characters engaged in a problem or conflict. Observers can suggest what they think each character's inner thoughts might be at that moment. Technical tips—use an object to help students focus their thinking and explorations. To create a simple spotlight, cut a circle inside in the middle of a sheet of paper and lay it on an overhead projector. Focus the spotlight on the tableau. Tableaux are greatly enhanced when presented in a dark room using a spotlight.

Reader's Theatre

Reader's Theatre involves children in oral reading through reading parts in scripts. Unlike traditional theatre, the emphasis is mainly on oral expression of the part. Reader's Theatre is theatre of the imagination. It involves children in understanding their world, creating their own scripts, reading aloud, performing with a purpose, and bringing enjoyment to both themselves and their audiences. Reader's Theatre gives children a purpose for writing, for reading and for sharing their learning by bringing others into the joyful imagination space they create. Reader's Theatre succeeds in giving the same suggestive push to the imaginations in the audience that the act of silent reading gives to the imagination of the perceptive silent reader. It is a simple, effective and risk-free way to get children to enjoy reading. As children write, read, perform and interpret their roles they acquire a better understanding of the literature.

Skits
Based on *Our Ecological Footprint*

The purpose of these short skits is to share knowledge with your peers during an assembly. Your goal is to get your audience to connect with your message; to want to learn more; to want to become involved.

Each group must address these component parts. Some of you may see humour as a perfect vehicle to deliver your message while others will focus on the seriousness of the issue. There is no one right way to complete this assignment, although, ensuring that your audience gets the message is critical. Sometimes getting the message across requires comparing two unlike things. An example may be comparing your Food Footprint with the footprint of another person your age from a developing country. This is called superimposing ideas.

Length – three minutes

Script Writing—group responsibility. Each group member must take part in this activity. Prior to writing your script, spend time brainstorming and reviewing what you already know. Look at the information that has been collected.

Identify your message. What is it that you want your audience to know? What is it that you want your audience to do?

Narrator or characters? Will your group have one person telling the story while the rest perform? Will there be a combination?

Tableau and/or Reader's Theatre. Will your group incorporate tableau or reader's theater into your production?

Props/costumes—keep them simple!

Other?