A Developing World: What the Numbers Can Mean

This lesson requires students to research and critically evaluate geographical data concerning human development. The students will review the parts of the United Nations Human Development Index (HDI), and research regional patterns of development, as well as the level of development in a particular country. As an extension, they can describe a development issue and the Canadian and international efforts being made to help resolve the problem.

**Grade Level**
Grades 12

**Time Required**
150 minutes

**Curriculum Connection**
Ontario Grade 12, Canadian and World Issues: A Geographic Analysis

**Link to Canadian National Geography Standards**

*Essential Element #1 (Grades 9–12) – The World in Spatial Terms*
- Map, globe, and atlas use

*Essential Element #3 (Grades 9–12) – Human Systems*
- Population characteristics by world regions, country, and regions within countries
- Economic development by world regions, country, and regions within countries

*Geographic Skills #2 (Grades 9–12) – Acquiring Geographic Information*
- Systematically assess the value and use of geographic information

*Geographic Skills #4 (Grades 9–12) – Analysing Geographic Information*
- Make inferences and draw conclusions from maps and other geographic representations
- Use the process of analysis synthesis, evaluation, and explanation to interpret geographic information from a variety of sources

**Canadian Geographic–CIDA Map**
This lesson uses the Canadian Geographic–CIDA map *A Developing World*. Copies of the map have been distributed to schools across Canada. To view an on-line version of the map, please go to [www.canadiangeographic.ca/worldmap](http://www.canadiangeographic.ca/worldmap).

**Additional Resources, Materials, and Equipment Required**
- projector,
- Internet access
- Blank world maps
• At least two colours of pen/pencil
• Latest HDI rankings which may be printed out, or viewed on-line (available at http://hdr.undp.org/en/reports/global/hdr2009/)

Main Objective
Students will see how global patterns of development are represented by select data, then correlate the data with causal relationships.

Learning Outcomes
By the end of the lesson, students will be able to:

• identify different methods of grouping countries (e.g. by level of development) and evaluate the implications of categorizing countries in these ways;
• select and compare statistical indicators of quality of life for a variety of developed and developing countries in different parts of the world;
• evaluate factors that may compound problems of hunger and poverty in a selected country;
• analyse cause-and-effect relationships in geographic data;
• produce a plan of action, and conduct an independent inquiry that synthesizes concepts, skills, and applications related to a geographic issue.
**Lesson**

| Introduction | • Distribute blank world maps. Ask students to shade, in a dark colour, whole regions or countries they know to be developing or poor. Use a light colour for those they know to be the most developed or wealthiest.  
  • Display the map *A Developing World* by posting it or projecting it from the website. Explain the main theme of the map and how the three classifications were determined using the HDI.  
  • Ask the students to visually compare their shadings with the map shows.  
  • Ask: What is a developed country? What are the levels of development?  
  • Explain how the HDI is derived. Use select examples from high, medium, and low HDI countries.  
  • Identify regions with different levels of development by name. Use the maps and bar graph data at the bottom of the map to reinforce regional examples. |
|---|---|
| Lesson Development | • Distribute the Student Activity Worksheet for this lesson.  
  • Direct students to access the following website  
  This site contains the United Nations Human Development Report for 2009. Have students click on “Human Development Indicators” in the list of chapters of the report.  
  • Download, print, and post these data. Alternately have the students download the information to their computers.  
  • Have students go to the on-line version of the map *A Developing World* ([www.canadiangeographic.ca/worldmap](http://www.canadiangeographic.ca/worldmap)) and answer the worksheet questions.  
  • Ask students to select one country in the developing world and use the websites indicated on the worksheet to answer questions and draw conclusions. |
| Conclusion | • Evaluate the answers to Parts A and B in a class discussion. Have select students share the information that they discovered.  
  • Evaluate the responses to the questions. |

**Lesson Extension**

- Research specific Canadian efforts to address the development issues identified in Parts A and B. Students will write a one-page monograph about a non-governmental organization (NGO) development agency with Canadian links or about a federal government initiative.  
- Have students select a country and go to the websites indicated on the extension worksheet for their research.
**Assessment of Student Learning**

- Check that the worksheet is complete, and evaluate using a rubric such as the Issue Monograph Marking Table below.
- Evaluate the extension product: a monograph on a specific development issue, Millennium Development Goals, means to address these goals, and Canadian connections, using the same rubric.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Rating</th>
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<tbody>
<tr>
<td><strong>Knowledge</strong></td>
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<td>Identify a development issue, its scope, and relationship to other issues, geographic concentration, and Canadian connections</td>
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<tr>
<td><strong>Thinking</strong></td>
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<td>Analyse causes and effects of the issue</td>
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<tr>
<td><strong>Communication</strong></td>
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<td>Use of written communication skills</td>
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<td><strong>Application</strong></td>
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<td>Selection and synthesis of key facts</td>
<td>1 2 3 4 5</td>
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Student Activity Worksheet
A Developing World: What the Numbers Can Mean

Student Name: ____________________________________________

What is development? How can we compare the levels of development between countries and regions?
What are Canadians and international agencies doing to help address development issues?

Instructions
1a. Define and explain the meaning of HDI.

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b. Describe how the HDI is formulated.

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What is it a good idea to have the process of comparing human development levels standardized?

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2. Go to www.canadiangeographic.ca/worldmap

Read the instructions on the right side of the page about how to explore the map. Select a country
from the developing world and write its name in the right-hand column heading below.

Use the comparison tools to compare this country with Canada on the basis of indicators directly or
indirectly related to the components of the HDI (for example, life expectancy for women and men).
Use the table below to summarize your research.

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<tr>
<th>Development Indicator</th>
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For more information about your country, go the CIA’s World Factbook (www.cia.gov/cia/publications/factbook). Then, select your country, and click on the various related topics: Introduction, Geography, People, Government, Economy, Communications, Transportation, Military, Transnational Issues.

3. Look up the HDI ranking of your country from the HDI report (http://hdr.undp.org/en/reports/global/hdr2009/). Click on Chapters / Human Development Indicators (922 KB) under the list of chapters for the 2009 report.

What is the overall rank of this country and the level of life expectancy, literacy, and GDP per capita?
_____________________________________________________________________________
_____________________________________________________________________________

4. How does this country differ from Canada?
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5. What factors may account for this level of development?
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6. Go back to the map A Developing World (www.canadiangeographic.ca/worldmap). Use the “Select a theme” tool to display maps for:

• Human Development
• Population
• Poverty and Hunger
• Environment

Carefully examine and compare the maps as you view them. Visually correlate and identify regional patterns that may be related.
a. To what extent are the development issues confronting the country you compared with Canada regional in nature? Explain with geographic references.

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b. What overall patterns do you notice when you compare indicators on these theme maps?

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7. **Worksheet Extension: Millennium Development Goals and Canadian Connections**

Go to [www.canadiangeographic.ca/worldmap](http://www.canadiangeographic.ca/worldmap) > Youth Page > Issues

Select a single Millennium Development Goal.

• Identify the issue, its scope, and connections to other issues.

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• Identify the regions of the world where this issue important.

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• Identify and research a Canadian or international program involved in helping to deal with this issue, as well as its purpose, goals, and specific actions being taken.

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• Summarize your findings in a one-page monograph for a general audience with the Millennium Development Goal as your title. A monograph is a brief, organized summary that synthesizes the key facts.