

Material World

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- **Grade level:**
Upper Elementary, Middle School, High School
- **Subject areas:**
Economics, English Language & Literature, Math, Science, Social Studies
- **Instructional strategies** (from *Classroom Instruction That Works—Research-Based Strategies for Increasing Student Achievement* by Robert J. Marzano, Debra J. Pickering, Jane E. Pollock)
Identifying similarities and differences
Summarizing and note taking
Nonlinguistic representations
Cooperative learning
Setting objectives and providing feedback
Generating and testing hypotheses
Cues, questions and advance organizers
- **Estimated duration:**
Preparation time: 15 minutes
Activity: Session one: 50 minutes to identify what students already know about other cultures around the globe, introduce the book, write learning goals and hypotheses, and begin exploring the book. (Give students up to 7 days to complete the assignment.)
Session two: 45 minutes for class discussion.
- **Setting:**
Classroom
- **Skills:**
Comparing similarities and differences, discussing, formulating hypotheses, inferring, interpreting data, investigating, generalizing, listening, recording, researching, presenting data to small group, self evaluation, writing

Summary—Students learn about the lives of “statistically average” families from around the globe.

Objectives

Students will:

- Set learning goals.
- Hypothesize about one or more cultures.
- Compare lifestyles of rich, middle and poor people throughout the globe.
- Compare use of natural resources of people throughout the globe.
- Write about the topic they investigated in the book, *Material World*.

Materials

- Pen
- Paper

- *Material World: A Global Family Portrait* **Note:** Every AEA lending library owns a minimum of three copies of *Material World*. Not only are those available; often local and school libraries have this book in their collections. The more books you can secure, the more students will be able to explore the book according to their interests.

Procedure

The Activity and Assessment

1. Start the lesson by asking, “What do you know about...” questions. This will help students use what they already know about cultures around the world to enhance further learning. After asking questions, be sure to pause briefly to allow for more in-depth responses from students. Possible questions include:
 - a. What do you know about the use of automobiles around the world? How do most people get around?
 - b. What do you know about the types of food eaten?
 - c. ...the incomes of people around the world (i.e., rich, poor?)
 - d. ...the medical care available?
 - e. ...the use of energy resources?
 - f. ...the size of families, say in India and Ethiopia, compared to the U.S. and Iceland?
 - g. ...their bathrooms?
2. Write on the board the statements below. Tell students that in a few minutes they will be asked to complete the statements (i.e., set a learning goal) for the upcoming activity.
 - I want to know...
 - I want to know more about...

So that students can better set personal learning goals, briefly introduce the book, *Material World*. Explain that students will have 10-20 minutes to review the book in small groups, and then several days in which to review the book on their own time. Tell them a little about the book, such as some of the information found in the Introduction on pages 7-8 and in the Methodology on page 11. Note, also, the statistics on pages 248-249, and what types of information students may find there.

Then ask students to set their goals for learning (i.e., identify areas of interest) by completing one of the learning goal statements shown above. To help them with this process, you may want to give an example from your personal experience reviewing the book. Also ask students to elaborate on their goal by creating a hypothesis statement. Below are two examples.

- I want to know more about **the correlation between the number of children in a family and poverty levels**. I always thought that—for the most part—countries with high birth rates are likely to be poor. I want to learn if this is the case, and what other factors might contribute to poverty.
- I want to know more about **the differences between rich, middle and poor countries**. I always thought that most of the world’s adult populations drive cars. I want to learn if this is the case, and other differences between rich, middle and poor.

Ask each student to keep a copy, and turn in a copy of his or her learning goals statement and hypothesis.

Assign a one- to two-page paper to be completed after reviewing *Material World* in which students first write their learning goal and hypothesis. Students then should describe what they found. Encourage students to also include a paragraph outlining new questions that the book may have stimulated.

3. Break into small groups and begin review of the book.
4. Several days later, after all students have had sufficient time to review the book and complete the assignment, break into small groups and ask students to share their learning goals and what they learned. Then come together in a large group and briefly discuss what students learned. Also collect papers. When grading, provide explanations of what is accurate and inaccurate in student responses and, for students who did not meet the learning goal, ask them to keep working on the assignment until they succeed.

Extensions

- 1) Conduct the activity/assessment found at the end of this lesson.
- 2) Write a compare and contrast paper about the life of a person from a poor or middle-class country, and compare it to your own life. How is there life different? How is it the same?
- 3) Conduct a service-learning project. Heifer International, a non-profit organization, has developed a program where youth read books to feed hungry children around the world. For more information, order the free *Read to Feed Leader's Packet* at www.readtofeed.org. The program is outlined in detail in the *Read to Feed Leader's Guide*, which comes with the packet. Heifer International helps families in more than 128 countries, providing food- and income-producing animals, training in animal management, environmentally sound farming and community development.
- 4) Teach several lessons from Heifer International's *Lessons from a Village Called Earth* (www.readtofeed.org).
- 5) From pages 248-249, calculate the differences between two to three countries. Do calculations for at least six categories—such as income level, household expenditures on food, population density, life expectancy, mean years of school, and infant mortality. After evaluating the results, write one or more hypotheses. A research paper could be assigned to investigate the accuracy of the hypotheses.
- 6) **Option:** If time is tight, introduce *Material World* to students by using the Scavenger Hunt handout found at the end of this lesson. Make the book available for students to look at during their free time.

Resources

Heifer Project. Read to Feed website, curriculum and service-learning project. [readtofeed.org].

Hollyer, Beatrice. *Wake Up, World!* Henry Holt and Company, 1999.

Kindersley, Barnabas and Anabel. *Children Just Like Me*. DK Publishing, Inc. 1995.

Lewis, Barbara. *The Kid's Guide to Service Projects*. Free Spirit Publishing, 1995.

Menzel, Peter. *Material World: A Global Family Portrait*. Sierra Club Books, 1994.

Smith, David J. *If the World Were a Village*. Kids Can Press Ltd., 2002.

United Nations Statistics Division, *Indicators on income and economic activity*. [Retrieved November 28, 2003, @ <http://unstats.un.org/unsd/demographic/social/inc-eco.htm>.]

U.S. Census Bureau, U.D. Department of Commerce, Table 16, Population: 1790 to 1990. [www.census.gov/population/censusdata/table-16.pdf].

U.S. Census Bureau, U.D. Department of Commerce, World population at a glance: 1998 and beyond. *IB/98-4*, issued January 1999. [www.census.gov/ipc/prod/wp98/ib98-4.pdf].

World Bank Atlas, *International Bank for Reconstruction and Development*, © 2001, p. 44.

Assessment/Activity

Dr. Mary Bigler, an internationally known educator and humorist, is a professor in the Dept. of Teacher Education at Eastern Michigan University. At the 2003 Midwest Middle Level Educator's Association conference, Mary shared ideas about creating strategic readers in middle school classrooms. The following activity was gleaned from her presentation.

Four Square

Divide index cards into 4 sections. In the upper left hand corner, write a vocabulary word you introduced to the class. Below that, in the lower left hand square, write its definition. Then ask the students to complete the index card by writing a personal example of the word in the upper right hand corner, and a word that is an example of an opposite in the lower right hand corner. Consider posting student index cards for all to review.

Example:

Word:

High infant mortality	Bhutan
Death rate of infants	U.S.

Word:

Diplomatic	Jesse Jackson
Skilled in international relations	Omar Khadafy

Definition:

Optional: Welcome students to draw pictures as an example, if they so choose. For example, for the vocabulary word, Nocturnal, they may draw a night sky with stars.

Scavenger Hunt

Browse the book, taking time to quickly skim pages 7 and 8.

On page 248, there is a chart called **Material World at a Glance**. In the **Rank of Affluence** column, find where U.S. and Ethiopia rank. U.S. _____ Ethiopia _____

On the same chart, what is the population density of the two countries? U.S. _____
Ethiopia _____

What is the commercial energy use per capita? U.S. _____ Ethiopia _____

What is the total fertility rate? U.S. _____ Ethiopia _____

What is the population per physician? U.S. _____ Ethiopia _____

What is the per capita income? U.S. _____ Ethiopia _____

Look at the profiles of Ethiopia and the U.S. on pages 28 and 136. Jot down a few impressions, including one or two after reviewing the “Photographer’s Notes” on page 32 and “Getu Family” on page 34.

Look at the Toilets of the World on pages 224-225. Jot down a few impressions.

If time permits, look at the Meals of the World on pages 176-177. Jot down a few impressions.