Middle School World Geography Focus on Economics

Curt Anderson Bonnie T. Meszaros Mary Lynn Reiser



National Council on Economic Education

Acknowledgments

AUTHORS:

Curt Anderson

Director

Center for Economic Education University of Minnesota, Duluth

Bonnie T. Meszaros

Associate Director
Center for Economic Education
and Entrepreneurship
University of Delaware

Mary Lynn Reiser

Associate Director Center for Economic Education University of Nebraska – Omaha

PROJECT DIRECTOR:

Mary C. Suiter

Director, Center for Entrepreneurship and Economic Education University of Missouri – St. Louis

PROJECT EDITOR:

Melinda Patterson Grenier

DESIGN:

Karl Hartig

ILLUSTRATION:

Roger Roth

REVIEWERS:

Patricia Moses

Golden West Middle School Fairfield, Calif.

Rebecca Reed

Colonial School District New Castle, Del.

Judith B. Ware

Teacher Consultant Missouri Geographic Alliance and Instructor Fontbonne University, St. Louis, Mo.

Michael Watts

Director Center for Economic Education Purdue University, Ind.

Reva Weinberg

Ladue Middle School Ladue, Mo.

FUNDING

The National Council on Economic Education

gratefully acknowledges the funding of this publication by the **U. S. Department of Education**,

Office of Safe and Drug-Free Schools under PR Grant #Q304B030002.

Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view of the U. S. Department of Education.

Copyright (c) 2004, National Council on Economic Education, 1140 Avenue of the Americas, New York, N. Y. 10036. All rights reserved. The activities and worksheets may be duplicated for classroom use, the number not to exceed the number of students in each class. Notice of copyright must appear on all pages. With the exception of the activities and worksheets, no part of this book may be reproduced in any form or by any means without permission in writing from the publisher. Printed in the United States of America.

Contents

Foreword		v
Introduction: Why Teach Economics and Geography?		vi
Geography Co	viii	
Economics Co	x	
Lesson 1	What Are Productive Resources?	1
Lesson 2	How Much Depends on Where	21
Lesson 3	Economics and Population Demographics	41
Lesson 4	Why Do People Move?	61
Lesson 5	Economic Freedom: How Important Is It?	75
Lesson 6	Joining Together That Which Has Drifted Apart	93
Lesson 7	What a Difference a Tool Makes!	111
Lesson 8	Ideas That Changed the World	129
Lesson 9	The Cost of Ignoring Economics and Geography	149
Glossary of Te	erms	165

Foreword

Middle School World Geography: Focus on *Economics* blends the disciplines of geography and economics through meaningful classroom instruction at the middle school level. This publication offers students in U.S. and international classrooms the ability to develop content knowledge and to enhance their analytical skills by learning to view the world from two perspectives: geographic and economic. Both the economic and geographic perspectives are valuable to middle school students as they study regions of the world. This dual perspective helps students to understand the choices people make in different regions and to think critically about an increasingly interdependent global economy.

The National Council on Economic Education (NCEE) thanks Mary Suiter and her outstanding team of economic and geographic educators for developing and classroom-testing these lessons. They provide the students with active-learning experiences, which are a hallmark of NCEE lessons.

The development of this publication was undertaken as part of the Cooperative Civic Education and Economic Education Exchange Program funded by the U.S. Department of Education, Office of Safe and Drug-Free Schools under PR Grant Number Q304B030002 and conducted in coordination with the U.S. Department of State. NCEE extends its appreciation to program officer Rita Fov Moss for her support. We are grateful that the U.S. Congress had the foresight to realize the need for economic education in emerging market economies and the vision to see how an international education program such as this also could benefit teachers and students in the United States. This publication is an example of that vision.

Robert F. Duvall, Ph.D.
President and Chief Executive Officer
National Council on Economic Education

Introduction: Why Teach Economics and Geography?

Geography and economics were included as core subjects in the Goals 2000: Education America Act. In 1994, the Geography Education Standards Project prepared Geography for Life: National Geography Standards, 1994. In 1997, the National Council on Economic Education brought the economics standards project to fruition. The result of this project is the publication Voluntary National Content Standards in Economics. Both sets of standards emphasize the critical need for students to gain content literacy in order to perform as responsible citizens who are competent decision makers in their lives as consumers, producers, savers and investors and who act as effective participants in the global economy.

Economics is not a dismal collection of graphs, data and theories, and geography is "not a collection of arcane information" (Geography for *Life*, 1994). Both disciplines are social sciences that rely on critical-thinking skills to analyze human behavior. While each has its own vocabulary, tools, skills and technologies, there is considerable overlap. For example, both disciplines are concerned with resources and their use and distribution; both are concerned with economic growth – gross domestic product, standards of living and per capita gross domestic product – and both are concerned with trade, trade restrictions and interdependence. Additionally, both disciplines emphasize the use of the tools of social science: data, tables, charts, graphs, maps and documents.

Blending these two disciplines through meaningful classroom instruction offers students the ability to develop content knowledge and enhance their analytical skills by learning to view the world from two perspectives: geographic and economic.

The economic perspective is based on an understanding of scarcity and trade-offs. Economics focuses on how people use scarce

resources to produce and exchange goods and services to satisfy people's wants. Because of scarcity, people must make choices about how best to utilize available resources. They must make choices about what to produce, how to produce and how to distribute what is produced. All of these choices involve opportunity costs, trade-offs and consequences. People develop economic systems. These systems develop rules and incentives that influence the choices people make.

Fundamental to geography is an understanding of spatial patterns and interactions of people with their environments. Where something exists or occurs and why are important dimensions of the physical world and the human activities that take place on its surface. Geography focuses on acquiring information about people, places and environments, and organizing and analyzing the information using maps and other geographic tools. Such information can be used to develop a spatial perspective. Recognizing that human activity affects the physical environment and that physical processes affect human activities also requires a geographic perspective.

Both the economic and geographic perspectives can inform middle school students as they study regions of the world. Through geography and economics, students can reflect on the choices people in these regions make about the use of resources and the choices they make about interaction with their physical world.

The world in which our students live is more crowded than ever before, people are more concerned about physical environments, the global economy is more competitive and people are far more interdependent. Understanding this world requires high levels of competency in economics and geography. What better way to provide this competence than by using high-quality lessons that emphasize content in economics and geography while providing

an opportunity for critical thinking about realworld problems?

Classroom teachers are under pressure to teach more and more, yet the amount of classroom time devoted to content instruction has not increased. Teachers can meet the goal of teaching more in the same amount of time by using integrated lessons that emphasize content in economics and geography while providing an opportunity for critical thinking about real-world problems. Students often experience school in unrelated segments. As a result, they fail to see the applicability of what they learn in one discipline to what they learn in another discipline. Likewise, they fail to see the relevance of what they learn to the real world. By participating in well-designed activities that emphasize content in economics and geography while providing an opportunity for critical thinking about real-life problems, students are more likely to make significant contextual connections.

This publication includes nine high-quality lessons designed to integrate economics and geography in a meaningful way. The lessons offer an opportunity for students to work individually, to work in groups and to participate in simulations. The lessons employ visuals, graphic organizers, data, charts, maps and graphs. The students have the opportunity to read, write, compute, speak and reason. They learn important economic and geographic content, but they also use economics and geography to analyze problems.

Lesson 9, "The Cost of Ignoring Economics and Geography," offers an excellent example of the benefits of teaching economics and geography together. In this lesson, students reorganize their classroom using a map showing several companies located along a river. Students take roles in a simulation that shows the impact of dumping waste into a river. Through this simulation, students learn about the physical processes of dilution and decomposition that reduce the impact of waste in the environment. The students then determine the least-costly way to reduce this impact. Their task

is complicated when they learn that the costs of reducing waste are not the same for each company. Students use mathematics skills and apply a trial-and-error method to solve their problem.

This lesson affords students an opportunity to think critically about a real-world problem: pollution. As they consider this problem, they employ communication skills and mathematics skills. The lesson employs a map and tables, along with kinesthetic and spatial activities. Students solve problems in small groups and communicate results to the entire class. As a result of this lesson, students conclude that they must take into account both economic and geographic factors when they strive to achieve an environmental goal. Teachers charged with the task of helping students learn geography and economics while emphasizing mathematics and language arts will find that this lesson helps them meet multiple objectives.

Mary C. Suiter
Director, Center for Entrepreneurship and
Economic Education
University of Missouri – St. Louis

Judith B. Ware Teacher Consultant, Missouri Geographic Alliance and Instructor, Fontbonne University, St. Louis

Content Standards: Geography

Essential Element 1: The World in Spatial Terms

- 1. How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective
- **3.** How to analyze the spatial organization of people, places, and environments on Earth's surface

Essential Element 2: Places and Regions

- The physical and human characteristics of places
- **5.** That people create regions to interpret Earth's complexity

Essential Element 3: Physical Systems

- 7. The physical processes that shape the patterns of Earth's surface
- **8.** The characteristics and spatial distribution of ecosystems on Earth's surface

Essential Element 4: Human Systems

- **9.** The characteristics, distribution, and migration of human populations on Earth's surface
- **11.** The patterns and networks of economic interdependence on Earth's surface
- **12.** The processes, patterns, and functions of human settlement
- **13.** How forces of cooperation and conflict among people influence the division and control of Earth's surface

Essential Element 5: Environment and Society

- **14.** How human actions modify the physical environment
- **16.** The changes that occur in the meaning, use, distribution, and importance of resources

Essential Element 6: The Uses of Geography

18. How to apply geography to interpret the present and plan for the future

A Correlation of the Lessons with the National Geography Standards: Geography for Life

Standards	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7	Lesson 8	Lesson 9
1. Spatial perspective									
3. Analyzing the spatial organization of Earth's surface									
4. Physical and human characteristics of places									
5. People create and define regions									
7. Physical processes									
8. Characteristics and spatial distribution of ecosystems									
9. Characteristics, distribution, migration of human populations									
11. Patterns and networks of economic interdependence									
12. Processes, patterns and functions of human settlement									
13. Forces of cooperation and conflict among people									
14. Human actions modify the physical environment									
16. Changes in meaning, use, distribution, importance of resources									
18. Applying geography to interpret present and plan for future									

 ${\bf Source: } \textit{Geography for Life: National Geography Standards}$

Geography Education Standards Project, 1994

Content Standards: Economics

- Scarcity: Productive resources are limited. Therefore, people cannot have all the goods and services they want; as a result, they must choose some things and give up others.
- 2. Marginal Cost/Marginal Benefit:
 Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Most choices involve doing a little more or a little less of something; few choices are all-or-nothing decisions.
- 3. Allocation of Goods and Services: Different methods can be used to allocate goods and services. People, acting individually or collectively through government, must choose which methods to use to allocate different kinds of goods and services.
- 4. Role of Incentives: People respond predictably to positive and negative incentives.
- 5. Gains from Trade: Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and among individuals or organizations in different nations.
- 6. Specialization and Trade: When individuals, regions, and nations specialize in what they can produce at the lowest cost and then trade with others, both production and consumption increase.
- 15. Growth: Investment in factories, machinery, new technology, and the health, education, and training of people can raise future standards of living.
- **16.** Role of Government: There is an economic role for government to play in a market economy whenever the benefits of a government policy outweigh its costs.

- Governments often provide for national defense, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also redistribute income.
- 18. Macroeconomy Income/Employment, Prices (Circular Flow and Interdependence): A nation's overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy.

A Correlation of the Lessons with the Voluntary National Content Standards in Economics

Standards	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7	Lesson 8	Lesson 9
1. Scarcity									
2. Marginal cost/marginal benefit									
3. Allocation of goods and services									
4. Role of incentives									
5. Gains from trade									
6. Specialization and trade									
15. Growth									
16. Role of government									
18. Circular flow-interdependence									

 ${\bf Source: \it Voluntary \it National \it Content \it Standards \it in \it Economics \it }$

National Council on Economic Education, 1997