POVERTY AND WORLD WEALTH

RECOGNIZING INEQUALITY

BY SUSAN HERSHEY AND BOB PETERSON

An important part of a person's understanding of global issues is the recognition of the dramatic inequalities between nations and social classes within countries. Math is an essential tool for acquiring this understanding.

The purpose of this activity is to demonstrate graphically the vast differences in wealth between different areas of the world. It combines math, geography, writing, and social studies.

We remind students of some of the things we learned about colonialism, such as how great quantities of silver and gold were stolen from the Americas and taken to Europe. We also explain that current relations between countries and international organizations, such as the World Trade Organization, also affect how much wealth countries possess. We make sure that students know the following terms: resources, GNP, wealth, distribution, income, power, and colonialism. (Additional teaching ideas that help set the context for this lesson can be found in Rethinking Globalization. See Resources, page 266.)

MATERIALS

- 11” x 17” world maps for each student or pair of students.
- 50 chips (25 of one color and 25 of another) for each map.
- 25 slips of paper with “I was born in [name of continent, based on chart].”
- 25 chocolate chip cookies.
- World map laid out on playground, or signs with names of continents and yarn to distinguish boundaries.
- Transparency of “World Population and Wealth” table (page 92).
- Six “negotiator” signs with yarn to hang around students’ necks.
- Writing paper and pens or pencils.
- Additional cookies for students who don’t get any during the simulation (optional).
- Worksheets (optional) for students to write down their estimates (available at www.rethinkingschools.org/math).

SUGGESTED PROCEDURE

1. Give each student or pair of students a world map. Have them identify the continents and other places you have been studying.

2. Ask students how many people they think are in the world. After students have guessed, show them an almanac or a website with a current estimate. Ask: If we represent all the people in the world with 25 chips, how many people is each chip worth? (For 7 billion people, for example, each chip would represent 280 million people.)

3. Give 25 chips to each student/group and have them stack them on the continents, based on where they think people live. Have students write down their estimates using the worksheets mentioned in the materials list or on a piece of paper. Discuss student estimates and then tell them the accurate figures. Have them rearrange their chips to reflect the facts. Ask students what the differing stacks of chips tell them about the world’s population.
4. Explain that you are now going to give them another 25 chips of a different color and that they represent all the wealth produced in the world (the monetary worth of all the goods and services produced every year, from health care to automobiles). Each chip therefore represents 1/25 of the world’s total amount of goods and services produced. Tell the students to put the chips on the continents to indicate their estimate of who gets this wealth.

Teachers can connect students’ feelings about fairness to the data on world wealth.

5. Discuss student estimates and record them on the chalkboard. Have students reflect on the sizes of the two different sets of chip stacks, representing population and resources. Collect the chips.

6. Tell students you are going to demonstrate how population and wealth are distributed by continent. Have each student pick an “I was born in …” slip from a container labeled “chance of birth.” Students may not trade slips. (As you distribute the slips, listen for stereotypical reactions to the continents—these will be useful in the follow-up discussion and will indicate possibilities for future lessons.)

7. Have students go to an area that you have designated to represent that continent. (Playground maps work great for this.) After students are in their areas, remind them that they each represent about 280 million people and that you are going to distribute the world’s wealth. Have each continent/group designate one person to be a “traveling negotiator” and distribute a traveling negotiator sign to those people.

8. Explain that once the bag of resources is passed out to a representative from each continent, each group needs to sit in a circle and discuss their situation. Tell the students there will be a cross-continent negotiation session, then a time for the traveling negotiators to return to their home base to discuss their negotiations with the rest of their group, and finally a time for any trading or donating of resources. Students on each continent are to talk about how many resources they have compared to people of other continents and to discuss ways they might negotiate to increase their resources. They may plead and/or promise. (Note: Every continent, except North America, will have at least one “stay-at-home negotiator” and one traveling negotiator. The North American person can stay put or travel throughout the world. Also note that because Mexico is by most definitions part of North America, I explain to the students that for the purpose of this simulation we will be using “Latin America,” which includes South America, Central America, the Caribbean, and Mexico; instead of “North America,” we will use “United States/Canada.”)

9. Use a popular treat that can easily be divided in half—such as chocolate chip cookies—and distribute them according to the percentages noted in the chart. Announce the number of treats you are giving to each continent as you do so. Provide a paper bag for each continent to keep their treats in. As you dramatically place each of the resources into the bag, remind students they are...
not to eat the treats until after the negotiation session.

10. Announce that the negotiation session is to begin. Only traveling negotiators may move to a different continent. When they come, they should sit in a circle with the stay-at-home negotiators and discuss the distribution of wealth and what should be done about it.

11. After five or 10 minutes, tell all traveling negotiators to return to their home continents. Each group should then discuss the negotiations. After a few minutes, announce that the trading session may begin, and if a continent wishes to trade or donate resources, they may. After that, instruct the people holding the resource bags to distribute the resources to people in their group.

12. Give each continental group tag board and markers. Tell them to make some signs that describe what they think of the way the resources were distributed.

13. Bring students back together for a whole-class discussion. Have each group share their posters and perspectives. Show students the information from the world wealth chart via a transparency or handout. Connect their emotions and feelings of fairness to the information on the chart. (At this time, a teacher might give out additional treats to those students who did not get any.)

QUESTIONS WORTH POSING IF THE STUDENTS DON’T ASK THEM THEMSELVES

• How did the distribution of wealth get to be so unequal?
• What does the inequality of wealth mean in terms of the kinds of lives people lead?
• Who do you think decides how wealth is distributed?
• Should wealth be distributed equally?
• Do you think that, within a particular continent or nation, wealth is distributed fairly?
• How does the unequal distribution of wealth affect the power that groups of people hold?
• Within our community, is wealth distributed fairly?
• What can be done about the unequal way wealth is distributed?
• Who can we talk with to find out more information about these matters?

If your students have studied colonialism, ask them what role they think colonialism played in creating this inequality.

After the discussion, have students write an essay about their feelings, what they learned, what questions they continue to have, and what they might want to do about world poverty. Some students might also make wall posters that graphically depict the inequality of wealth.

FOLLOW-UP ACTIVITIES

A few days after this simulation, “Ten Chairs of Inequality” (page 213) is a useful activity to help students understand that wealth is also unequally distributed in individual countries.

Students also can do follow-up research on related topics, such as: the role colonialism played in the wealth disparity; how current policies of U.S. corporations and the U.S. government affect people in poorer nations; the role of groups such as the WTO and the International Monetary Fund; and what different organizations and politicians are doing about world poverty. (Refer to the list of “Organizations and Websites for Global Justice” in Rethinking Globalization. See Resources, page 266.)
Three notes of caution with this activity: First, as with any simulation (or role play) this should be understood to be just that—a simulation. We can in no way reenact the violence of poverty and hunger that kills tens of thousands of children daily. We are providing a mere glimpse. Second, while Africa and other areas south of the equator do not have lots of wealth as defined by GNP, those areas have great human and natural resources and this fact should not be lost on the students. Finally, in this simulation we seek to describe rather than to explain current power and wealth arrangements. They can, however, be powerful tools in motivating students to want to figure out the answer to the essential question: Why?

**WORLD POPULATION AND WEALTH**

**DATA TABLE**

<table>
<thead>
<tr>
<th>CONTINENT</th>
<th>POPULATION (in millions)</th>
<th>% OF WORLD POPULATION</th>
<th>% OF WORLD GNP</th>
<th>% OF WORLD GNP</th>
<th>% OF WORLD GNP</th>
<th># OF STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(in a class of 25)</td>
<td>(in a class of 30)</td>
<td>(in billions of dollars)</td>
<td>(out of 25)</td>
<td>(out of 30)</td>
</tr>
<tr>
<td>Africa</td>
<td>1,022</td>
<td>14.8</td>
<td>4</td>
<td>4</td>
<td>1,701.5</td>
<td>2.6</td>
</tr>
<tr>
<td>Asia</td>
<td>4,164</td>
<td>60.4</td>
<td>15</td>
<td>18</td>
<td>20,737.7</td>
<td>31.6</td>
</tr>
<tr>
<td>Oceania</td>
<td>36.5</td>
<td>0.5</td>
<td>0</td>
<td>0</td>
<td>1,255.5</td>
<td>1.9</td>
</tr>
<tr>
<td>Europe</td>
<td>738</td>
<td>10.7</td>
<td>3</td>
<td>3</td>
<td>20,119.9</td>
<td>30.6</td>
</tr>
<tr>
<td>U.S. and Canada</td>
<td>344.5</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>16,719</td>
<td>25.5</td>
</tr>
<tr>
<td>Latin America</td>
<td>590</td>
<td>8.6</td>
<td>2</td>
<td>3</td>
<td>5,101.4</td>
<td>7.8</td>
</tr>
<tr>
<td>WORLD TOTAL</td>
<td>6,895</td>
<td>100</td>
<td>25</td>
<td>30</td>
<td>65,635</td>
<td>100</td>
</tr>
</tbody>
</table>

Sources: World population figures are from the United Nations, Department of Economic and Social Affairs, Population Division, [http://esa.un.org/unpd/wpp/Excel-Data/population.htm](http://esa.un.org/unpd/wpp/Excel-Data/population.htm) based on figures from The 2010 Revision of the World Population Prospects. GNP figures are from the World Bank, [http://data.worldbank.org/indicator/NY.GNP.ATLS CD](http://data.worldbank.org/indicator/NY.GNP.ATLS CD), for 2011. For countries where 2011 figures were not available, figures from the next available previous year were used.

Gross National Product (GNP) is defined as the total national output of goods and services produced by a nation and its citizens in a particular year. Percentage of world wealth is an estimate based on total GNP.

For purposes of this chart, divisions of population and GNP by regions followed the population divisions for the United Nations. Europe includes the Russian Federation and Greenland. Asia includes the Middle East. Latin America includes Mexico, the Caribbean Islands, and South America. Oceania includes Australia and New Zealand.

Please note: We have included in the above table, calculations for a classroom of 25 students and of 30 students. If one uses 30 students, the lesson needs to be adjusted accordingly.