

LESSON 10

CHAPTER 11 OPENER

WHAT DOES SUSTAINABILITY MEAN?

Students will explore various understandings of sustainability, as well as the relationship between sustainability and the ecological footprints of Canada and other countries.

ESTIMATED TIME: 75 minutes

CHAPTER-ISSUE QUESTION

To what extent does globalization affect sustainability?

INQUIRY QUESTION

What does sustainability mean?

GETTING READY

Photocopy reproducibles.

- Reproducible 3.11.1, Comparing the Ecological Footprints of Canada and Bangladesh
- Reproducible 3.11.2, What if Ecological Footprints Changed?

Create an overhead transparency or presentation slide of Figure 11.1 (p. 258, *Exploring Globalization*).

Book an overhead projector, or a computer, and screen.

Assemble coloured pencils or markers.

RESOURCES

Exploring Globalization, pages 258–263

ADDITIONAL RESOURCES

Check the McGraw-Hill Ryerson Online Teacher Centre — www.ExploringGlobalization.ca — to find out whether new resources have been posted to the site.

www.edwardburtynsky.com

Edward Burtynsky, whose photograph appears in Figure 11-1 (p. 258, *Exploring Globalization*) is an internationally acclaimed photographer who specializes in the impact of industrialization on the landscape and environment. His web site includes a large number of evocative images.

www.myfootprint.org

Earthday Network's web site includes a user-friendly online personal ecological footprint calculator. Earthday Network was founded by the organizers of the first Earth Day in 1970.

www.unesco.org/education/tlsf/index.htm

The UNESCO web site, Teaching and Learning for a Sustainable Future, offers extensive online materials for exploring sustainable development. The site is an initiative of the UN Decade of Education for Sustainable Development.

Manufactured Landscapes. National Film Board (2006, 90 minutes). Edward Burtynsky's photographic record of China's industrial revolution.

An Inconvenient Truth. Paramount Classics and Participant Productions (2006, 96 minutes). A film about Al Gore's crusade to halt global warming.

The Great Global Warming Swindle. Channel 4, Belfast, UK (2007, 73 minutes). Martin Durkin challenges the idea of global warming and presents a counterpoint to *An Inconvenient Truth*.

ASSESSMENT AND EVALUATION ACTIVITIES

You may formatively assess student participation and achievement in a variety of activities.

- participating in class discussions
- completing reproducibles

PRIOR LEARNING

This lesson builds on students' learning about the interconnections among the environment, globalization, and sustainability.

TEACHING AND LEARNING STRATEGIES

1. Display an overhead transparency or presentation slide of Figure 11-1 (p. 258, *Exploring Globalization*) so that students see it when they enter the classroom. Ask students what makes this a powerful photograph. What did the photographer do to make it memorable? What elements in the photograph make viewers want to know more of the story?

Read students the caption to the photo. Ask them what they think might be some of ship-breaking's severe effects on the environment and on the workers?

2. Ask a student to read the introduction on page 259. Before students respond to the questions on this page, ask them what people are involved in this shipbreaking process. Students will probably suggest the shipbreakers of Bangladesh. Ask students who else is involved in the shipbreaking process. Help them understand that the shipbuilders and the people who transport products on the ships are also part of the process, as are the people who work for the companies that make and sell products that are transported on the ships. Connect the process with students' lives. How do students also share in the process (they buy the products that are brought to Canada on such ships)?

Then ask students to respond to the questions on page 259. This exercise will help them understand the environmental and personal risks the shipbreakers take. Read students the inquiry questions in "Looking Ahead" and ask them to predict what they will be reading and learning about in this chapter.

3. Read the IQ that introduces this chapter — What does sustainability mean? (p. 260, *Exploring Globalization*). With students, brainstorm what they know about sustainability as they begin the chapter. Write their ideas on the chalkboard.

Ask students to name the various text and visual elements on pages 260–261 of *Exploring Globalization*. Students should mention the ecological footprint diagram (Figure 11-2), the bar graph (Figure 11-4) and pie graph (Figure 11-6), the table listing factors that affect city and individual footprints (Figure 11-3), the comparison chart (Figure 11-5), and the two photos that show the difference between rural life and city life in Bangladesh (Figure 11-7).

4. Assign students a partner and ask them to read page 260 of *Exploring Globalization*. Remind them to use all the visual elements to expand their understanding. Ask questions like the following:

- How does Figure 11-2 help you understand the significance of the bulleted list in the first paragraph?
- How does the listing of factors in Figure 11-3 help you connect the concept of ecological footprints with your own life?
- How does the bar graph in Figure 11-4 help you understand what your own ecological footprint is likely to be?
- Why do you think that Edmonton and Calgary have larger footprints than the other Canadian cities?

For the activity icon on page 260, instruct the pairs of students to compare their reasons with those of another pair of students. Encourage them to write quick notes on their conclusions.

5. Distribute Reproducible 3.11.1, Comparing the Ecological Footprints of Canada and Bangladesh. With their partners, ask students to read “Bangladesh’s Ecological Footprint” (p. 261, *Exploring Globalization*). They can use the reproducible to help them track the differences between Bangladesh and Canada and respond to the activity icon on this page. Encourage students to, once again, use the visuals on the page to help them explore. Ask them which difference in Figure 11-5 is the most significant from their point of view.
6. Instruct students to read “Global Perspectives on Ecological Footprints” on page 262 of *Exploring Globalization* and “The Resource Gap,” “Population Growth,” and “Consumption of Resources” on page 263. Their explanations should include the idea that North Americans make up a small portion of the global population but have extremely large ecological footprints, while most of the global population has, by comparison, remarkably small ecological footprints. Ask students if they think this situation is sustainable.

Distribute Reproducible 3.11.2, What if Ecological Footprints Changed? Draw students’ attention to Figure 11-8 and explain that this reproducible contains a copy of the graph without any colour coding. Ask volunteers to explain the graph in Figure 11-8. Tell students that they will use the reproducible to respond to the last question in the activity icon on page 262: What do you suppose would happen if the ecological footprint of the Asia Pacific region were as big as that of North America?

Students should first select their colours and fill in the bars and the legend on the reproducible. Then they should add to the height of the Asia Pacific bar to make it the same as the bar for North America. Once they complete their revised bar graph, organize a think-pair-share activity to help students answer the question. Encourage them to include concepts of resource gaps, population growth, and consumption of resources in their thinking and their discussions.

7. Ask a student volunteer to read aloud to the class “Making Choices: The Kogi — At the Heart of the World” (p. 262, *Exploring Globalization*). After the reading, encourage students to discuss the Kogis’ relationship to the land and the earth. Students will have various responses to the activities in “Explorations”, but they should include an awareness that the Kogi’s ecological footprint would be much smaller than that of the average Canadian. In response to Activity 2, students should show that they understand how dependent the Kogi are on their environment for their survival. For Activity 3, suggest to students that their topics should relate to the Kogis’ stated concern that those who are “killing” the world must find ways to repair it.

8. In response to “Reflect and Respond” on page 263 of *Exploring Globalization*, encourage students to think about the consequences of the “refuse” actions they could take. What effect would their refusals have on their quality of life, as well as on sustainability? If they include a refusal to use a particular natural resource, for example, they should understand the impact that refusal would have on their lives.
9. Remind students of the challenge for this related-issue — a persuasive essay that responds to the related-issue question: To what extent does globalization contribute to sustainable prosperity for all people? (pp. 212–213, *Exploring Globalization*). Encourage volunteers to suggest aspects of this lesson that might be useful in their essays. Give students time to add to the notes they are keeping as they progress through the related issue.

DIFFERENTIATING INSTRUCTION

1. Students who would like to see more of Edward Burtynsky’s photography can go online to Burtynsky’s web site. (see “Additional Resources”). Students could use the images found there to generate a short photo essay about the impact of globalization on sustainable development.
2. The task in “Reflect and Respond” (p. 263, *Exploring Globalization*) could be made into a visual and posted in the classroom, or it could be the basis for a school-wide campaign. Posters and announcements about the ideas of sustainability and stewardship could also be included.
3. Interested students can take the online Ecological Footprint Quiz at the Earthday Network (see “Additional Resources”). Students begin their online quiz by locating Canada on an interactive map of the world and then respond to questions. Their responses are ranked and they are given a score that tells them the impact of their ecological footprint.

LESSON 11

FOCUS ON SKILLS: ANALYZING RELATIONSHIPS IN GEOGRAPHY

HOW ARE GLOBALIZATION AND SUSTAINABILITY RELATED?

In the skill focus, students will learn how to analyze relationships in geography. They will also continue to explore ways that globalization affects sustainability as they investigate the impact of the global shipping and shipbreaking industries on people in various countries.

ESTIMATED TIME: 75 minutes

INQUIRY QUESTION

How are globalization and sustainability related?

GETTING READY

Photocopy reproducibles.

- Reproducible 3.11.3, Analyzing Relationships in Geography: Wood-Harvesting.
- Reproducible 3.11.4, Effects of Shipbuilding and Shipbreaking on Developing Countries
- Reproducible 3.11.5, Sustainability of the Shipping Industry

Create an overhead transparency or presentation slide of Figure 11-17 (p. 267, *Exploring Globalization*).

Book an overhead projector, or a computer, and screen.

Make sure a wall map of the world is available.

RESOURCES

Exploring Globalization, pages 264–271

ADDITIONAL RESOURCES

Check the McGraw-Hill Ryerson Online Teacher Centre — www.ExploringGlobalization.ca — to find out whether new resources have been posted to the site.

www.itfglobal.org/flags-convenience/index.cfm

The Flags of Convenience campaign, against the use of the practice, is sponsored by the International Transport Workers' Federation.

www.greenpeaceweb.org/shipbreak

Greenpeace's site on shipbreaking includes news reports, information on environmental campaigns, ships that are currently in the spotlight, and photos and videos.

ASSESSMENT AND EVALUATION ACTIVITIES

You may formatively assess student participation and achievement in a variety of activities. These may include

- completing reproducibles
- participating in activities and class discussions

PRIOR LEARNING

This lesson builds on students' understanding of the role of the shipping industry in expanding globalization.

TEACHING AND LEARNING STRATEGIES

1. Start the lesson by asking students to recall the responses they generated when asked to list “refuse” actions they could personally take that would contribute to sustainability (“Reflect and Respond,” p. 263, *Exploring Globalization*). Ask how many students included on their list at least one action that would help keep paper or paper products out of the local landfill. Let the class know that about 35 to 40 per cent, by volume, of Canadian landfills consists of paper and paper products.
2. With the class, turn to “Focus on Skills: Analyzing Relationships in Geography” (pp. 264–265, *Exploring Globalization*). Distribute Reproducible 3.11.3, Analyzing Relationships in Geography: Wood-Harvesting Methods.

Discuss with the class what it means to analyze a relationship. In this case, students are asked to analyze the relationship between forestry cutting methods and sustainability. They will need to focus on breaking down this relationship into its parts, examining the relationship critically and in detail, and paying close attention to its essential elements. Ensure that students understand the goal of analyzing relationships: to be able to draw conclusions and take appropriate action.

With students, read Step 1: Ask powerful research questions. Remind students that they were introduced to powerful questions in the prologue of *Exploring Globalization* (p. 8). Powerful questions should

- generate curiosity and encourage creativity
- be open-ended — they do not have one correct answer
- be thought-provoking, requiring people to make choices, decisions, and judgments
- lead to more questions

3. Instruct students to choose a partner — or assign partners. Tell each pair to complete Steps 2 through 5. As students begin, briefly review what they learned in the previous lesson about using charts, graphs, and photographs to increase understanding. They can apply this learning in Step 2.

More to the Story

The International Labour Organization calls shipbreaking one of the world’s most hazardous occupations. Shipbreakers work on beaches where the temperature reaches 40° C. Air pollution is a major problem. Workers are exposed to some very dangerous substances, including asbestos, PCBs (polychlorinated biphenyls), lead, and mercury. Workers have little protection when they use explosives or plasma and gas torches. They use cranes and lifting machines that have not been tested or are carrying loads that exceed their capacity. They usually do not have protective clothing, gloves, boots, or safety glasses. Many workers do not wear shoes, so they often suffer cuts from the small iron splinters that are left on shipbreaking beaches. Bangladesh, China, India, Pakistan, and Turkey are the world’s largest shipbreaking countries.

4. Draw students’ attention to the IQ that introduces this section — How are globalization and sustainability related? (p. 266, *Exploring Globalization*). Ask a volunteer to explain what sustainability means. Encourage students to share their ideas on connections between sustainability and globalization. Students may suggest that the ecological footprints of developed countries have become larger because of globalization (p. 260, *Exploring Globalization*). They may also recall that three of the top transnational corporations in 2005 were oil companies (p. 250,

Exploring Globalization), which use large tankers to transport their oil around the world.

Tell students that this lesson will deal with shipbreaking and sustainability, a subject they were introduced to in the opening photograph of Chapter 11.

5. With students, read page 266 of *Exploring Globalization*. Distribute Reproducible 3.11.4, Effects of Shipbuilding and Shipbreaking on Developing Countries. Tell students to use the section of the reproducible titled “Effects of Shipbuilding on Developing Countries” to begin responding to the activity icon on this page. Encourage them to add points to their organizer as they learn more about shipbuilding. Tell students that they will use the “Effects of Shipbreaking on Developing Countries” part of the reproducible later in this lesson.
6. Instruct students to read “Ships and the Environment” (p. 267, *Exploring Globalization*). Ask students what impact the activities described in this section have on the water in ports around the world. Why should students in Alberta, which has no such ports, be concerned about problems in the Great Lakes or at ocean ports? Help students move towards the understanding that being wise environmental stewards of Earth’s water benefits all people.
7. Tell students to continue reading page 167. When everyone has finished reading, display an overhead transparency or presentation slide of Figure 11-17. Ask students which are the four top countries that offer flags of convenience (Panama, Liberia, Malta, and Bermuda). Ask a volunteer to point out the countries on a wall map of the world. Encourage students to compare the number of ships owned and ships registered for these countries. Which countries have the greatest discrepancy between ships owned and ships registered? What do students think is the reason for the discrepancy?

More to the Story

Statistics on the Four Top Flags-of-Convenience Countries

Country	Population	Type of Government	Date of Independence	GDP per Person (U.S.\$)
Panama	3 242 173	constitutional democracy	1903	\$8 200.00
Liberia	3 195 931	republic	1847	\$900.00
Malta	401 880	republic	1964	\$21 000.00
The Bahamas	305 655	constitutional parliamentary democracy	1973	\$21 600.00

(Source: *The World Factbook 2007* (Washington, D.C.), Central Intelligence Agency.)

8. Ask volunteers to read aloud the paragraphs in the sections titled “Disposing of Old Ships,” “Death of a Ship,” and “Proposals to Improve the Sustainability of Shipbreaking” (pp. 268 and 270, *Exploring Globalization*). Ask the class to read the captions and view the photographs in Figures 11-19 and 11-20. Then ask questions such as
 - How does the practice described on these page influence your viewpoint about the recycling issues?

- What evidence of problems associated with shipbreaking do you see in the photographs?
- What complexities and challenges do current shipbreaking practices present to people who believe that recycling is necessary for sustainability?

Encourage students to return to Reproducible 3.11.4, *Effects of Shipbuilding and Shipbreaking on Developing Countries*, and complete the organizer by considering the effects of shipbreaking. You could set this up as a think-pair-share activity (see p. 61) so that students begin with their own thoughts but also have the opportunity to consider a variety of responses.

9. With students, read the introduction to “Points of View” (p. 269, *Exploring Globalization*). Ensure that they understand the issue involved. Then ask them to silently read the introductions to the words of the three speakers and their comments on the issue. As they read, suggest that they make quick notes on the challenges and opportunities that each speaker refers to.

In response to Activity 1 of “Explorations,” students should try to bring out both the action the speaker recommends and the complexities that he acknowledges would accompany that action. A summary of Rune Larsen’s statement, for example could be — Shipbreakers’ working conditions must improve, but someone must decide who will pay for those improvements. In responding to Activity 2, students should be able to support their response with a clear understanding of its effects on various stakeholders. For Activity 3, encourage students to look at broad solutions, such as changes to international labour laws and environmental laws.

10. Ask three volunteers to read Ling’s, Marie’s, and Tom’s comments in response to the question in “Ideas.” Pause after each reading and ask students how they know the position the speaker is taking on this question. Guide them to see that the first sentence in each comment states the speaker’s position clearly. Ask students how the speakers support their positions. What evidence do they offer in support of their position? How do their statements inform the reader of their position? Who are the stakeholders they identify?
11. Distribute Reproducible 3.11.5, *Sustainability of the Shipping Industry*. Suggest that students use their learning in this lesson — including their notes in Reproducible 3.11.4, *Effects of Shipbuilding and Shipbreaking on Developing Countries* — to develop their position on the question in “Reflect and Respond”. Is the shipping industry sustainable?

DIFFERENTIATING INSTRUCTION

1. The reproducibles provided in this lesson can be completed in small groups rather than pairs, or in pairs and small groups rather than by individuals. In addition you may plan for continuing assessment of students as they work alone, in pairs, and in small groups.
2. None of the individual activities in this lesson needs to be completed entirely. Students whose work is incomplete will still be thinking about this inquiry and will engage in reflection and metacognition.

Encourage students to identify elements from the chapter section studied in this lesson that they could use for this related issue’s challenge — writing a persuasive essay.

LESSON 12

HAVE EFFORTS TO PROMOTE SUSTAINABILITY BEEN SUCCESSFUL?

THINK . . . PARTICIPATE . . . RESEARCH . . . COMMUNICATE . . .

Students will expand their understanding of sustainability by evaluating the efforts of various groups to be sustainable. This lesson concludes with the end-of-chapter activities.

ESTIMATED TIME: 75 minutes

INQUIRY QUESTION

Have efforts to promote sustainability been successful?

GETTING READY

Assemble chart paper and coloured pencils or markers.

Collect current news reports that include various points of view and perspectives on the Kyoto Protocol and the Alberta tar sands (optional).

RESOURCES

Exploring Globalization, pages 272–277

ADDITIONAL RESOURCES

Check the McGraw-Hill Ryerson Online Teacher Centre — www.ExploringGlobalization.ca — to find out whether new resources have been posted to the site.

www.greenbeltmovement.org

The official web site of the Green Belt Movement begun by Wangari Maathai.

www.sustainabledevelopment.ca/index.php

The home page of the Sustainable Development Project at Cochrane High School in Alberta.

ASSESSMENT AND EVALUATION ACTIVITIES

You may formatively assess student participation and achievement in a variety of activities. These may include

- participating in class discussions and group activities

You may also wish to summatively assess selected activities and end-of-chapter activities. If you decide to do this, consider preparing an assessment rubric and distributing it to students so they know ahead of time how their work will be evaluated.

PRIOR LEARNING

Students' will draw on their previous learning about the relationship between the environment, globalization, and sustainability.

TEACHING AND LEARNING STRATEGIES

1. Read students the IQ that introduces this section — Have efforts to promote sustainability been successful (p. 272, *Exploring Globalization*)? Then lead the class in a brief discussion

based on students' understanding of the relationship between globalization and sustainability. Pose questions such as the following:

- Do you think that people around the world experience sustainability as a consequence of globalization?
 - What evidence would you use to support your position in response to the previous question?
 - What examples would you provide to show ways that globalization affects sustainability?
 - How would you change the forces of globalization so everyone could enjoy sustainable prosperity?
2. Divide the class into three groups. If your class is large, you could divide it into six groups and have two groups work on each of the following topics.
- The Kyoto Protocol (p. 272, *Exploring Globalization*)
 - Alberta Tar Sands (p. 273, *Exploring Globalization*)
 - Alternative Energy Sources (p. 274, *Exploring Globalization*)

Instruct students to read silently their appointed section of *Exploring Globalization*. When every member of the group has finished reading, instruct students to discuss whether the efforts to achieve sustainability described in their topic have been successful.

3. Distribute chart paper and coloured pencils or markers to each group. Direct group members to work together to create a visual that communicates the conclusion they reached about sustainability. The format of the visual may be predetermined by you, or the groups may select the type of visual they would like to construct. They may choose, for example, to make political cartoons to illustrate various aspects of their topic, or they may choose to make a series of mind maps.

In groups, students will present their visuals to the class and explain how their representations show their judgment about the Kyoto Protocol, Alberta tar sands, or alternative energy sources. In their explanations and in their visuals, students should address the problem, proposed solution, goals, actions, successes, and barriers.

4. Each group of students should also be prepared to lead the class through a discussion of the issues or questions posed in the activity icon that accompanies their topic. You may want to provide current news reports from various points of view and perspectives on the Kyoto Protocol and the Alberta tar sands for the groups who are responding to the activity icons for those two topics.

For those groups who are giving presentations on alternative energy sources, suggest that they could use earlier sections of the textbook as a resource. In exploring the last question of the activity icon on page 274 — In what ways do government policies affect the sustainability of globalization? — students have many sections to choose from. For example, “Identity and Some Political Dimensions of Globalization” (pp. 52–53); “Aung San Suu Kyi and Dictatorship in Myanmar (Burma)” (pp. 154–155); “How Effectively Have Governments Responded to the Legacies of Historical Globalization” (pp. 196–201); “The World Trade Organization” (p.244–245); and “The North American Free Trade Agreement” (p. 248).

5. With students, read page 275 of *Exploring Globalization*. Discuss with students other examples of individuals in the class, school, or community who provide examples of people who have successfully moved towards sustainability. When reading the profile on Wangari Maathai, pause to discuss the “power-of-one movement.” Many believe that once one person acts in a sustainable manner, others will follow. Ask students if they agree with this thinking and why.

6. Remind students of the challenge for this related issue — a persuasive essay that responds to the related issue question: To what extent does globalization contribute to sustainable prosperity for all people? (pp. 212–213, *Exploring Globalization*). Encourage volunteers to suggest aspects of this lesson that might be useful in their essays. Give students time to add to the notes they are keeping as they progress through the related issue.
7. Conclude the lesson by assigning one or more of the end-of-chapter activities (pp. 276–277, *Exploring Globalization*). Because the curriculum outcomes are visited and revisited many times throughout *Exploring Globalization*, it is not necessary for every student to complete every activity. You may wish to provide class time for students to complete the activities or assign them for homework.

DIFFERENTIATING INSTRUCTION

1. The visual presentation in this lesson is well-suited to students who are visual learners or who have artistic talent. Some students may prefer to complete the oral presentation component of the activity. Others may provide the group with written guidelines for the presentation to make sure all aspects are covered.
2. Students who wish to find out more about Wangari Maathai and the Green Belt movement may visit her web site (see “Additional Resources”).
3. Modify the end-of-chapter activities to accommodate students’ needs, interests, and abilities.

POSSIBLE ANSWERS TO “THINK . . . PARTICIPATE . . . RESEARCH . . . COMMUNICATE . . . ”

(pp. 276–277, *Exploring Globalization*)

Notes

1. No single correct answer should be expected when assessing students’ responses to the end-of-chapter activities. Though you may expect a wide range of responses, look for evidence that students are engaging in critical thinking and using criteria to make their judgments.
2. Because all curriculum outcomes are visited and revisited many times in the chapter and end-of-chapter activities, students should not be expected to complete every activity in “Think . . . Participate . . . Research . . . Communicate . . . ”

Answers

1. The question asked in this activity can be viewed as a “powerful research question” of the kind highlighted in Step 1 of “Focus on Skills: Analyzing Relationships in Geography” (p. 264, *Exploring Globalization*). Students’ research should be directed at different aspects and methods of shipping (Step 2). Look for a variety of sources and media. Students’ organizer (Step 3) could list the type or method of shipping in Column 1 and information on sustainability or non-sustainability in Columns 2 and 3. Students’ presentations should show evidence of identifying patterns and should have a clearly stated final position supported by evidence from research.
2. Encourage students to write reports from two distinct points of view. The facts and ideas in the report should relate directly to each point of view. Taken together, the two reports should reflect different points of view on sustainability. The extent of additional research expected

will depend on the time available to the student. Look for research from a variety of sources and media. Also, look for evidence of an awareness of the presence of bias in sources.

3. Encourage students to research a variety of sources. Remind students that they need to find out not only what the project is, but also how it is progressing. This may require using several sources for each project. Because some sources may be unusual (e.g. a personal communication), you may want to review the class citation styles with students.
4. a) Tell students that their presentation (written or oral) in this activity is essentially a short position paper, so students should include a clearly articulated position and a series of points and proofs that support their position. They should end their statement with a clear conclusion. You may also want them to include a summary of alternative viewpoints and a response to those viewpoints.

b) You may want to instruct students to answer this question separately, or you may want students to respond as if they were the politician in 4 a). In either case, tell students that the actions must be reasonably attainable by governments (as opposed to some other institution) and must be fully explained. Look for a recognition that the specific action is most appropriately carried out by government, as opposed to some other institutions.
5. You may want to provide students time to research Wangari Maathai. Encourage them to relate peace and sustainability in their responses. Did Maathai win the prize because the movement has spread to other countries? Is it because she believes that the Green Belt Movement is ultimately about the individual? Is it because of her impact on the politics of Kenya? More than one response is possible. Look for answers that show evidence of understanding the power of one and the importance of building strong communities as the basis for long-term sustainability and stewardship.
6. Remind students that their letters should clearly articulate the issue and the writer's position on the issue. Their position should be supported with relevant facts and should show a clear understanding of the economic and environmental costs and benefits of flagging out. As a writing exercise, you may want to ask students to share their letters for peer editing. Editors should look for clarity, succinctness, and appropriate style for a business letter.

LESSON 13

CHAPTER 12 OPENER

WHAT IS SUSTAINABLE PROSPERITY?

Students will suggest explanations for the concept of sustainable prosperity and explore the challenges in some of the ways that prosperity is measured.

ESTIMATED TIME: 75 minutes

CHAPTER ISSUE QUESTION

To what extent can globalization bring sustainable prosperity to all people?

INQUIRY QUESTION

What is sustainable prosperity?

GETTING READY

Photocopy reproducibles.

- Reproducible 3.12.1, What Is Sustainable Prosperity?
- Reproducible 3.12.2, Measures of Prosperity

Create overhead transparencies, or presentation slides of Figure 12-1 (p. 278, *Exploring Globalization*) and Figure 12-6 (p. 283).

Book an overhead projector, or a computer, and screen.

Have chart paper and markers available.

RESOURCES

Exploring Globalization, pages 278–285

ADDITIONAL RESOURCES

Check the McGraw-Hill Ryerson Online Teacher Centre — www.ExploringGlobalization.ca — to find out whether new resources have been posted to the site.

www.gov.ns.ca/legislature/legc/bills/60th_1st/1st_read/b146.htm

The Nova Scotia Environmental Goals and Sustainable Prosperity Act (introduced as Bill 146) is available at this Government of Nova Scotia web site.

www.afn.ca/article.asp?id=2844

“First Nations Water Initiative” is a policy paper at the Assembly of First Nations web site, with links to background on the issue, the scope of the work needed, and reports on the situation in 2006 and 2007.

www.undp.org

The home page of the United Nations Development Programme includes links to the annual Human Development Reports. These reports, which can be downloaded, include extensive statistics related to the human development index.

www.conferenceboard.ca/documents.asp?rnext=1793

The Conference Board of Canada’s briefing paper, “Sustainability: A Winning Merger of Growth and the Environment,” discusses where Canada is achieving sustainable development and how Canadians can do more.

<http://hdr.undp.org/water>

Water Rights and Wrongs is a young people's summary of the United Nations *Human Development Report 2006, Beyond Scarcity: Power, Poverty, and the Global Water Crisis*. The summary is co-produced by Peace Child International.

www.gpiatlantic.org/about.htm

GPIAtlantic is a Nova Scotia-based think tank that is working to develop the genuine progress index.

ASSESSMENT AND EVALUATION ACTIVITIES

You may formatively assess students' participation in a variety of activities in this lesson. These may include

- participating in small-group activities and class discussions
- completing Reproducible 3.12.2, Measures of Prosperity

PRIOR LEARNING

This lesson builds on students' understanding of the connections between globalization, prosperity, and sustainability.

TEACHING AND LEARNING STRATEGIES

1. Open the lesson by displaying an overhead transparency or presentation slide of Figure 12-1 (p. 278, *Exploring Globalization*). Read the caption to students and ask them the following questions:
 - How would your life be different if you were one of the young women carrying water in Kenya?
 - How would the difference affect your future prosperity — your economic future?
 - What would prosperity mean to you if you were one of those young women?

Then read the introduction to the chapter on page 279. Instruct students to turn to page 158 of *Exploring Globalization* and to locate Kenya on the map of Africa in Figure 6-25, Africa, 2006. If you wish to link the discussion to legacies of historical globalization, you could also ask students to turn to page 140 and locate the area that became Kenya on the map in Figure 8-4, European Imperial Rule in Africa, 1914 (Kenya was British East Africa).

Discuss with students the questions on page 279. Encourage students to look beyond the photographs to the lives and economic circumstances of the young women and to their prospects for the future.

Draw students' attention to "My Point of View on Globalization" (p. 279, *Exploring Globalization*) and remind them to record their comments. Encourage volunteers to identify whether, how, and why their point of view has changed.

2. Draw students' attention to the IQ — What is sustainable prosperity? — at the top of page 280 of *Exploring Globalization*. Briefly discuss their preliminary responses to the question. Remind them of the related issue for this section of the course: To what extent does globalization contribute to sustainable prosperity for all people?

With students, read the page, including the two "Voices" quotations from Benjamin William Mkapa of Tanzania and Peter Ellyard of the United Nations. Pause and ask students to respond to the questions at the end of the first paragraph.

Distribute Reproducible 3.12.1, *What Is Sustainable Prosperity?* Explain to students that they can use this reproducible to respond to the activity icon on page 280. Instruct them to date their first explanation of the concept and tell them they will be revising their explanation several times during the lessons for this chapter. Suggest that, for their first explanation, they consider the viewpoints and perspectives they have encountered so far, including the “Voices” and the caption to Figure 12-2.

Tell students that their growing understanding of the issues involved in the question — *What is sustainable prosperity?* — will help them plan the persuasive essay that is the challenge for Related Issue 3 (pp. 212–213, *Exploring Globalization*).

3. Ask students to read “Sustainable Prosperity and Global Interdependence” (p. 281, *Exploring Globalization*). Direct students’ attention to the activity icon on this page. Arrange students in groups of four. Distribute chart paper to each group for students to use to prepare their organizers. (You may wish to refer students to page 143 of *Exploring Globalization* for an example of a cause-and-effect organizer.) Remind students to include the social, political, and environmental repercussions of the plant closings. When the diagrams are complete, post them around the classroom. Discuss with students the situation they have described in their cause-and-effect diagrams.
4. Refer students to “Ideas” on page 281 of *Exploring Globalization*. Invite volunteers to read aloud the opinions expressed by Katerina, Ling, and Deven. After each opinion is read, ask students how each speaker has connected the “Ideas” question with his or her own life. Katerina, for example, tells the story of her uncle in Leaf Rapids, a town that has banned the use of plastic bags. Before students respond to the “Your Turn” questions, ask them to think about links they could make to their own experience and the issues that those links might raise. Do they know of examples of positive change? What are some likely effects of the recommended change? Who would be affected by the change? How is the change related to quality of life, stewardship, and sustainability?
5. Ask students what criteria they would use to measure prosperity. As they respond, record their criteria on the chalkboard. Tell students they will return to this list when they complete “Reflect and Respond” (p. 285, *Exploring Globalization*). With students, read the opening paragraph of “Measures of Prosperity” (p. 282, *Exploring Globalization*). Pause to respond to any questions students may have.

Distribute Reproducible 3.12.2, *Measures of Prosperity*, and tell students they can use this reproducible to track their viewpoints on the different measures of prosperity discussed on pages 282 to 285 of *Exploring Globalization*.

Instruct students to read “Gross Domestic Product as a Measure of Prosperity” (p. 282) including Figure 12-4. Ask what is the difference between GDP per person in Canada and in Kenya. How might that discrepancy help explain the difference between the lives of the young women in the two photographs that open Chapter 12? With students, do the calculations in the activity icon on this page. The president earns \$7 000 000 and all the 100 workers combined earn \$3 500 000. The average wage of the 101 people would be \$103 960.00. How would the difference between the real wage and the average wage affect the workers, lives and their prosperity? How would the method of calculation distort GDP measures?

6. Ask students to read the rest of pages 282 and 283. Then form students into small groups and instruct the groups to suggest responses to the activity icon at the bottom of page 282.

Encourage students to keep in mind the three specific categories on which the HDI calculations are based — you may want to pause to discuss the categories further. Why, for example, do students think longevity is one of the categories? What does literacy have to do with prosperity?

When they have completed the activity, ask a volunteer from each group to summarize the group's responses. In 2006, the countries ranked between Norway and Canada were Iceland (2), Australia (3), Ireland (4), and Sweden (5).

7. Ask students to look again at the statistics for various countries in Figure 12-5 (p. 283, *Exploring Globalization*). What is the relationship among those numbers? What human stories do the statistics and the relationship among the statistics tell? In Figure 12-1, for example, students were introduced to the three young women carrying water in Kenya. How does knowing the life expectancy and the adult literacy rate in Kenya help students better understand the young Kenyans' situation and opportunities to enjoy prosperity?
8. Display an overhead transparency or presentation slide of Figure 12-6 (p. 283, *Exploring Globalization*). Invite a volunteer to read "Voices" (p. 283). Point out that the data for Canada's Aboriginal people shown in Figure 12-6 is for registered Indians only and does not include off-reserve or non-status Indians. Ask students to suggest what circumstances might account for the gap between the two lines on the graph. What legacies of historical globalization contributed to the gap? Ask them to comment on the trends since 1980.
9. Ask students why access to clean water is important to human development and sustainable prosperity. Once again, Figure 12-1 should help students respond to this question. Tell students to read the three comments in "Points of View" (p. 284, *Exploring Globalization*). Ask students to describe in their own words the essential message of each speaker. They may suggest that Jeff Parker sees the availability of clean water to be problematic, particularly for developing countries; Phil Fontaine says that the lack of availability of clean water for Canada's First Nations is unacceptable; and Marq de Villiers believes that global water resources are being managed poorly and that people are indifferent to the consequences of these actions.
Tell students to use Reproducible 3.12.1, *What Is Sustainable Prosperity?* to write their response to "Explorations" Activity 1. How does their current description differ from their earlier one? Suggest to students that in responding to Activity 2 they refer to the discussion in Step 8 of this lesson.
10. Ask students to complete Reproducible 3.12.2, *Measures of Prosperity*, before they respond to "Reflect and Respond" on page 285 of *Exploring Globalization*.

After they have completed this activity, ask them to compare the list of criteria that they created in Step 5 with the list they have prepared for "Reflect and Respond." Ask students if any of the criteria on their two lists are similar. If they have changed, why have they changed?

DIFFERENTIATING INSTRUCTION

1. When completing the readings in this lesson, some students may benefit from working with a partner who is a more proficient reader. The two might read the sections aloud together, with the more proficient reader taking the lead.
2. Students may wish to explore further the Assembly of First Nations' efforts to clean up the water systems in First Nations communities. They could present the results of their research in writing or orally to the class. Students could use the Assembly of First Nations "First Nations Water Initiative" policy paper to begin their research (see "Additional Resources" at the beginning of this lesson).

LESSON 14

WHAT POLITICAL AND ECONOMIC CHALLENGES AND OPPORTUNITIES ARE ASSOCIATED WITH GLOBALIZATION?

FOCUS ON SKILLS: WRITING FOR DIFFERENT PURPOSES AND AUDIENCES

Students will expand their understanding of the challenges and opportunities in trying to achieve sustainable prosperity for all people in a globalizing world. The skill focus — writing for different purposes and audiences — provides students with a series of steps to follow when planning a position paper on an issue.

ESTIMATED TIME: 75 minutes

INQUIRY QUESTION

What political and economic challenges and opportunities are associated with globalization?

GETTING READY

Photocopy reproducibles.

- Reproducible 3.12.3, Economic Growth and Sustainable Prosperity
- Reproducible 3.12.4, Writing for Different Purposes and Audiences
- Reproducible 3.12.5, Groups for Whom Globalization Offers Challenges and Opportunities

Create an overhead transparency or presentation slide of Reproducible 3.12.3, Economic Growth and Sustainable Prosperity.

Book an overhead projector, or computer, and screen.

RESOURCES

Exploring Globalization, pages 286–293

ADDITIONAL RESOURCES

Check the McGraw-Hill Ryerson Online Teacher Centre — www.ExploringGlobalization.ca — to find out whether new resources have been posted to the site.

www.cbc.ca/news/features/water

This page links to a number of radio interviews — audio and transcript — from *Water for Profit*, a 2003 CBC Radio series on water privatization. The page also includes links to other CBC resources on the larger issue of water.

www.nfb.ca/collection/films/fiche/?lg=en&id=54351&v=h

The National Film Board documentary *Dead in the Water* examines water privatization in an era of declining access to clean water.

ASSESSMENT AND EVALUATION ACTIVITIES

You may formatively assess students' participation in a variety of activities in this lesson. These may include

- completing reproducibles
- participating in small-group activities and class discussions

PRIOR LEARNING

This lesson builds on a variety of concepts introduced in earlier lessons, including sustainable prosperity, trade liberalization, and the economic theories of Friedrich Hayek and Milton Friedman.

TEACHING AND LEARNING STRATEGIES

1. To begin the lesson, revisit with students the difference between a market economy (little government involvement in the economy) and interventionist economic policies (increasing government participation in economic activity). Ask the class which approach best meets the needs of citizens, based on their current knowledge. Have recent lessons deepened or changed their point of view? Tell students that this lesson will explore the challenges and opportunities associated with globalization. They will be able to gather information and ideas relevant to the challenge of writing a persuasive essay in response to Related Issue 3: To what extent does globalization contribute to sustainable prosperity for all people? (pp. 212–213, *Exploring Globalization*).
2. With the class, read the first two paragraphs in the section titled “What Political and Economic Challenges and Opportunities Are Associated with Globalization?” (p. 286, *Exploring Globalization*). Remind students about Friedrich Hayek and Milton Friedman’s ideas and their influence on the movement towards a market economy (Chapter 9, pp. 227 and 231, *Exploring Globalization*).

Discuss with students the extent to which they think governments should let their countries’ economies expand without exerting control. Do students think that expanding economies will eventually lead to sustainable prosperity for all people? Should governments have a role in controlling their economies, in the interests of their citizens? Will expanding free market economies result in prosperity for all people? Will that prosperity be sustainable?

3. With students, read the section titled “Economic Growth and Sustainable Prosperity” (p. 286, *Exploring Globalization*). Tell them that they will be learning more about the elements in the “fuel blend” in Figure 12-9 — foreign investment, privatization, trade liberalization, and the knowledge economy — during this lesson. Remind students that they learned about outsourcing in Chapter 10 (p. 238) and read about some of its effects on the people of Salaberry-de-Valleyfield earlier in Chapter 12 (p. 281).
4. Display an overhead transparency of Reproducible 3.12.3, Economic Growth and Sustainable Prosperity, and distribute copies of this reproducible. Review the questions in the first column to ensure that students understand what they are being asked. Explain that they will jot notes in response to these questions as they explore economic growth and how it affects sustainable prosperity for all people.

Organize a jigsaw activity (see p. 61) to help students explore how economic growth presents challenges and opportunities to people around the world. Form students into small groups that will become their home groups. Assign each student in the home group the number 1, 2, 3, or 4 to identify the expert group the student will join. Members of Group 1 will become experts on trade liberalization and its effects on sustainable prosperity (p. 287); members of Group 2 will become experts on the knowledge economy and its effects on sustainable prosperity (p. 290); members of Group 3 will become experts on privatization and its effects on sustainable prosperity (pp. 291–292); and Group 4 will become experts on foreign investment and its effects on sustainable prosperity (pp. 292–293).

Instruct members of each expert group to read their assigned section of the textbook, to discuss the information, and to work together to fill in the appropriate column of the reproducible. Remind students to check the visuals and margin features for additional information. But tell students not to respond to the activity icons on pages 287 and 291; they will complete those later in the lesson.

Tell students to return to their home groups and share their information with other home-group members. As they do this, the other group members should record the information in the blank sections of their charts. When this stage of the activity concludes, all students' charts should be filled in completely. With the class, briefly review the notes they recorded.

Return to students' earlier predictions (see Step 2) about how economic growth affects sustainable prosperity for all people and compare their predictions with the notes they have made. Discuss why people have different points of view and perspectives on whether economic growth will provide sustainable prosperity for all people.

5. Draw students' attention to the activity icon on page 287. Students will have various opinions about the challenges governments face and about farm subsidies, but their responses should show that they understand the interconnections between government decisions, the food that students eat, and the farmers who produce that food.

Instruct students to use their copy of Reproducible 3.12.1, *What Is Sustainable Prosperity?* to revisit and revise their explanation of that concept.

6. Draw students' attention to the skill focus on pages 288 and 289 of *Exploring Globalization* and read the introduction aloud. Ask students what they know about analyzing their purpose and audience before they write. Ask them which writers in the "Voices" and "Points of View" features in the textbook seemed to have a clear purpose and audience in mind.

Distribute Reproducible 3.12.4, *Writing for Different Purposes and Audiences*, and divide the class into small groups. Review Step 1 with students to ensure that they understand the role they are to take and the kind of position paper they are asked to plan.

Help students understand the benefits of asking themselves the questions in Step 2. Why do these questions matter?

- The audience's views on the issue matter because, as the writer, you have to address those views.
- As a writer, you need to have a sense of how much your readers know so that you can give them enough background to be able to understand and appreciate your viewpoint.
- Your supporting evidence has to be such that it will be convincing to this audience, who will need to trust your sources.
- If you can find common concerns and common ground, then perhaps you can propose a solution that will resolve common problems.

Instruct students to complete the steps in the skill focus and Reproducible 3.12.4, *Writing for Different Purposes and Audiences*.

7. Distribute Reproducible 3.12.5, *Groups for Whom Globalization Offers Challenges and Opportunities*. Instruct students to use this reproducible to complete the first part of "Reflect and Respond" on page 293 of *Exploring Globalization*. For the second part of this activity, tell students to choose a partner, compare their chart with their partner's, and then finish the activity as directed.

8. Draw students' attention to "Think about Your Challenge" on page 299 of *Exploring Globalization*, which reminds students of the essay they are preparing (pp. 212–213, *Exploring Globalization*).

Ask volunteers to offer ideas discussed during today's lesson and to suggest how they might be useful in their essays. Allow students a few minutes to make any changes or to add new ideas and information to the notes they are making in preparation for the challenge.

DIFFERENTIATING INSTRUCTION

1. None of the individual activities in this lesson needs to be completed entirely. Students whose work is incomplete will still be thinking about this inquiry and will engage in self-reflection and metacognition.

Encourage students to identify elements from the chapter section studied in this lesson that they could use for this related issue's challenge — writing a persuasive essay.

2. Interested students may want to conduct further research on the knowledge economy and new technologies. They could present "A Day in the Life" of someone who works in this sector and uses these technologies 20 or 50 years in the future. The presentation could be graphic or oral or computer-based.
3. Students who wish to know more about water privatization could start with the web sites in "Additional Resources" and present a position paper on this issue.

LESSON 15

WHAT CHOICES ARE ASSOCIATED WITH SUSTAINABLE PROSPERITY?

THINK . . . PARTICIPATE . . . RESEARCH . . . COMMUNICATE . . .

By investigating the millennium development goals, global climate change, and changing government policies, students will explore some challenges and opportunities faced by people who are trying to ensure that all people enjoy sustainable prosperity. The lesson concludes with end-of-chapter activities.

ESTIMATED TIME: 75 minutes

INQUIRY QUESTION

What choices are associated with sustainable prosperity?

GETTING READY

Photocopy reproducibles.

- Reproducible 3.12.6, HDI Scores and Carbon Dioxide Emissions for Selected Countries
- Reproducible 3.12.7, Questions to Albertans on Shaping a Provincial Climate Change Action Plan
- Reproducible 3.12.8, Comparing the Needs of Kenyan and Canadian Teenagers (optional)

Create an overhead transparency or presentation slide of Figure 12-17 (p. 294, *Exploring Globalization*).

Book an overhead projector, or a computer, and screen.

Assemble sheets of chart paper.

RESOURCES

Exploring Globalization, pages 294–299

ADDITIONAL RESOURCES

Check the McGraw-Hill Ryerson Online Teacher Centre — www.ExploringGlobalization.ca — to find out whether new resources have been posted to the site.

www.earthinstitute.columbia.edu/about/director/index.html

The web site of the Earth Institute at Columbia University contains a biography of its director, Professor Jeffrey Sachs, and links to several relevant video and audio clips.

www.croptrust.org/main/arctic.php?itemid=211

The web site for the Global Crop Diversity Trust has a link to a page that describes the Svalbard Global Seed Vault, including several photos of the tunnel to the vault as it was being built.

www.un.org/millenniumgoals

On this page, you will find a link to *The Millennium Development Goals Report 2007*. There is also a variety of other useful links to UN sites.

www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/JUD-13173118-GPM

The federally-funded Canadian International Development Agency offers the official view of Canada's work toward achieving the millennium development goals.

www.mcdonough.com/full.htm

William McDonough's web site has an extensive archive of his speeches and books. McDonough and some of his work are discussed in the profile on page 297 of *Exploring Globalization*.

www.ipcc.ch

The Intergovernmental Panel on Climate Change was established by the World Meteorological Organization and the United Nations Environment Programme in 1988.

www3.gov.ab.ca/env/climate

"Albertans and Climate Change" is the Alberta government site that solicited feedback from citizens on how the province should update its climate change action plan.

www.cia.gov/library/publications/the-world-factbook

The World Factbook, produced by the CIA, has detailed entries on the geography, people, government, economy, communications, transportations, military, and transnational issues for every country.

Sachs, Jeffrey D. *The End of Poverty: Economic Possibilities for Our Time*. (New York: Penguin Group, 2005).

Professor Sachs' outline of a plan for reducing poverty is discussed on page 294 of *Exploring Globalization*.

ASSESSMENT AND EVALUATION ACTIVITIES

You may formatively assess students' participation in a variety of activities in this lesson. These may include

- participating in small-group activities and class discussions
- completing reproducibles

You may also wish to summatively assess selected activities and end-of-chapter activities. If you decide to do this, consider preparing an assessment rubric and distributing it to students so they know ahead of time how their work will be evaluated.

PRIOR LEARNING

This lesson builds on and expands the concept of sustainable prosperity and how it might be achieved by all people.

TEACHING AND LEARNING STRATEGIES

1. Ask volunteers to share the explanations of sustainable prosperity that they have been revising on Reproducible 3.12.1, What Is Sustainable Prosperity? How has their understanding of the concept changed since they wrote their first entry at the beginning of Chapter 12?

With students, read the IQ — What choices are associated with sustainable prosperity? (p. 294, *Exploring Globalization*). Ask students why they think the word "choices" is used in this inquiry question. What do choices have to do with sustainable prosperity? How can people choose sustainable prosperity?

Ask students to read page 294 silently. Direct their attention to the bar chart in Figure 12-16. Ask them the following questions:

- Which regions of the world have the largest proportion of people living on \$1 a day? (Sub-Saharan Africa)

- Which regions have seen the greatest decrease in people living on less than \$1 a day? (Eastern Asia and Southeastern Asia and Oceania)
- Which regions of the world are not represented in the bar chart? (North America) Why?

Then draw students' attention to the first activity icon on page 294. Brainstorm, with students, lists of purchases. Help them calculate items such as shelter, food, clothing, etc. Work together to estimate daily average spending. Ask them to consider what it would be like to live on \$1 a day.

2. Review, with students, Jeffrey Sachs' plan for managing challenges faced by people who are trying to reduce poverty in their country (p. 294, *Exploring Globalization*). Ask students what the various bulleted points of his plan mean and why they are important.

- Why would it be important for the people who live in affected communities to decide what should be done about their situation?
- What kind of training would people need? Why should such training be on the local as well as the national level?
- How could people use information technologies to end poverty in their communities?
- Why would benchmarks matter? Why do they need to be measurable? What benefits would measurable benchmarks offer?
- Why should there be stringent rules about auditing?
- How would budgets and plans to monitor programs work? Why would evaluation be important?

3. Display an overhead transparency or projection slide of Figure 12-17 (p. 294, *Exploring Globalization*). Ask students to suggest how each of these millennium development goals might be achieved. What challenges face people who are trying to achieve the millennium goals? What opportunities?

Ask students to choose a partner — or assign partners. Instruct students to work with their partner to respond to the activity icon at the bottom of page 294. Then ask the partners to share their thoughts with another pair of students.

4. Tell students to form groups of two or three — or assign students to groups. Instruct the groups to read pages 295 and 296 as far as “Changing Government Policies.” Ask them to discuss the following questions amongst themselves:

- Has there been a change in the climate where you live?
- Are people in your community concerned about climate change?
- What do you think should be done about climate change?
- What could you do in your school or in your community to lessen its impact?
- Why are issues involving climate change so hard to resolve?

Give the groups about five minutes to discuss the questions. When the time is up, encourage volunteers to share the results of the discussion.

5. Direct students to remain in their groups. Tell students to respond to the activity icon on page 296 with quick notes. In response to the question about relationships students might suggest the industries located in these countries and the importance of those industries to the economies of the United States, Saudi Arabia, China, and India.

Distribute Reproducible 3.12.6, HDI Scores and Carbon Dioxide Emissions for Selected Countries. Remind students that they were introduced to the statistics in this chart earlier in

Chapter 12 (p. 283). Instruct students to add the statistics from Figure 12-19 in the appropriate columns of the reproducible. Once they've completed the chart, tell them to revisit their earlier responses to the questions in the activity icon. What relationships do they see among GDP, life expectancy, adult literacy rate, and CO₂ emissions? What do those relationships mean in terms of the countries that contribute most to climate change?

6. Read aloud the opening paragraph of "Changing Government Policies" (p. 296, *Exploring Globalization*). Before students read "Bolivia," ask them what they have learned about the global water crisis in this chapter — for example, Figure 12-1 (p. 278), "Human Development and Access to Clean Water" (p. 283), "Points of View" (p. 284), and "Privatizing Water" (p. 292). Then instruct students to read "Bolivia" and respond to the questions at the end of the second paragraph.
7. Instruct students to read the rest of pages 296 and 297. When students are finished reading, ask them to consider how the policies of the governments of Bolivia, Norway, and Alberta represent choices associated with sustainable prosperity.
Distribute Reproducible 3.12.7, Questions to Albertans on Shaping a Provincial Climate Change Action Plan, and ask students to decide how they would respond to the survey's questions.
8. Focus students' attention on the profile of William McDonough (p. 297, *Exploring Globalization*). Ask students what they think is meant by "zero pollution and total recycling."
When students have finished reading, divide the class into small groups. Distribute sheets of chart paper to each group. Ask students to brainstorm ideas for how buildings and homes might be designed to reduce pollution and promote recycling and to jot their ideas on the chart paper. Encourage students to be creative with their ideas. When students have completed their lists, post them in the classroom and discuss the lists with the class.
9. Conclude the lesson by assigning one or more of the end-of-chapter activities on pages 298–299 of *Exploring Globalization*. Because curriculum outcomes are visited and revisited many times throughout *Exploring Globalization*, it is not necessary for every student to complete every activity. You may wish to provide class time for students to complete the activities or assign them for homework.
10. Draw students' attention to "Think about Your Challenge" on page 299 of *Exploring Globalization*, which reminds students of the essay they are preparing (pp. 212–213, *Exploring Globalization*). Ask volunteers to offer ideas discussed during today's lesson and to suggest how they might be useful in their essays. Allow students a few minutes to update the notes they are making in preparation for the challenge.

DIFFERENTIATING INSTRUCTION

1. When assigning end-of-chapter activities, consider students' learning styles and match the activities to these. You may wish to pair a struggling student with a more proficient one when you assign Activity 4.
2. Some students may want to visit the Albertans Climate Change web site to find out about Albertans' responses to the government's online survey and draft climate change plan (see "Additional Resources" for this lesson).
3. Suggest students conduct further research into William McDonough's design for the roof of the Ford Rouge Center truck factory and present the results of their research to the class.

Students may wish to begin their research with a visit to William McDonough's web site (see "Additional Resources" for this lesson).

4. Interested students may wish to research some of the other activities of the Intergovernmental Panel on Climate Change (see "Additional Resources" for this lesson). They may present the results of their research in writing or orally to the class.

POSSIBLE ANSWERS TO "THINK . . . PARTICIPATE . . . RESEARCH . . . COMMUNICATE . . ."

(pp. 298–299, *Exploring Globalization*)

Notes

1. No single correct answer should be expected when assessing students' responses to the end-of-chapter activities. Though you may expect a wide range of responses, look for evidence that students are engaging in critical thinking and using criteria to make their judgments.
2. Because all curriculum outcomes are visited and revisited many times in the chapter and end-of-chapter activities, students should not be expected to complete every activity in "Think . . . Participate . . . Research . . . Communicate . . ."

Answers

1. a) Students can use Reproducible 3.12.1, *What Is Sustainable Prosperity?* to complete this activity. Because their entries on the reproducible are dated, they should be able to see how their understanding of the concept has evolved throughout the chapter and how they have reached their current understanding. Look for responses that show reflection and evolution in thinking. While specific references and long descriptions are not required, look for the use of data to support students' point of view.
 - b) In addition to the possibilities mentioned, students may choose to prepare a plan for a billboard for the front hall or gallery of the school, a small exhibit for a display case, or a flyer for a protest rally. Look for clear connections between message, medium, purpose, and audience.
 - c) Students' explanations should discuss the reasons the particular medium was selected and how the medium strengthened the message for the intended audience. The message should be clearly stated.
2. a) Completed responses should include an explicit connection between water and sustainable prosperity. For example, a statement of the importance of clean water should state how clean water makes sustainability possible and polluted water does not. Students should show that they recognize the complexity of protecting the water supply.
 - b) You may want to provide additional research time for this activity. If so, U.S. Central Intelligence Agency's *World Factbook* has reliable short country summaries that would likely be adequate for this purpose. See the "Additional Resources" for this lesson. Students' responses should address the specifics of the carbon emissions data. Responses should reflect the views of the farmer and politician rather than those of the student. The goal is to encourage students to see these issues from different points of view and perspectives.
3. a) Remind students that while people in Kenya may not have access to the goods and services of the developed world, they are likely aware that those goods and services exist. Encourage students to consider how difficult access to the necessities of life and the health of the family and community can become in some parts of the developing world.

- b) Distribute Reproducible 3.12.8, Comparing the Needs of Kenyan and Canadian Teenagers. Encourage students to include needs which reference economic, environmental, and social aspects of life. Students should identify that some, if not most, basic needs are much more difficult to attain in Kenya. Look for answers that suggest why this is so. Students should be able to recognize that the different needs reflect differing cultures, values, and aspirations as well as different levels of economic development.
- c) Draw students' attention to the fact that this activity is asking about *sustainable* prosperity not just prosperity. Look for answers that make use of the chart and analysis in parts a) and b) of this activity.
4. You will need to decide the scale of this assignment. Alert students to the manner in which the activity lays out the assignment in a step-by-step process. Consider brainstorming a partial checklist with the whole class, leaving the groups to complete and refine the list. Discuss the need for measurable criteria. Ensure that students follow the instructions and complete each step before moving on to the next.
 5. Before beginning to write, students should work independently to summarize and show their understanding of the original text. With a partner, students could work collaboratively to write the additional verses. If students are uncomfortable with presenting in class, their verses can be posted in the classroom.

LESSON 16

YOUR CHALLENGE PRESENTATIONS

The challenge for Related Issue 3 requires students to prepare and present a persuasive essay in response to the related-issue question: To what extent does globalization contribute to sustainable prosperity for all people? (pp. 212–213, *Exploring Globalization*). This lesson provides students with an opportunity to present their essays, the ideas behind them, and the factors that influenced their conclusions. If more time is needed, allocate a second or third period.

ESTIMATED TIME REQUIRED: 75 minutes

RELATED-ISSUE QUESTION

To what extent does globalization contribute to sustainable prosperity for all people?

GETTING READY

Photocopy additional copies of reproducibles

- Reproducible 3.9.3, Your Challenge 3 — Checklist for Success
- Reproducible 3.9.4, Your Challenge 3 — Evaluation Rubric

Prepare an overhead transparency or presentation slide of Reproducible 3.9.4, Your Challenge 3 — Evaluation Rubric.

RESOURCES

Exploring Globalization, pages 210–299

ADDITIONAL RESOURCES

Check the McGraw-Hill Ryerson Online Teacher Centre — www.ExploringGlobalization.ca — to find out whether new resources have been posted to the site.

ASSESSMENT AND EVALUATION ACTIVITIES

You will evaluate students' essays using Reproducible 3.9.4, Your Challenge 3 — Evaluation Rubric. You may also wish to incorporate peer feedback into your evaluation. Follow up by providing specific feedback to individual students on how they could improve their research, writing, and organization skills.

You may also wish to provide students with an opportunity to assess, and learn from, the work of their peers by encouraging them to comment on one another's work using Reproducible 3.9.3, Your Challenge 3 — Checklist for Success.

TEACHING AND LEARNING STRATEGIES

Notes: Each of the following strategies can be used independently or in conjunction with one or more of the others. No matter which strategies you use, you should read and respond to each completed essay.

You may ask students to submit their rough notes and their completed rubric detailing their steps to success along with their essays.

1. Display an overhead transparency or presentation slide of Reproducible 3.9.4, Your Challenge 3 — Evaluation Rubric. Focus students' attention on the first section, which is

titled “Knowledge and Understanding.” Explain that you will use this rubric to evaluate their essays. Ask students to read silently the categories and the criteria for evaluating each level of achievement.

When students finish reading, ask if they have questions about the criteria. If students ask, for example, about the difference between proficient and excellent, suggest that the differences would involve the number of examples presented, the breadth and depth of explanations offered, and the number of connections shown; in other words, the difference between the levels is one of degree.

2. Tell students to choose a partner — or assign partners. Instruct one partner to read his or her essay to the other while the other uses the rubric as a guide for offering assessment and feedback. Then tell partners to reverse their roles.

When this activity is complete, students will have a peer review of their essays. Instruct them to make a brief note about this review at the end their essay and to include a statement explaining whether — and why — they agree or disagree with their partner’s assessment.

3. Ask each student to assess his or her own essay on the basis of the evaluation rubric. Tell students to make notes in the margins of the essay to indicate where and to what degree they believe they have met the criteria. Direct students to make brief notes at the end of the essay to indicate their overall assessment.
4. Ask volunteers to read the opening and closing paragraphs of their essay to the class. After each reading, encourage the class to ask questions like the following:
 - Why did you take the position set out in the opening paragraph?
 - What are two main arguments you make to clearly show why you took your position?
 - Does another paragraph in your essay explain why you took your position?
 - What is the connection between the opening and closing paragraphs?

Collect and evaluate the essays using Reproducible 3.9.4, Your Challenge 3 — Evaluation Rubric.

DIFFERENTIATING INSTRUCTION

1. Some students may feel more comfortable working alone throughout this lesson.
2. Some students may prefer to submit their essay without preparing a self-assessment or participating in a peer assessment.
3. Some students may prefer to tape their essay rather than reading aloud in person.