GLOBAL EDITION

Introduction to Geography

People, Places & Environment

SIXTH EDITION

Carl T. Dahlman • William H. Renwick

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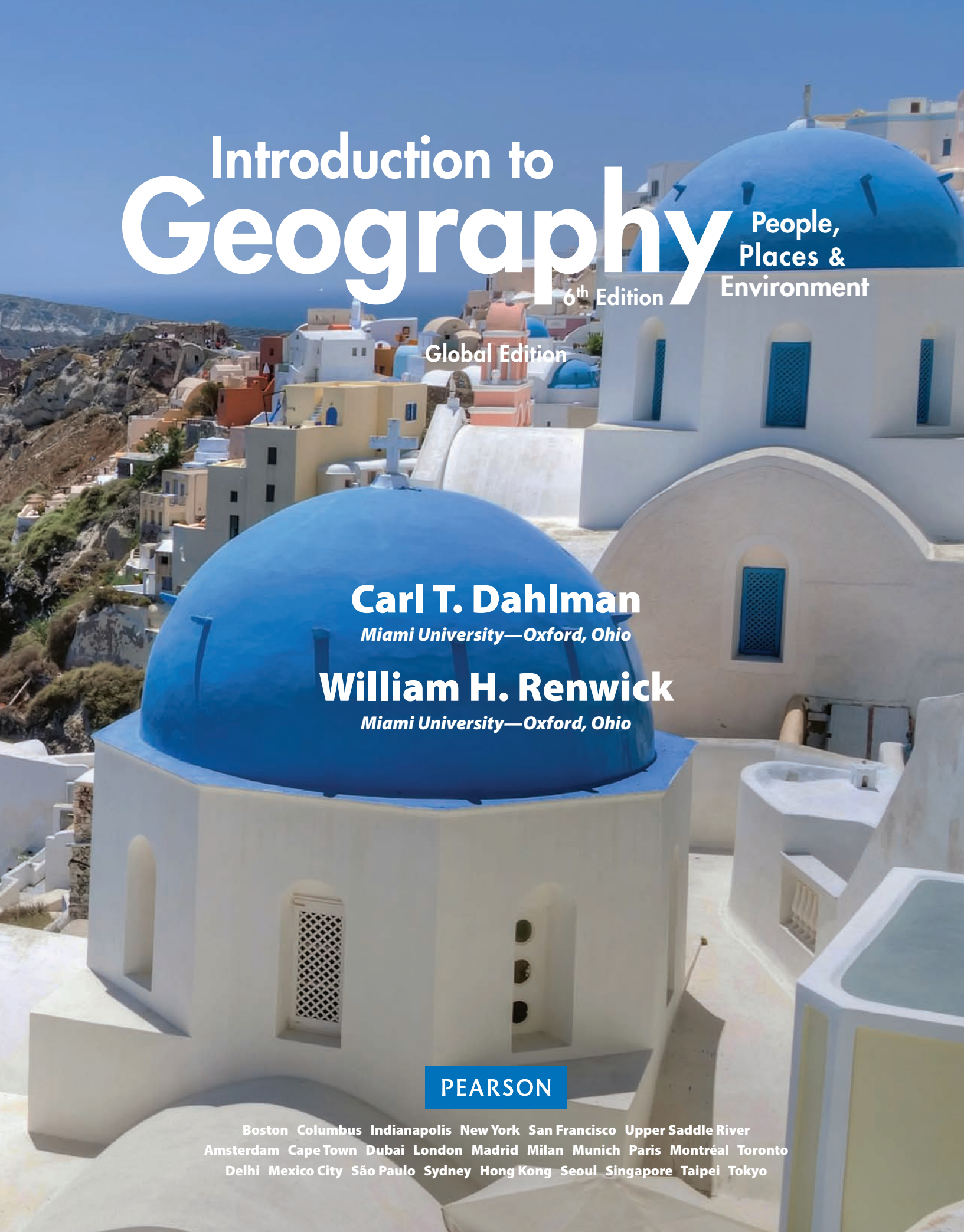
Introduction to Geography

People, Places & Environment



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PREFACE

Geographic literacy is critical in today's globalized world. *Introduction to Geography: People, Places & Environment* provides a working knowledge of the conditions and interactions essential to successfully negotiate the world of the 21st century. This text provides readers with frameworks for evaluating the qualities and consequences of the relationships among the different places and peoples as we live in—and change—the world around us. In a globally connected world, once-distant and seemingly foreign nations and regions now interact with regularity. One hundred years ago, most of us would have lived and died in the village where we were born. Few would have ventured much farther than the nearest town. Fewer still knew a foreign language, completed high school, or needed to know much about the natural or cultural features of other places. Our world is now very different.

Today, we expect educated individuals to have significant understanding of the diversity of environments and cultures around the world and of the processes that connect them. In *Introduction to Geography: People, Places & Environment* we promote an integrated view of geography that emphasizes the interrelationships among the breadth of human activities and environments that range from the tropical wilderness to thoroughly engineered cities. We recognize that just by heating our homes and powering our vehicles, we participate directly in global energy markets—and emit pollutants that travel around the globe and that will probably have long-term effects on climate. Global trade and finance have made far-flung places and people more dependent on one another.

New to the Sixth Edition

The sixth edition has been thoroughly revised with numerous substantive changes to the book, support, and media program:

- **Explorations** features, written by experts in various fields, present real-world data and research, emphasizing the applied nature and relevance of geography.
- **The World in 2050** features explore the future development of the world based on what geographers know and can predict today.
- **Learning Outcomes** integrated into the chapter-opening pages help students prioritize key knowledge and skills as they study.
- **Checkpoint questions** integrated throughout the chapters give students opportunities to check their understanding of the material as they read, for a more active learning approach.
- **Integrated media** link students to the Study Area of **www.MasteringGeography.com** where they can access media that enrich and extend the book content, including *MapMaster™ Interactive Maps* and *Geoscience Animations*.
- **Integrated quick response (QR) codes** enable students to link from the book to online media and data using their mobile devices.
- **Reorganization of the chapters** into three parts better emphasizes the major subfields of geography and the interrelations among them. The three parts are: *Environment and Resources*; *Culture*; and *The Development of Modern Society*.
- **Global climate change coverage** is expanded across the chapters, including observed climate change, model predictions, and important uncertainties in climate science.
- **Important recent natural disasters** are covered, including the Midwest drought of 2012 and Hurricane Sandy.
- The **global carbon budget** is examined in detail, linking climate change with key biosphere and geosphere processes as well as human emissions of greenhouse gases.
- **A new world vegetation map** shows the biotic landscape as it is today, rather than as it might be in the absence of human activity.
- **Up-to-date resource data** show the national and global impacts of changing technology and the global financial crisis/recession on solid waste generation, forest products, mining, and energy.
- **Completely revised energy section** describes the impacts of development of new fossil energy sources through hydrofracturing (fracking) and oil sand mining, as well as the impacts of the Fukushima disaster on the nuclear industry.
- **Completely revised sections on migration** feature a systematic typology of human movement, as well as newly written migration histories for North America, Europe, and Asia.
- **Cultural change and culture regions** contain a revised section on cultural diffusion and trade, and a new section on media geographies.
- **Historical geography of food production** includes expanded, up-to-date coverage of the challenges in meeting rising demand for more food.
- The **political geography chapter** now provides readers with a clear and more concise discussion of nations, states, and relations among states.

- **Data and Statistics** (tables, graphs, maps) on climate, energy, natural resources, population, and economics are completely updated.
- **Redesigned maps and illustrations** better highlight geographical patterns and data trends.
- **MasteringGeography**™ is an online homework, tutorial, and assessment platform designed to improve results by helping students quickly master concepts. Students benefit from self-paced tutorials that feature immediate wrong-answer feedback and hints that emulate the office-hour experience to help keep students on track.

Three Important Themes

This textbook emphasizes three themes integral to the study of geography. First, geography examines the interrelationships between humans and their natural environment; second, many basic principles of human geography can be studied and demonstrated both locally and globally; and third, geography is dynamic.

Geography Explores Interrelationships Between Humans and the Environment

The study of Earth's climates, soils, vegetation, and physical features, or *physical geography*, sets the stage upon which we act out our lives. A great deal of human effort is spent wresting a living from the environment, adjusting to it, or altering it.

Chapters 2 through 5 of this book offer an overview of Earth's physical environment, the natural resources on which we depend, and how humans transform Earth's environments. The theme of human–environmental interaction is incorporated throughout the book.

Geography Is Global and Local

The basic principles of geography can be studied locally—in your hometown and even on campus. How do local temperatures and rainfall vary throughout the year? What natural hazards affect people in your area? Where did new arrivals to your community come from, and why did they move? Where are local food crops and manufactured goods sold? Can you map the rents on commercial properties in your town? And how do these values reflect perception of which neighborhoods are the most elegant?

The applications of geography range from the local to the international: city planners designing new housing, scientists working to reduce water pollution, transportation consultants routing new highways, advertisers targeting zip codes where residents have specific income levels, and diplomats negotiating treaties to regulate international fishing. The relevance of its applications makes geography an incredibly integrative and valuable field for study.

Geography Is Dynamic

It is important to know the current distributions of landforms, people, languages, religions, cities, and economic activities—and to understand that none of these patterns is static. Earth's surface is constantly changing. Social, political, and economic forces constantly redistribute human activities. While many think of maps when they think of geography, we can understand maps of economic or cultural activity only if we understand the patterns of movement that create them. Modern geography explores the forces at work behind the maps.

Every day, events trigger changes in geography: A volcano erupts in Mexico; a bountiful harvest in Argentina improves the diet available to Africans; Canadian scientists synthesize a mineral substitute for one previously imported; new governments redirect international alliances, economic links, and migration streams. American movies and music diffuse our culture around the world, while we adopt foods such as sushi, dosas, and falafel. Developing countries and the developed world add industrial sources of air pollution and change the chemical composition of Earth's atmosphere. Protestant Christianity wins converts throughout Latin America; nations adopt new official languages and governments open family planning clinics. Elsewhere, Islamic fundamentalists win political power and curb women's rights. All these events remap world cultural, political, and economic landscapes. Today's dynamic geography doesn't just exist; it *happens*. In every topic covered in this text, it is our goal not only to *describe* distributions and locations but to *explain* them.

Contemporary Issues in Geography

Geography can help you better understand current events and form opinions on important questions of the day. Each chapter of this book provides background material for understanding the news—including, for example, the topics of environmental protection and development.

Each inhabitant on Earth aspires to material comfort, yet today many people live in conditions of deprivation. The world distribution of wealth and welfare reveals that wealth does not coincide with the world distribution of raw material resources. If it did, then the Republic of Congo and Mexico would count among the richest countries in the world, and Japan and Switzerland would be among the poorest. Understanding this paradox is essential to understanding some of the factors driving the world markets today.

Maps, Cartograms, and GIS

Geography is data-rich discipline, requiring robust visualizations to effectively communicate complicated ideas and spatial information. A variety of maps illustrate this book, all created using the latest data sources and GIS techniques. Many include relief shading to show surface features. Traditional maps illustrate distributions as mosaic patterns of color. *Flow maps* use arrows and lines to represent movements of people or of goods—the numbers of passengers flying major airline routes across the United States, for example (Figure 1-17). We include a graphic (Figure 1-27) that illustrates the variety of thematic mapping styles, with references to maps in the book that use specific styles. A variety of other visual devices are also used to explain concepts and present information, including process diagrams, illustrations, tables, bar graphs, and pie graphs.

The discussion of GIS technologies and cartographic visualization has been expanded in Chapter 1. We have increased the use of remote sensed imagery throughout the book, and have stressed the role of Geographic Information Systems (GIS) technology for both science and management in a changing world.

A Word About Numbers

This book contains many numbers—measurements of populations, economic conditions, production of various commodities, world trade, and more. These measures come from a variety of sources—private organizations, national governments, international organizations—and they are the best available. Such numbers, however, must always be read with two considerations in mind: reliability and date.

The compilation of measures is a tremendously difficult task. For example, the United States is the world's richest country, with many highly skilled government workers—yet the government admits that the national census is probably inaccurate by a factor of 5% to 7%. We do not want to promote cynicism about the value or reliability of statistics, but an educated person does exercise judgment about the probable exactitude of any figure.

The second caution is that the measures themselves change. It takes a long time to gather and compile statistics, so the measures may seem out of date by the time they are published. This is especially true of international comparative statistics. For example, each year the United Nations Conference on Trade and Development (UNCTAD) publishes a handbook of statistics of world trade, but the book appears three or four years after its date, and many statistics recorded were measured years before the date of the volume. Furthermore, governments sometimes change the way they measure things. For example, for many years governments counted and published a statistic called gross national product (GNP), but today that statistic is often replaced by a slightly different measure called the gross national income (GNI). The meaning of GNI is explained in Chapter 12.

The statistics in this textbook are as up to date as possible using the most reliable sources as of 2013. The text notes the direction in which many of these measures are changing, and in many cases we have dared to predict their future direction. The U.S. population will probably continue to rise, and the percentage of the national labor force working in manufacturing will probably continue to fall. We encourage you to go to the library or to search the Internet to update those measures.

This Book's Media

Introduction to Geography features an innovative integration of media and connections to the MasteringGeography™ platform, giving students and instructors flexible self-study and assessment options.

- **Quick Response (QR) codes.** Traditional books are challenged to provide students with quick and easy access to relevant media and updated data. QR codes integrated throughout each chapter help solve this problem, enabling students to use their mobile devices to easily and instantly access online images, media, and data.
- **MapMaster™ Interactive Maps.** Maps comprise an important part of the geographer's toolset, but traditional print maps are limited in their ability to allow students to dynamically isolate or compare different spatial data. Available in MasteringGeography both for student self-study and for teachers as assignable and automatically gradable assessment activities, *MapMaster* Interactive Maps act as mini-GIS tools that allow students to overlay, isolate, and examine different thematic data at regional and global scales. Icons for various *MapMaster* maps are integrated into chapters, encouraging students to log into the Study Area of MasteringGeography to explore additional map data layers and extend their learning beyond the book's maps. Teachers also have access to a separate large suite of *MapMaster* activities for each chapter, including hundreds of multiple-choice questions that can be customized, assigned, and automatically graded by the MasteringGeography system, for a wide range of interactive mapping assessment activity options.
- **Geoscience Animations.** Static 2-D print figures do not always present a convenient way to visualize complicated physical processes that occur over vast expanses of space and time. Available in MasteringGeography both for student self-study and as assignable and automatically

gradable assessment activities, Geoscience Animations provide students with dynamic visualizations of the most complex physical processes, with voiceover narrative and text transcripts to help guide them through the animations. Icons for the animations are integrated into chapters, encouraging students to log into the Study Area of MasteringGeography to access the media on their own, while teachers have the option of assigning the animations with automatically graded questions.

Acknowledgments

Countless colleagues, librarians, and generous individuals both in government and in the private sector helped with information for this text. We wish to especially thank Professor James M. Rubenstein of Miami University, Oxford, Ohio, for his many contributions to our thinking.

We also wish to thank our scholarly colleagues who provided thoughtful suggestions for improving the book over the years. These include:

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Carl T. Dahlman
William H. Renwick

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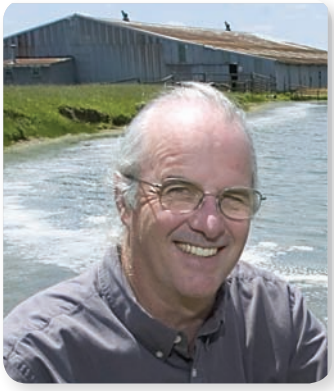

William H. Renwick earned a B.A. from Rhode Island College in 1973 and a Ph.D. in geography from Clark University in 1979. He has taught at the University of California, Los Angeles, and Rutgers University, and is currently Professor of Geography at Miami University. He is a co-author of Pearson's *Introduction to Contemporary Geography*, with James M. Rubenstein and Carl T. Dahlman. A physical geographer with interests in geomorphology and environmental issues, his research focuses on impacts of land-use change on rivers and lakes, particularly in agricultural landscapes in the Midwest. When time permits, he studies these environments from the seat of a wooden boat.

THE TEACHING AND LEARNING PACKAGE

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MasteringGeography offers:

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- Student Study Area with MapMaster™ Interactive Maps, Videos, Geoscience Animations, web links, videos, glossary flashcards, "In the News" RSS feeds, chapter quizzes, optional Pearson eText including versions for iPad and Android tablet devices, and more. **www.MasteringGeography.com**

Television for the Environment *Earth Report* Videos (0321662989): This three-DVD set helps students visualize how human decisions and behavior have affected the environment and how individuals are taking steps toward recovery. With topics ranging from the poor land management promoting the devastation of river systems in Central America, to the struggles for electricity in China and Africa, these 13 videos from Television for the Environment's global *Earth Report* series recognize the efforts of individuals around the world to unite and protect the planet.

Television for the Environment *Life* World Regional Geography Videos (013159348X): From the Television for the Environment's global *Life* series, this two-DVD set brings globalization and the developing world to the attention of any world regional geography course. These 10 full-length video programs highlight matters such as the growing number of homeless children in Russia, the lives of immigrants living in the United States trying to aid family still living in their native countries, and the European conflict between commercial interests and environmental concerns.

Television for the Environment *Life* Human Geography Videos (0132416565): This three-DVD set is designed to enhance any human geography course. These DVDs include 14 full-length video programs from Television for the Environment's global *Life* series, covering a wide array of issues affecting people and places in the contemporary world, including the serious health risks of pregnant women in Bangladesh, the social inequalities of the "untouchables" in the Hindu caste system, and Ghana's struggle to compete in a global market.

***Geoscience Animation Library* 5th edition (0321716841):** Created through a unique collaboration among Pearson's leading geoscience authors, this DVD resource offers over 100 animations covering the most difficult-to-visualize topics in physical geology, physical geography, oceanography, meteorology, and earth science.

***Practicing Geography*: by Association of American Geographers (0321811151):** This book examines career opportunities for geographers and geospatial professionals in business, government, nonprofit, and educational sectors. A diverse group of academic and industry professionals share insights on career planning, networking, transitioning between employment sectors, and balancing work and home life. The book illustrates the value of geographic expertise and technologies through engaging profiles and case studies.

***Teaching College Geography*: by Association of American Geographers (0136054471):** This two-part resource provides a starting point for becoming an effective geography teacher. Part One addresses "nuts-and-bolts" teaching issues. Part Two explores being an effective teacher in the field, supporting critical thinking with GIS and mapping technologies, engaging learners in large geography classes, and promoting awareness of international perspectives and geographic issues.

***Aspiring Academics*: by Association of American Geographers (0136048919):** Drawing on several years of research, these essays are designed to help graduate students and early career faculty start their careers in geography and related social and environmental sciences. *Aspiring Academics* stresses the interdependence of teaching, research, and service—and the importance of achieving a healthy balance of professional and personal life—while doing faculty work. Each chapter provides accessible, forward-looking advice on topics that often cause the most stress in the first years of teaching.

For Teachers

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Available integrated with MasteringGeography. **www.learningcatalytics.com**

***Instructor Resource Manual* (download only) (1292061383):** Written by Richard Walasek (University of Wisconsin-Parkside), the *IRM* includes a chapter review summary, chapter outline, possible questions and topics for discussions and exams, and representative answers to all Checkpoint, Review and Discussion, and Thinking Geographically questions.

***TestGen/Test Bank* (download only) (1292061375):** *TestGen* is a computerized test generator that lets teachers view and edit *Test Bank* questions, transfer questions to tests, and print the test in a variety of customized formats. Authored by Amy D'Angelo (SUNY Oswego), this *Test Bank* includes approximately 1,300 multiple-choice, true/false, and short-answer/essay questions. Questions are correlated against the revised U.S. National Geography Standards, chapter-specific learning outcomes, and Bloom's Taxonomy to help teachers better map the assessments against both broad and specific teaching and learning objectives.

Instructor Resources (download only): This provides everything teachers need where they want it. The *Instructor Resources* help make teachers more effective by saving them time and effort. All digital resources can be found in one well-organized, easy-to-access place. This includes:

- All book images as JPEGs, PDFs, and PowerPoints™
- Pre-authored Lecture Outline PowerPoints™, which outline the concepts of each chapter with embedded art and can be customized to fit teachers' lecture requirements
- CRS "Clicker" Questions in PowerPoint™
- The *TestGen* software and *Test Bank* questions
- Electronic files of the *IRM* and *Test Bank*

This Instructor Resource Center content is available via the Instructor Resources section of MasteringGeography and **www.pearsonglobaleditions.com/Dahlman.**

For Students

***Goode's World Atlas*, 22nd Edition (0321652002):** *Goode's World Atlas* has been the world's premiere educational atlas since 1923—and for good reason. It features more than 280 pages of maps, from definitive physical and political maps to important thematic maps that illustrate the spatial aspects of many important topics. The 22nd edition includes 190 pages of new, digitally produced reference maps, as well as new thematic maps on global climate change, sea level rise, CO_2 emissions, polar ice fluctuations, deforestation, extreme weather events, infectious diseases, water resources, and energy production.

***Dire Predictions: Understanding Global Warming* by Michael Mann and Lee R. Kump (0136044352):** This text is for students in any science or social science course who are in need of a basic understanding of Intergovernmental Panel on Climate Change (IPCC) reports. In just over 200 pages, this practical text presents and expands upon the essential findings of the IPCC in a visually stunning and undeniably powerful way to the lay reader. Scientific findings that provide validity to the implications of climate change are presented using striking graphics and understandable analogies.

Pearson's *Encounter* Series

Pearson's *Encounter* series provides rich, interactive explorations of geoscience concepts through Google Earth™ activities, exploring a range of topics in regional, human, and physical geography. For those who do not use MasteringGeography™, all chapter explorations are available in print workbooks as well as in online quizzes, at **www.mygeoscienceplace.com**, accommodating different classroom needs. Each exploration consists of a worksheet, online quizzes, and a corresponding Google Earth™ KMZ file.

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- *Encounter Physical Geography* by Jess C. Porter and Stephen O'Connell (0321672526)
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ABOUT OUR SUSTAINABILITY INITIATIVES

Pearson recognizes the environmental challenges facing this planet, and acknowledges our responsibility in making a difference. This book has been carefully crafted to minimize environmental impact. The binding, cover, and paper come from facilities that minimize waste, energy consumption, and the use of harmful chemicals. Pearson closes the loop by recycling every out-of-date text returned to our warehouse.

Along with developing and exploring digital solutions to our market's needs, Pearson has a strong commitment to achieving carbon neutrality. As of 2009, Pearson became the first carbon- and climate-neutral publishing company. Since then, Pearson remains strongly committed to measuring, reducing, and offsetting our carbon footprint.

The future holds great promise for reducing our impact on Earth's environment, and Pearson is proud to be leading the way. We strive to publish the best books with the most up-to-date and accurate content, and to do so in ways that minimize our impact on Earth. To learn more about our initiatives, please visit **www.pearson.com/responsibility**.

U.S. National Geography Standards

In 1994 the U.S. Congress adopted Goals 2000: The Educate America Act (Public Law 103-227). This act listed geography among the fundamental subjects of a national curriculum. Geographical understanding, wrote Congress, is essential to achieve "productive and responsible citizenship in the global economy." Several academic and scholarly geographical organizations collaboratively produced an agreed-upon core of geographic material and ideas, which was published as *Geography for Life: The National Geography Standards*, revised into a second edition in 2012. These 18 Standards and the Essential Elements specify the geographical subject matter and skills that U.S. students should master.

The goals demonstrate the degree to which geographic knowledge is essential for both understanding and effectively managing environmental and human relations in the 21st century. They were established in the hope that all persons educated in the public school system become geographically knowledgeable. In this book, we go beyond these standards in the treatment of both subject matter and thinking skills, but we provide here the outline of the goals in order to demonstrate the great breadth of the field.

The geographically informed person knows and understands the following:

The World in Spatial Terms

1. How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information
2. How to use mental maps to organize information about people, places, and environments in a spatial context
3. How to analyze the spatial organization of people, places, and environments on Earth's surface

Places and Regions

4. The physical and human characteristics of places
5. That people create regions to interpret Earth's complexity
6. How culture and experience influence people's perceptions of places and regions

Physical Systems

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

Human Systems

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

Environment and Society

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

The Uses of Geography

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

STRUCTURED LEARNING TO GUIDE AND ENGAGE STUDENTS

An integrated learning path supports active learning, application, and mastery of geographic concepts.

NEW! Learning Outcomes at the beginning of each chapter help students prioritize key concepts and skills as they read.

A Look Ahead briefly outlines the main points in each chapter.

Checkpoint: Food Origins

Survey your local grocery for the origins of whole foods (raw vegetables, fruits, and nuts). Which traveled the farthest to your store? What origins seem least likely as food producers and why? What was required to transport these foods?

Checkpoint: Know Your Fishmonger

Survey the fish counter at your local grocery store. Write down a list of the species, their countries of origin, whether they were farm raised or wild caught, and price per pound. Is your selection mostly freshwater or marine? Local or international? Farm raised or wild? Which are least expensive? Ask your fishmonger how they were shipped. Is your fish counter sustainable?

NEW! Checkpoint questions integrated at the end of chapter sections allow students to check and apply their conceptual understanding, for a more applied and active learning approach.

NEW! Chapter Review Summary is organized around the main points and Learning Outcomes in each chapter.

CHAPTER REVIEW

Summary

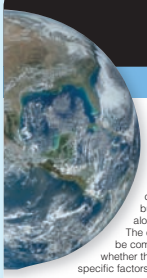
Feeding a Growing Population

- Food supplies have generally kept up with a growing population because farmers have opened new farmland, grown new crops, and adopted new techniques.
- Storing, transporting, and trading food allows productive regions to support more distant hungry regions.
- The green revolution used new scientific techniques to increase crop yields in many poor and hungry countries.
- Biotechnology changes the genetic structure of plants and animals for greater productivity or preferred food qualities.

GEOGRAPHY IN THE REAL WORLD

Rich, contemporary, and relevant applications illustrate the geography in action all around us.

NEW! **The World in 2050** explores possible future scenarios based on what geographers know today.



The World in 2050

Changes in the Biosphere

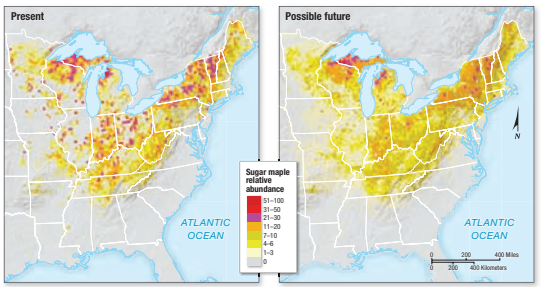
The biogeography of Earth in 2050 will likely be significantly different from today, as a result of multiple forces affecting species and ecosystems. We will see the effects of these forces most clearly on the distributions of individual species, but we may also see subtle changes along the margins of some biomes. The causes of changing distributions will be complex, and it will be difficult to say whether the changes we see are caused by specific factors.

Changes in the Biomes Population growth and changing resource use, particularly the demand for agricultural commodities, will likely cause changes in the distribution of forest and grassland biomes. The extent of tropical forests has been shrinking, and the pressures causing that shrinkage—primarily demand for agricultural land to support food production and material needs such as lumber—will likely continue or increase. Presently in North America, increased demand for biofuels is causing grassland to be converted to cropland. If we develop technology to use switchgrass or similar crops for biofuel, those pressures will continue in other environments as well.

Species Changes Climate change for many species with specific climatic tolerances is affecting their distribution. In North America, global warming will force northward shifts in distribution. For example, the sugar maple, known for its striking autumn colors and as a source of maple syrup, requires cold winter temperatures, and moderate summer temperatures. Today, the sap runs and can be harvested a week or more earlier than in the past, and harvests do not last as long as it did. If these trends continue, the range of sugar maple in the United States will be greatly restricted in 2050 (Figure 4-4-1).

Invasive Species Invasive species will continue to cause extinctions and disruptions of ecological communities virtually everywhere. Because invasive species usually succeed in environments similar to their home ranges, the biome, as a region of broadly similar plant and animal types, will remain despite gains and losses of certain species. The disappearance of sugar maple from the forests of North America would not spell the end of the forest.

The biosphere of 2050 is thus likely to look different from that of today in its details. In high-latitude environments, forests may expand into areas that are currently tundra, or the border may shift between grassland and desert. Larger changes in the world map of biomes are likely, with significant shifts in the extents of biomes and the species they contain.



NEW! **Explorations,** written by experts in various areas of geography, present real-world research, emphasizing the applied nature and relevance of geography today.

EXPLORATIONS

A Cultural Geographic Approach to Islam and Gender

By Banu Gökariksel, University of North Carolina, Department of Geography

In recent years, there has been an emphasis on veiling as an Islamic requirement for pious Muslims. The emergence of veiling as a religious, political, and cultural issue is linked to two related issues in the Muslim world. The first is the rise of broad Islamic-oriented social and political movements across most Muslim countries. These movements share an emphasis on living according to the tenants of Islam, but vary in terms of specific political goals and strategies. The second issue is the growth of an "Islamic" consumer market that includes a fashion industry.

THE CONCEPT OF VEILING IN ISLAM Veiling is an application of the Islamic code of modesty. The Qur'an specifies modesty for both men and women, including virtues such as humility, moderation, and not drawing attention to oneself in public. The same code mandates women's covering their "ornaments" or "jewels" in public spaces or in the presence of unrelated men. Debates continue about the interpretation of Qur'anic injunctions about veiling, which has led to different practices in different places (Table 7-3-1).

Interpretations of modest dress differ across Muslim communities. These are often linked to cultural concepts such as honor, respectability, femininity, and social class. Historically in Egypt, upper-class urban women were fully covered. For many centuries in Indonesia, Muslim women did not cover their hair and shoulders in their daily practice. Only recently have young Indonesian women accepted veiling as an important religious requirement.

THE VEIL AS A FASHION OBJECT Muslim women's veiling practices are increasingly varied as a result of the rise of a growing fashion industry that targets devout Muslim

▲ **Figure 7-3-1 Fatih, a conservative lower-middle-class neighborhood in Istanbul.** This photo shows several styles of veiling in one frame: two young women dressed in the fashionable styles and colors of 2004, an older woman dressed in a more conservative style with a large headscarf and an overcoat, and in the back, women in loosely tied headscarves and no scarves at all.

Global and Local features examine the connections between global forces and local places, and how particular places respond to global impacts.

GLOBAL AND LOCAL

Detroit, The Shrinking City

While many U.S. cities confront sprawl, some are in steep decline. The city of Detroit once housed 1.85 million people in 1950. The city of Detroit was once home to the Big Three automakers—Ford, Chrysler, and General Motors (Figure 10-3-1). Many more companies started there to supply parts to the massive factories that employed much of Detroit's workforce. As long as the auto industry was thriving, the basic sector of Detroit grew, hiring many of the African Americans that left the American South after World War II.

DOWNWARD SPIRAL The population began to decline after 1970 when most industrial cities experienced a combination of a worsening economy and social unrest. Two additional factors made matters worse for Detroit. Detroit's economy was almost entirely based on the auto industry as a global center of production. Competition from foreign automakers began to cut into the sales of the Big Three, beginning their slow decline. Rising oil prices caused by Middle East turmoil made production more expensive and slowed the economy in general, lowering sales. Lower sales meant fewer jobs.

The auto industry started moving out of downtown, taking jobs and the employed to the suburbs. The population that remained in Detroit was increasingly poor and less educated. Demand for public services remained but the loss of jobs meant the city had a smaller tax base to pay for schools, infrastructure, and policing. Crime increased and the vicious cycle of postindustrial decline worsened. Today, the city of Detroit is the smallest it has been in a century. The city is demolishing abandoned houses and businesses that have become fire hazards and eyesores (Figure 10-3-2). Some blocks are

▲ **Figure 10-3-1 Detroit, Motor City.** The headquarters of America's "Big Three" automakers and many related companies dominated the skyline of Detroit.

Rapid Change features emphasize the issues that arise as local places contend with environmental, economic, cultural, and political changes that occur at unprecedented speed.

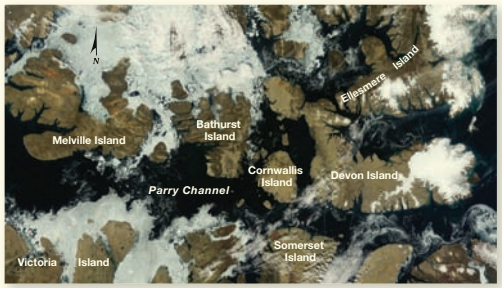
RAPID CHANGE

Monitoring Arctic Sea Ice Extent

In September 2012, the extent of sea ice in the Arctic Ocean reached the lowest level ever recorded. Both the thickness and extent of sea ice have been declining for decades, as a result of global warming. The Parry Channel, a key part of the Northwest Passage sea route across northern Canada, was largely ice free in late summer 2012 (Figure 1-2-1).

FROM FISHING TO DRILLING Inuit people have lived in the Arctic region for thousands of years, subsisting largely through hunting and fishing in Arctic coastal waters. The Northwest Passage was first navigated by Europeans in 1903–1906, but has not yet become a viable route for commercial ships. Today the region is increasingly important in world affairs, principally as a source of oil. Offshore drilling is planned in both the Russian and United States parts of the Chukchi Sea, which likely contains large oil and gas deposits. Scientists believe that a substantial portion of the world's remaining fossil fuel resources are beneath the Arctic Ocean. Russia has claimed large parts of the Arctic Ocean floor and in 2007 planted its flag on the sea bed beneath the North Pole.

EXPLORE HOW PLACES CHANGE The Arctic is a region of rapid change. Climatic warming is underway, driven primarily by fossil-fuel combustion around the globe. This warming is melting permafrost, accelerating coastal erosion, and transforming ecosystems. Resource extraction is growing, creating new communities, cultural interactions, and sometimes conflict. Warming, economic development, and cultural change are interrelated, perhaps most profoundly by the fossil fuel combustion that drives climate change, and the declining sea ice that facilitates oil and gas exploration and extraction. Such changes in the physical environment and human societies, and the processes that connect them, are the central focus of geography.

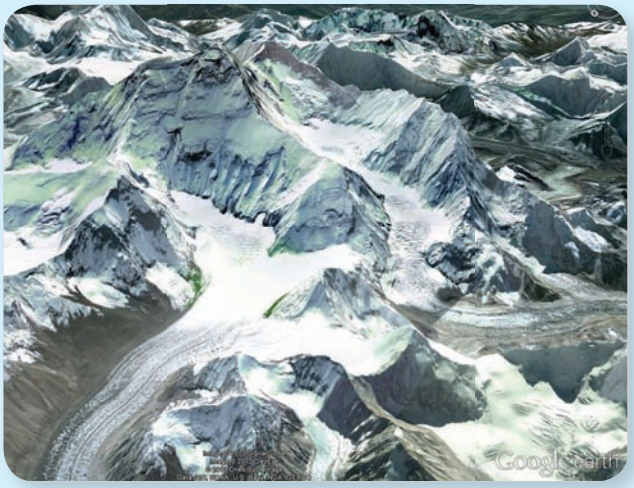


▲ **Figure 1-2-1** Satellite image of the Parry Channel, between Victoria Island and Melville Island in northern Canada, on August 2, 2012.

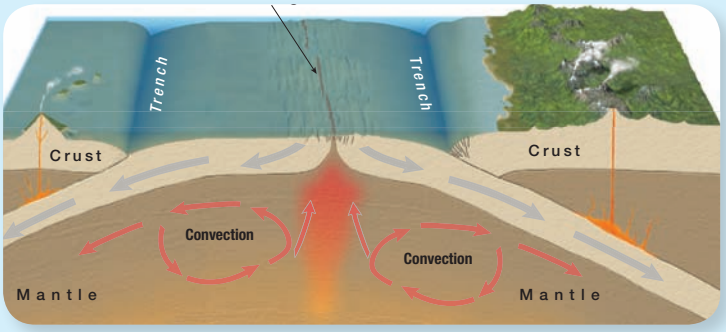
GEOGRAPHIC VISUALIZATION

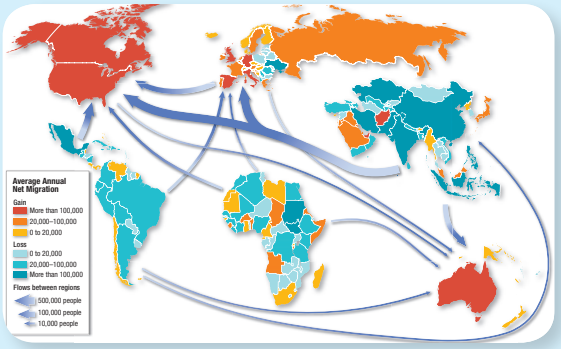
Geographic concepts illustrated with compelling, current, and accessible figures.

The latest remote-sensed, satellite, and Google Earth imagery.



Photorealistic illustrations, and dynamic cartography built with current data and GIS tools.





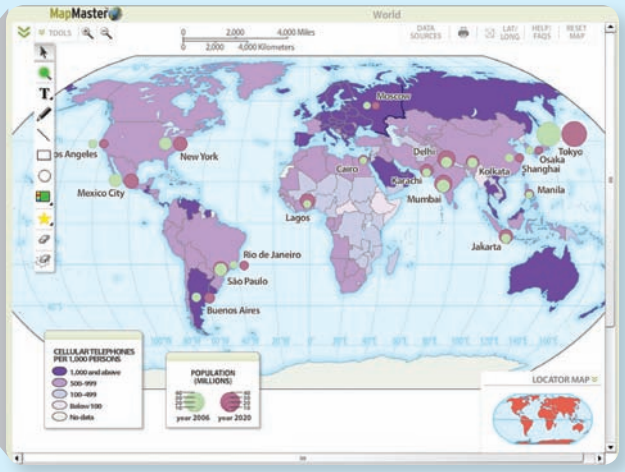
Contemporary photos of people and places illustrate the diversity of Earth's geography.

INTEGRATED MEDIA

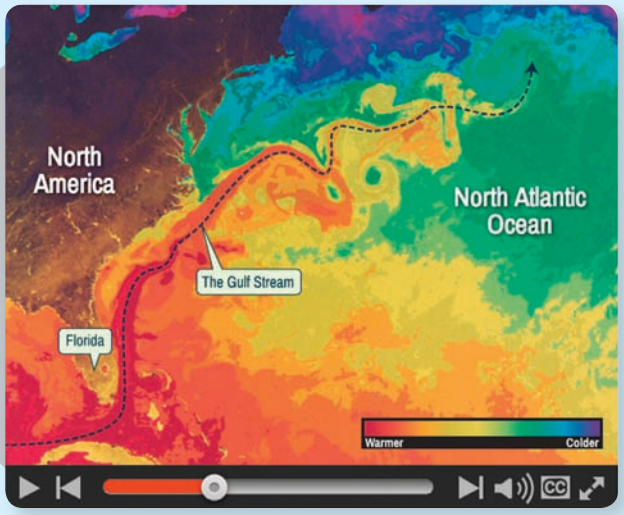
Integrated media resources create a dynamic learning experience and bring geographic concepts to life.

NEW! **Quick Response (QR)** codes integrated throughout each chapter enable students to use mobile devices to connect the print book to online imagery, media, and data sources.

MapMaster Interactive Maps allow students to layer various thematic maps to analyze spatial patterns and data at regional and global scales.



Geoscience Animations illuminate the most difficult-to-visualize topics from across the geosciences with dynamic and interactive visualizations of key physical processes.



MasteringGeography™

www.masteringgeography.com

The Mastering online homework, tutorial, and assessment system helps teachers focus on their course objectives by delivering self-paced tutorials that provide students with individualized coaching and respond to each student's progress.

Tools for improving geographic literacy and exploring Earth's dynamic landscape.

MapMaster™ is a powerful interactive map tool that presents assignable layered thematic and place name interactive maps at world and regional scales for students to test their geographic literacy and spatial reasoning skills, and explore the modern geographer's tools.

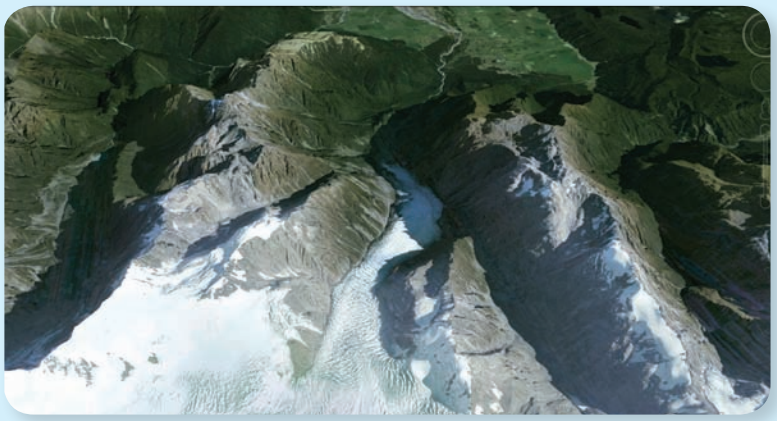
MapMaster Layered Thematic Interactive Map Activities act as a mini-GIS tool, allowing students to layer various thematic maps to analyze spatial patterns and data at regional and global scales and answer multiple-choice and short-answer questions organized by region and theme.

NEW! Layered Thematic Map Features

- 90 new map layers
- Zoom and annotation functionalities
- All maps updated with data from the 2010 U.S. Census, as well as current data from the United Nations, and the Population Reference Bureau

MapMaster Place Name Interactive Map Activities have students identify place names of political and physical features at regional and global scales, explore select recent country data from the CIA World Factbook, and answer associated assessment questions.

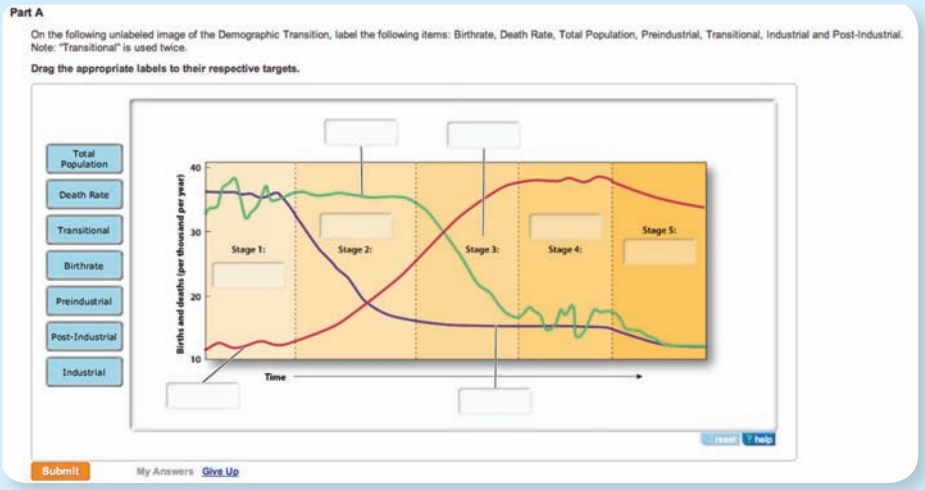
Help students develop a sense of place and spatial reasoning skills.



Encounter Activities provide rich, interactive explorations of geography concepts using the dynamic features of **Google Earth™** to visualize and explore Earth's landscape. Dynamic assessment includes questions related to core human geography concepts. All explorations include corresponding Google Earth KMZ media files, and questions include hints and specific wrong-answer feedback to help coach students towards mastery of the concepts.

Geography videos provide students a sense of place and allow them to explore a range of locations and topics. Covering issues of economy, development, globalization, climate and climate change, culture, etc., there are 10 multiple choice questions for each video. These video activities allow teachers to test students' understanding and application of concepts, and offer hints and wrong-answer feedback.

Thinking Spatially and Data Analysis Activities help students master the toughest concepts to develop spatial reasoning and critical thinking skills by identifying and labeling features from maps, illustrations, graphs, and charts. Students then examine related data sets, answering multiple-choice and increasingly higher order conceptual questions, which include hints and specific wrong-answer feedback.



Student Resources in MasteringGeography

- MapMaster™ interactive maps
- Practice chapter quizzes
- Geoscience animations
- Geography videos
- "In the News" RSS feeds
- Glossary flashcards
- Optional Pearson eText and more

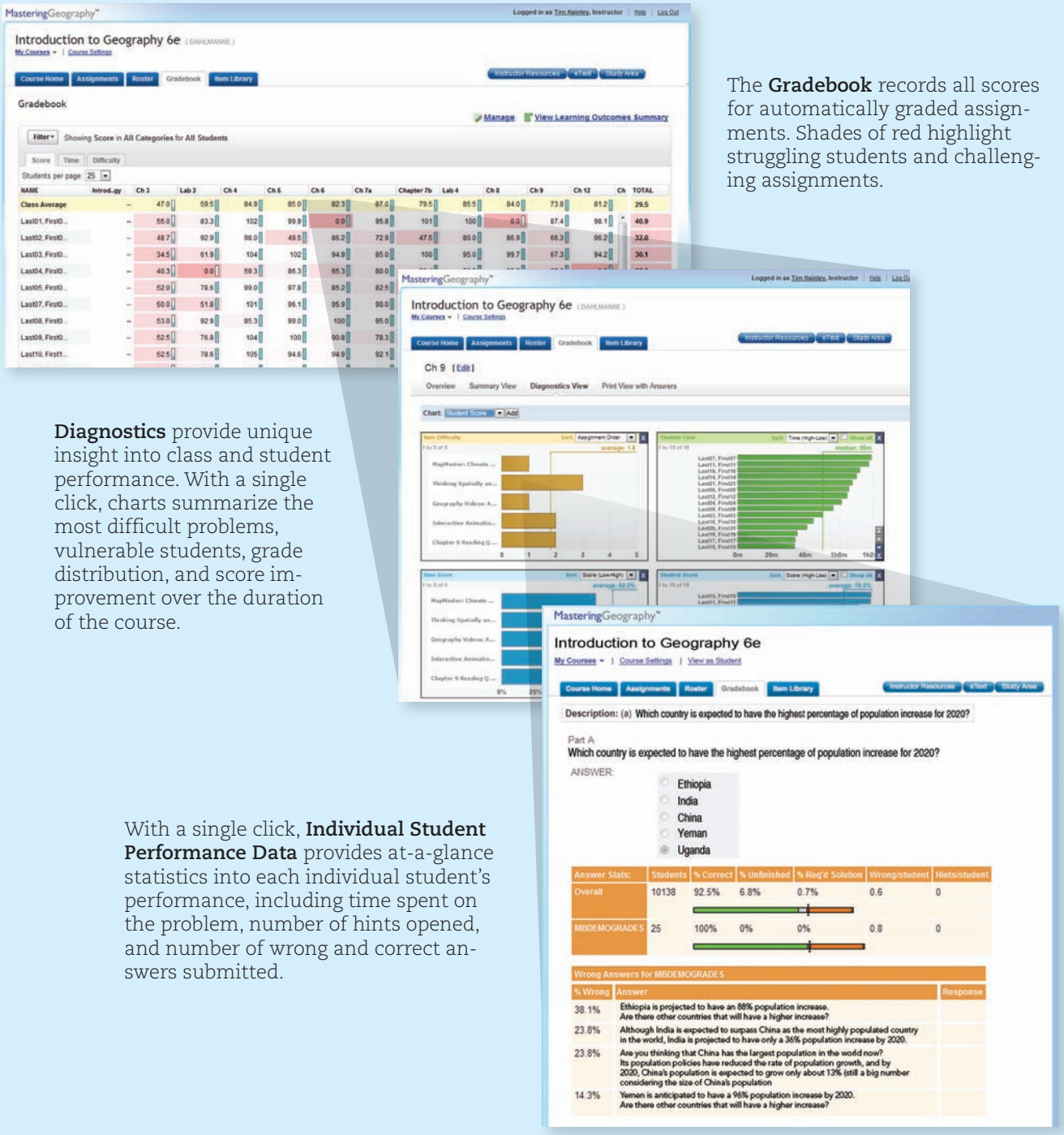
Media icons integrated throughout the chapters direct students to login and extend their learning beyond the textbook.

MasteringGeography™

www.masteringgeography.com

With the Mastering gradebook and diagnostics, you'll be better informed about your students' progress than ever before. Mastering captures the step-by-step work of every student—including wrong answers submitted, hints requested, and time taken at every step of every problem—all providing unique insight into the most common misconceptions of your class.

Quickly monitor and display student results.



The **Gradebook** records all scores for automatically graded assignments. Shades of red highlight struggling students and challenging assignments.

Diagnostics provide unique insight into class and student performance. With a single click, charts summarize the most difficult problems, vulnerable students, grade distribution, and score improvement over the duration of the course.

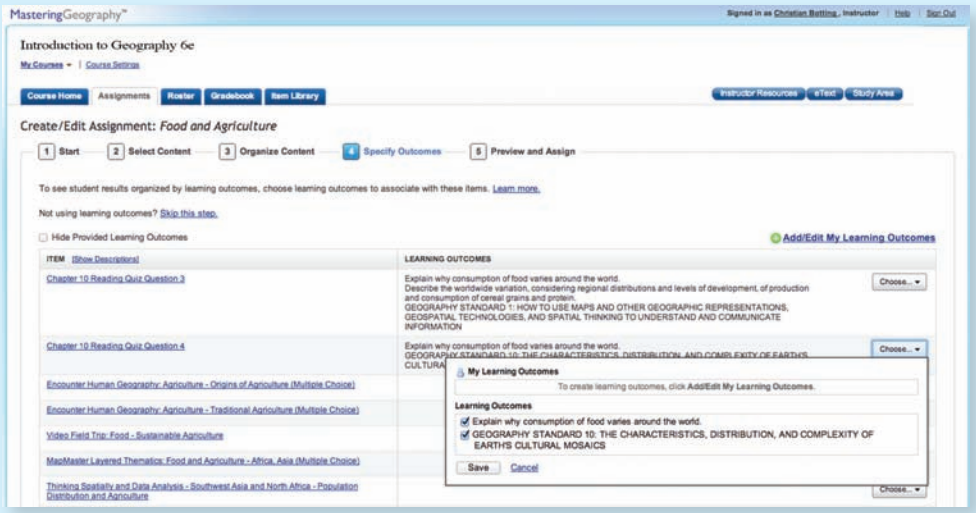
With a single click, **Individual Student Performance Data** provides at-a-glance statistics into each individual student's performance, including time spent on the problem, number of hints opened, and number of wrong and correct answers submitted.

Quickly measure student performance against learning outcomes

Learning Outcomes

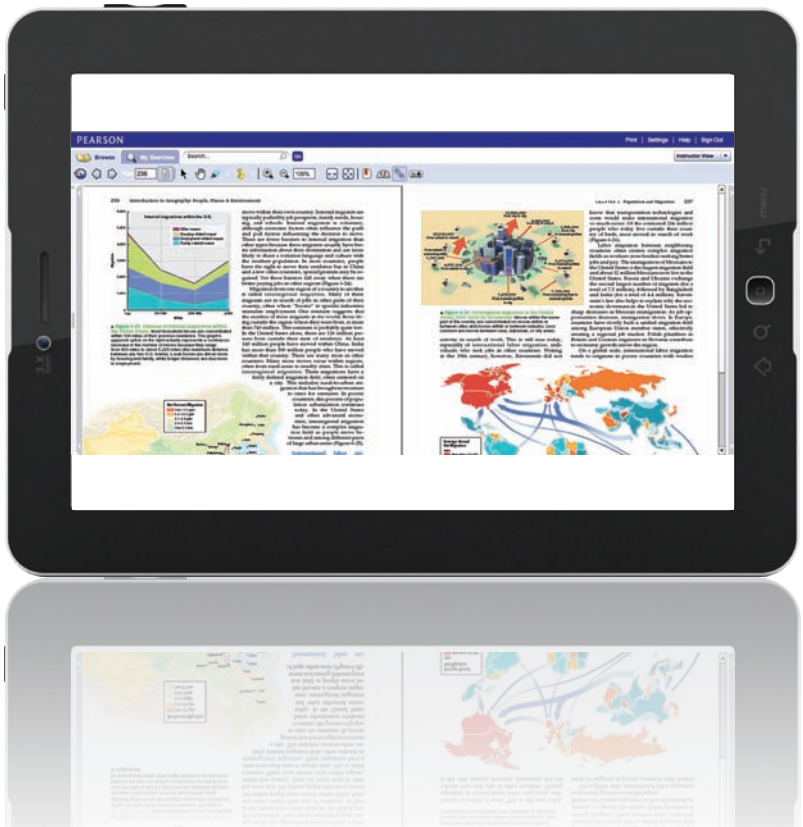
MasteringGeography provides quick and easy access to information on student performance against your learning outcomes and makes it easy to share those results.

- Quickly add your own learning outcomes, or use publisher-provided ones, to track student performance and report it to your administration.
- View class and individual student performance against specific learning outcomes.
- Effortlessly export results to a spreadsheet that you can further customize and/or share with your chair, dean, administrator, and/or accreditation board.



Easy to make it your own

Customize publisher-provided problems or quickly add your own. MasteringGeography makes it easy to edit any questions or answers, import your own questions, and quickly add images, links, and files to further enhance the student experience. Upload your own video and audio files from your hard drive to share with students, as well as record video from your computer's webcam directly into MasteringGeography—no plug-ins required. Students can download video and audio files to their local computer or launch them in Mastering to view the content.



NEW! The Pearson eText app is a great companion to Pearson's eText browser-based book reader. It allows existing subscribers who view their Pearson eText titles on a Mac or PC to additionally access their titles in a bookshelf on the iPad or Android Tablets either online or via download.

Pearson eText gives students access to ***Introduction to Geography: People, Places & Environment*, 6th Edition** whenever and wherever they can access the Internet. The eText pages look exactly like the printed text, and include powerful interactive and customization functions. Users can create notes, highlight text in different colors, create bookmarks, zoom, click hyperlinked words and phrases to view definitions, and view as a single page or as two pages. Pearson eText also links students to associated media files, enabling them to view an animation as they read the text, and offers a full-text search and the ability to save and export notes. The Pearson eText also includes embedded URLs in the chapter text with active links to the Internet.