Table of Contents

Executive Summary Components of the Study
How the No Child Left Behind Act Impacts Social Studies Social Studies and the No Child Left Behind Connection
Glencoe's Civics Today: Citizenship, Economics & You
Authors About Our Authors
Correlations13NSCG Standards Correlations15NCEE Standards Correlations15
Research on the Elements of an Effective Textbook
Reading Strategies Glencoe Reading Strategies
Learning StylesVisual Reading Features65"The Importance of Photographs," by Steve Mico67
Research on the Effectiveness of Glencoe's Social Studies Textbooks
Quantitative and Qualitative ResearchAssessment Reliability and Validity71Focus Groups73Teacher Discussion Groups77Classroom Visits79
References for Further Study 81

Research Summary

Glencoe/McGraw-Hill's *Civics Today: Citizenship, Economics, & You*, as well as Glencoe's entire social studies series, is the product of ongoing classroom-oriented research that involves students, teachers, curriculum supervisors, administrators, parents, content experts, and educational-research specialists.

Glencoe's programs are founded on pedagogy, research, and authorship, all of which contribute to the success of Glencoe's programs in the classroom. Glencoe's pedagogical approach draws on significant educational research conducted by leading scholars and practitioners in education. Glencoe's author team is a mix of practicing classroom teachers, curriculum supervisors, college-level educators, and learning specialists. Glencoe's research framework helps ensure that Glencoe social studies programs are both practical and progressive in their approach.

Executive Summary

This summary provides an overview of the research-based framework study of Glencoe's *Civics Today: Citizenship, Economics*, & *You* contained in this booklet.

Components of the Study

Glencoe/McGraw-Hill social studies textbooks are developed using independent research conducted by experts in pedagogy, reading, geography, and social studies. Once a book is developed, independent research firms test its classroom effectiveness with educators and students. The scholarly research used by Glencoe/McGraw-Hill during the development of *Civics Today* is included in this booklet.

In addition, research conducted on *Civics Today* in schools across the United States using quantitative and qualitative methods was collected and compiled to support the effectiveness of *Civics Today* in classrooms. Research methods used include focus groups, teacher discussion groups, and classroom visits. Summaries of this data are also included in this booklet.

The section entitled **Research on the Elements of an Effective Textbook** includes independent research on reading, learning styles, and geography and cartography. The section entitled **Research on the Effectiveness of Glencoe's Social Studies Textbooks** includes both quantitative and qualitative research based on independent studies conducted with classroom teachers.

In addition to the research sections in this booklet, you will find complete standards correlations charts and information on reading strategies (why our textbooks look like they do, including our rationale for the two-column format and the liberal use of maps and other graphical elements). We have created this booklet to help you better understand our *Civics Today* textbook and how it may have contributed to increased scores in districts that have used the textbook, and how it might contribute to not only increased student scoring in your district, but also better student understanding of the subject and a more enjoyable teaching experience.

Features and Benefits

The following section provides a summary of the instructional features and benefits included in Glencoe's *Civics Today: Citizenship, Economics*, & *You* program.

Dynamic Instructional Strategies present a clear and comprehensive coverage of civics.

- Engaging section introductions include Guide to Reading, Key Terms,
 Reading Strategy, Read to Learn, and Americans in Action.
- Political cartoons, Teens in Action, and An Inside Look At...from TIME® put real-life slants on the study of civics.
- Each Review to Learn feature offers a concise summary of important chapter topics and can be used to preview, review, or summarize chapter content.

A Research-Based Reading Strand encourages active reading and learning for students of all reading levels.

- Foldables[™] help students organize and process key concepts as they read.
- Evaluating Charts, Graphs, and Tables questions ask students to interpret a visual.
- The American Biographies features highlight interesting information to engage students.
- Reading Checks help students check their reading comprehension.

Differentiated Instruction makes *Civics Today* accessible to students of all learning levels.

- Differentiated Instruction activities and strategies are designed for students of differing abilities and learning challenges.
- How Do I Use My Textbook? teaches students how to approach the text to retain course information and get the most value out of the Student Edition.

Standardized Test Preparation gives students the opportunity to practice for state and national exams.

- Chapter assessments and a Standardized Test Practice Workbook provide a variety of forms of standardized test practice, including multiple-choice, open-ended short response, and open-ended extended response items.
- Test-Taking Tips help students learn how to successfully approach test questions.

A Variety of Interdisciplinary Activities and Features get students excited about civics and contribute to student success.

- The Issues to Debate feature encourages students to look at both sides of an issue and discuss it.
- Economics and You features give students real-life economics information.
- Documents of American History offers students practice in interpreting primary sources.

Teacher Resources provide convenient strategies to help both new and experienced teachers.

- The Planning Guide in each unit provides background information to help you prepare for each unit.
- Fast File™ unit resources contain important reproducible masters.
- Chapter Resources help teachers organize their daily lessons.

Technology provides time-saving software products to help you creatively engage students and reduce prep time.

- The Civics Today Video Programs offer interesting and diverse content extension.
- TeacherWorks includes an Interactive Teacher Edition as well as an Interactive Lesson Planner that contains all resources available with the program on a CD-ROM.
- StudentWorks includes an electronic version of the Student Edition, along with all of the program's workbooks.
- Civics Online at civ.glencoe.com provides added activities and self-checks.

How the No Child Left Behind Act Impacts Social Studies

Social Studies and the No Child Left Behind Connection

Developing proficient reading skills has long been an important component of social studies instruction, as such development helps promote comprehension and retention of curricular subject matter. Furthermore, research has shown that students can improve their language skills and reading proficiency by using social studies reading materials. Today, the link between reading and social studies has perhaps never been more critical. Reading proficiency is the key to the government's education program, as evidenced by the attention given to the No Child Left Behind (NCLB) Act. The act, signed into law in January of 2002, resulted from disturbing reports about serious deficiencies in students' reading abilities and how this affects their preparations for college and the workforce. Specifically, the government reports that:

- Students who fall behind in reading have a greater chance of dropping out of high school.
- Of 100 ninth graders, only 68 will graduate from high school on time;
 38 will enter college directly, but only 26 will still be enrolled in college by their sophomore year, and only 18 will graduate from college. (The rates for minority students are even lower.)
- In wealthy school districts, more than one-fifth of fourth graders were unable to reach the National Assessment of Educational Programs' basic level in 2000, and about two-thirds of fourth graders in high-poverty schools were unable to reach the basic level.
- Only one-third of America's workforce has any post-secondary education, yet 60 percent of new jobs will require post-secondary education.

The goal of NCLB is to ensure that students graduate from high school with the skills needed to succeed in college and in the modern workforce. States are charged with improving the academic achievement of their schools each year. To accomplish this, states must annually test children in grades three through eight in reading and math and make sure that students are proficient in those subjects by 2014. To help accomplish these objectives, states can receive significant federal funding through the NCLB's Reading First program to help establish comprehensive, scientifically based reading instruction for children in kindergarten through third grade.

"Research has shown that students can improve their language skills and reading proficiency by using social studies reading materials."

"The social-studies curriculum can be used to improve and support reading proficiency."

"The parallels
between the goals
of social studies
and those of reading
instruction are
longstanding."

Impact of NCLB on the Curriculum

The stringent guidelines set forth in NCLB require teachers and administrators to design reading curricula and assessments that will improve proficiency and eliminate gaps in student achievement. Some schools have responded by launching extensive reading programs, many of which emphasize reading at the expense of other subjects. The result has been a narrowing of the overall curriculum.

In a recent study by the Council for Basic Education, about three-fourths of the 1,000 principals surveyed report that their teachers now spend more time on reading, writing, and math, and nearly one-third of elementary school principals report less class time for social studies. Perhaps most unsettling are results showing that nearly half of the principals in elementary schools serving mostly minority students report decreases in social studies class time. Clearly, it is not easy to fit social studies into a curriculum crowded by subjects charged with meeting strict government-mandated standards.

The Reading/Social Studies Link

Instead of diminishing or even eliminating social studies instruction, teachers can use the social studies curriculum to improve and support reading proficiency. In describing the importance of reading to learning, U.S. Education Department spokeswoman Susan Aspey noted that schools can use a variety of disciplines to improve basic skills. In other words, reading-skills instruction should not be limited to the reading-skills classroom; rather, a subject such as social studies can become a key component of a school's reading-proficiency efforts.

The parallels between the goals of social studies and those of reading instruction are longstanding. Social studies teachers strive to ensure that their students clearly grasp the content of what they read in their textbooks and in other materials. In addition, both disciplines frequently demand that students:

- Understand vocabulary.
- Identify key concepts, ideas, connections, and chronologies.
- Evaluate and analyze writing methods.
- Compare and synthesize information from multiple sources.
- Form questions and draw conclusions about the subject matter.

Thus, social studies curricula can clearly be complementary to reading instruction, and vice versa.

Literature, as one example, has proven to be an excellent vehicle for learning history. In the article "Learning History Through Children's Literature," Lynn R. Nelson and Trudy A. Nelson explain that reading material "illustrating the triumphs of individuals embodying civic virtue and good character" has historically been used to teach history. They note that literature and narratives have "provided children with an understanding of American history and government as well as the attributes that individual citizens needed to maintain the Republic." To acquire the full value of understanding and instruction offered by literature and to make connections and inferences apart from the subject context—to fully appreciate the unique meaning literature provides—children must be taught to improve their reading proficiency.

Similarly, MaryEllen Vogt, author and associate professor of education at California State University, notes the advantages of cross-curricular thematic instruction, or using reading and writing in a variety of subject areas to encourage students to explore important topics, problems, and questions. Rather than teaching in isolated learning periods, students can explore a theme by using a variety of disciplines. Thus, a social-studies topic can be explored through reading and writing about the topic, role-playing, art projects, music, and research. The skills gained through such experience also can be employed when reading or writing about the sciences or reviewing, for instance, mathematical statistics on the same theme.

This type of cross-curricular instruction, Vogt notes, enables students to "integrate and enrich the language processes of reading, writing, listening, speaking, and thinking." Another result is that "reading and writing tasks are authentic, interesting, relevant, and contextualized." Correspondingly, when students are offered a variety of reading sources, they can choose material that is appropriate for their reading level, and teachers can plan lessons based on students' abilities, needs, and interests.

Social Studies Texts and English Learners

Linguistic and cultural diversity is on the rise in U.S. schools, prompting renewed attention on how best to prepare students for mainstream instruction. A study by the National Center for Research on Cultural Diversity and Second Language Learning suggests that by increasing the use of visuals, demonstrations, and graphic organizers, among other techniques, teachers can facilitate comprehension of course material.

"This type of cross-curricular instruction, Vogt notes, enables students to 'integrate and enrich the language processes of reading, writing, listening, speaking, and thinking."

"... The academic language used in social studies is commensurate with much of the academic language in other humanities courses and is similar to the non-technical language used in the math and science classroom."

 National Center for Research on Cultural Diversity and Second Language Learning Researcher Deborah J. Short, reporting on the study, notes that many social studies textbooks use common structures, such as chronological and cause-and-effect order, as well as linguistic signals, such as verb tenses and conditions, time expressions, rhetorical markers, and causative words, to signal students about time references, cause and effect, and comparison/contrast frameworks. Short explains that "classroom observations showed that students who were taught to recognize these cues improved their reading and writing skills."

Another study by the National Center for Research on Cultural Diversity and Second Language Learning, which focused on middle-school history classes, revealed that the reading proficiency gained from an emphasis on social studies language, reading, and writing skills can be transferred to other disciplines:

". . . the academic language used in social studies is commensurate with much of the academic language in other humanities courses and is similar to the non-technical language used in the math and science classroom. Because the language skills required for participation in social studies courses mirror those of other academic courses, placement in integrated language and social studies classes is recommended for developing the academic skills needed by English Learners before they are placed in mainstream classes."

Glencoe's Approach to Teaching Social Studies and Reading

The numerous reading skills and strategies introduced and reinforced throughout Glencoe's social studies texts and supplementary materials are appropriate for a variety of learning levels. In particular, each text's reading strategies are research-based, with the goal of improving reading comprehension and extending language skills. Reading strategies are employed in the introduction of each unit, chapter, and section. Strategies used include:

- Unit Openers
- Chapter Openers
- Prior-Knowledge Activators
- Reading and Study Skills Foldables[™]
- Guide to Reading (previews the main idea and key terms and provides a reading comprehension guide)
- Reading Checks
- Section Assessments
- Chapter Assessments
- StudentWorks Plus (includes an electronic version of the Student Edition with embedded audio, all of the program's workbooks, a Student Presentation Builder, and a daily assignment and grade log for students)

Further reading support can be found in Glencoe blackline masters, including the Unit Resources booklets, the Reading Essentials and Study Guide, and the Active Reading Note-Taking Guide. In addition, Glencoe social studies textbooks use extensive visual reading features, such as graphs, charts, graphic organizers, maps, and photographs, to aid reading comprehension. Visual reading features help present complex information in easy-to-understand formats.

Glencoe texts are designed with the reading proficiency goals of NCLB in mind, with particular emphasis on reading skills, strategies, features, writing prompts, assessments, and other support materials. Each text reflects a commitment to support teachers in their efforts to improve student performance and achieve NCLB goals.

Clearly, the alarming achievement gap that NCLB attempts to close can be addressed in coursework that extends beyond the reading-skills classroom to include the entire social studies curriculum. This unmistakable trend promises to enhance the understanding, appreciation, and proficiency levels of both the reading and social studies disciplines.

Sources

Center for Applied Linguistics. "Integrating Language and Culture in the Social Studies." The National Center for Research on Cultural Diversity and Second Language Learning. http://www.cal.org/Archive/projects/socstud.htm (June 8, 2004).

Center on Education Policy. "From the Capital to the Classroom: Year 2 of the No Child Left Behind Act." Jan. 2004.

Council for Basic Education. "Implementation of NCLB Curtails Study of History, Civics, Languages, & the Arts, While Expanding Learning Time for Literacy, Math, & Science, New Study Says." http://www.c-b-e.org/news/nr040308.htm (June 7, 2004).

National Center for Research on Cultural Diversity and Second Language Learning. "Integrating Language and Culture in Middle School American History Classes." Feb. 1994. http://www.cal.org/resources/digest/ncrcds02.html (June 9, 2004).

Nelson, Lynn R., and Trudy A. Nelson. "Learning History Through Children's Literature." 1999. http://www.indiana.edu/~ssdc/hislitdig.htm (June 8, 2004).

- Short, Deborah J. "Study Examines Role of Academic Language in Social Studies Content–ESL Classes." *Forum*, Vol. 17, No. 3, Spring 1994. http://www.ncela.gwu.edu/pubs/forum/1703.htm (June 8, 2004).
- U.S. Department of Education. "Questions and Answers on No Child Left Behind—Reading." http://www.ed.gov/nclb/methods/reading/reading.html (June 7, 2004).
- U.S. Department of Education. "Two Years of Accomplishment with No Child Left Behind." http://www.ed.gov/news/pressreleases/2004/01/01082004factsheet.html (June 7, 2004).
- U.S. Department of Education. "Reading First." *No Child Left Behind:*A Desktop Reference. http://www.ed.gov/admins/lead/account/nclbreference/
 page_pg5.html (June 7, 2004).
- U.S. Department of Education. "Improving Literacy through School Libraries." *No Child Left Behind: A Desktop Reference*. http://www.ed.gov/admins/lead/account/nclbreference/page_pg8.html (June 7, 2004).
- Vogt, MaryEllen. "Cross-Curricular Thematic Instruction." Houghton Mifflin Co., 1997. http://www.eduplace.com/rdg/res/vogt.html (June 8, 2004).
- von Zastrow, Claus, and Helen Janc. "Academic Atrophy: The Condition of the Liberal Arts in America's Public Schools." Council for Basic Education. (March 2004).

Glencoe's Civics Today: Citizenship, Economics, & You

About Our Authors

Glencoe/McGraw-Hill textbooks are written by leading scholars in the fields of education, geography, and history.

Richard C. Remy, Ph.D., is Professor Emeritus in the College of Education, The Ohio State University, and Senior Consultant on Civic Education with the Mershon Center for International Security and Public Policy at Ohio State. He received his Ph.D. in political science from Northwestern University. His books include: United States Government: Democracy in Action, Building Civic Education for Democracy in Poland, American Government and National Security, and Lessons on the Constitution. In the 1990s Dr. Remy created and codirected a long-term project with the Polish Ministry of National Education and the Center for Citizenship Education, Warsaw to develop new civic education programs for Polish students, teachers, and teacher educators.

John J. Patrick, Ed.D., is a professor in the School of Education at Indiana University, Bloomington, where he also is Director of the Social Studies Development Center. He is the author or coauthor of many publications about civics and government, such as *The Oxford Guide to the United States Government, The Supreme Court of the United States: A Student Companion*, and *The Bill of Rights: A History in Documents* (published by Oxford University Press in 2003).

David C. Saffell, Ph.D., received his Ph.D. in political science from the University of Minnesota. He has taught at Ohio Northern University since 1972, serving as chair of the Social Science Division for 15 years. Professor Saffell is coauthor of *State of Local Government: Politics and Public Policies*, 7th edition, published by McGraw-Hill. He has authored and edited several other books dealing with American government.

Gary E. Clayton, Ph.D., currently teaches economics at Northern Kentucky University. He received his Ph.D. in economics from the University of Utah, has taught economics and finance at several universities, and has authored a number of books and articles in professional journals. Dr. Clayton appeared on numerous radio and television programs and was a guest commentator for Marketplace for American Public Radio. Dr. Clayton has a long-standing interest in economic education. He has participated in numerous economic education workshops, is a National Council on Economic Education Kazanjian award winner, and is former vice president of the Kentucky Council on Economic Education. Dr. Clayton most recently received a year 2000 Leavey Award for Excellence in Private Enterprise Education from the Freedoms Foundation at Valley Forge.

Correlations

Glencoe's Civics Today: Citizenship, Economics, & You

The following section contains correlations found in the Teacher Wraparound Edition of Glencoe's *Civics Today: Citizenship, Economics*, & *You.* The first set of correlations reflects the content standards for Civics and Government as outlined in the *National Standards for Civics and Government (NSCG)*. The second set of correlations reflects the Economics standards set by the National Council on Economic Education (NCEE) as outlined in the Council's *Voluntary National Content Standards in Economics*.

National Standards for Civics and Government

Standard	Student Edition Chapter			
I. What are civic life, politics, and government?				
A. What is civic life? What is politics? What is government? Why are government and politics necessary? What purposes should government serve?	Chapters 1, 5, 9, 12, 13			
B. What are the essential characteristics of limited and unlimited government?	Chapters 2, 3, 4, 15, 17, 23, 27			
C. What are the nature and purposes of constitutions?	Chapters 1, 3, 4			
D. What are alternative ways of organizing constitutional governments?	Chapters 3, 4, 27			
II. What are the foundations of the American political system?				
A. What is the American idea of constitutional government?	Chapters 1, 3, 4, 5, 15, 17			
B. What are the distinctive characteristics of American society?	Chapters 1, 5, 9, 11, 14, 15, 23, 25			
C. What is American political culture?	Chapters 9, 10, 11, 14			
D. What values and principles are basic to American constitutional democracy?	Chapters 1, 2, 3, 4, 5			
III. How does the government established by the Constitution embody the purposes, values, and principles of American democracy?				
A. How are power and responsibility distributed, shared, and limited in the government established by the United States Constitution?	Chapters 3, 4, 6, 7, 8, 12			

NSCG STANDARDS

Standard	Student Edition Chapter
B. How is the national government organized and what does it do?	Chapters 3, 6, 7, 8, 12
C. How are state and local governments organized and what do they do?	Chapters 12, 13, 14
D. What is the place of law in the American constitutional system?	Chapters 15, 16, 17
E. How does the American political system provide for choice and opportunities for participation?	Chapters 3, 4, 5, 6, 7, 9, 10, 17
IV. What is the relationship of the United States to other	her nations and to world affairs?
A. How is the world organized politically?	Chapters 27, 28
B. How do the domestic politics and constitutional principles of the United States affect its relations with the world?	Chapters 3, 9, 18, 19, 28
C. How has the United States influenced other nations, and how have other nations influenced American politics and society?	Chapters 9, 23, 26, 27, 28
V. What are the roles of the citizen in American dem	ocracy?
A. What is citizenship?	Chapters 1, 5, 9, 10
B. What are the rights of citizens?	Chapters 3, 4, 5, 15, 16, 17
C. What are the responsibilities of citizens?	Chapter 5
D. What civic dispositions or traits of private and public character are important to the preservation and improvement of American constitutional democracy?	Chapters 1, 3, 4, 5, 14, 15, 17
E. How can citizens take part in civic life?	Chapters 5, 9, 10, 14, 15, 17

Correlations

Glencoe's Civics Today: Citizenship, Economics, & You

National Council on Economic Education's Voluntary National Content Standards in Economics.

For each standard, students will understand that:	Civics Today: Citizenship, Economics, and You Chapter and Section Coverage
1 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.	Chapter 18 What Is Economics? Section 1: The Fundamental Economic Problem Section 2: Making Economic Decisions
2 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.	Chapter 18 What Is Economics? Section 1: The Fundamental Economic Problem Section 2: Making Economic Decisions Chapter 19 The American Economy Section 1: Economic Resources
3 Different methods can be used to allocate goods and services. People, acting individually or collectively through govern-	Section 4: The Economy and You Chapter 19 The American Economy Section 1: Economic Resources
ment, must choose which methods to use to allocate different kinds of goods and services.	Chapter 20 Demand Section 1: What Is Demand? Section 2: Factors Affecting Demand
	Chapter 21 Supply Section 1: What Is Supply? Section 2: Factors Affecting Supply Section 3: Markets and Prices
	Chapter 26 Comparing Economic Systems Section 2: Economic Systems

NCEE STANDARDS

For each standard, students will understand that:	Civics Today: Citizenship, Economics, and You Chapter and Section Coverage	
4 People respond predictably to positive and negative incentives.	Chapter 18 Section 1: Section 3:	What Is Economics The Fundamental Economic Problem Being an Economically Smart Citizen
	Chapter 19 Section 1: Section 2: Section 3: Section 4:	The American Economy Economic Resources Economic Activity and Productivity Capitalism and Free Enterprise The Economy and You
	Chapter 23 Section 2:	Government and the Economy Measuring the Economy
	Chapter 24 Section 2:	Money and Banking The Federal Reserve System
5 Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and usually among individuals or organizations in	Chapter 19 Section 1: Section 2: Section 3:	The American Economy Economic Resources Economic Activity and Productivity Capitalism and Free Enterprise
different nations.	Chapter 26 Section 1: Section 2:	Comparing Economic Systems International Trade and Its Benefits Economic Systems
6 When individuals, regions, and nations specialize in what they can produce at the lowest cost and then trade with others, both	Chapter 19 Section 2:	The American Economy Economic Activity and Productivity
production and consumption increase.	Chapter 26 Section 1:	Comparing Economic Systems International Trade and Its Benefits
	Section 2:	Economic Systems

For each standard, students will understand that:	Civics Today: Citizenship, Economics, and You Chapter and Section Coverage
7 Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.	Chapter 19 The American Economy Section 1: Economic Resources Section 2: Economic Activity and Productivity Section 3: Capitalism and Free Enterprise Section 4: The Economy and You
	Chapter 20 Demand Section 1: What Is Demand? Section 2: Factors Affecting Demand
	 Chapter 21 Supply Section 1: What Is Supply? Section 2: Factors Affecting Supply Section 3: Markets and Prices
8 Prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives.	Chapter 19 The American Economy Section 1: Economic Resources Section 2: Economic Activity and Productivity Section 3: Capitalism and Free Enterprise Section 4: The Economy and You
	Chapter 20 Demand Section 1: What Is Demand? Section 2: Factors Affecting Demand
	Chapter 21 SupplySection 1: What Is Supply?Section 2: Factors Affecting SupplySection 3: Markets and Prices

For each standard, students will understand that:	, students will Civics Today: Citizenship, Economics, and You Chapter and Section Coverage		
9 Competition among sellers lowers costs and prices, and encourages producers to produce more of what consumers are willing and able to buy. Competition among buyers increases prices and allocates goods and services to those people who are willing and able to pay the most for them.	Chapter 19 Section 1: Section 2: Section 3: Section 4: Chapter 20	The American Economy Economic Resources Economic Activity and Productivity Capitalism and Free Enterprise The Economy and You Demand	
	Section 1: Section 2:	What Is Demand? Factors Affecting Demand	
	Chapter 21 Section 1: Section 2: Section 3:	Supply What Is Supply? Factors Affecting Supply Markets and Prices	
10 Institutions evolve in market economies to help individuals and groups accomplish their goals. Banks, labor unions, corpora-	Chapter 18 Section 3:	What Is Economics? Being an Economically Smart Citizen	
tions, legal systems, and not-for-profit organizations are examples of important institutions. A different kind of institution, clearly defined and enforced property	Chapter 22 Section 1: Section 2: Section 3:	Business and Labor Types of Businesses Labor Unions Businesses in Our Economy	
rights, is essential to a market economy.	Chapter 24 Section 1: Section 2: Section 3:	Money and Banking What is Money? The Federal Reserve System How Banks Operate	
11 Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services.	Chapter 24 Section 1: Section 2: Section 3:	Money and Banking What Is Money? The Federal Reserve System How Banks Operate	

For each standard, students will understand that:	Civics Today: Citizenship, Economics, and You Chapter and Section Coverage		
12 Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, which affects the allocation of scarce resources between present and future uses.	Chapter 24 Money and Banking Section 1: What Is Money? Section 2: The Federal Reserve System Section 3: How Banks Operate		
13 Income for most people is determined by the market value of the productive resources they sell. What workers earn depends, primarily, on the market value of what they produce and how productive they are.	Chapter 19 The American Economy Section 1: Economic Resources Section 2: Economic Activity and Productivity Section 3: Capitalism and Free Enterprise Section 4: The Economy and You		
	Chapter 20 Demand Section 1: What Is Demand? Section 2: Factors Affecting Demand		
	Chapter 21 Supply Section 1: What Is Supply? Section 2: Factors Affecting Supply Section 3: Markets and Prices		
14 Entrepreneurs are people who take the risks of organizing productive resources to make goods and services. Profit is an important	Chapter 19 The American Economy Section 1: Economic Resources Chapter 22 Business and Labor		
incentive that leads entrepreneurs to accept the risks of business failure.	Section 1: Types of Businesses Section 3: Businesses in Our Economy		

For each standard, students will understand that:	Civics Today: Citizenship, Economics, and You Chapter and Section Coverage
15 Investment in factories, machinery, new technology, and in the health, education, and training of people can raise future standards of living.	Chapter 19 The American Economy Section 1: Economic Resources Section 2: Economic Activity and Productivity Section 3: Capitalism and Free Enterprise Section 4: The Economy and You
16 There is an economic role for government 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.	Chapter 19 The American Economy Section 3: Capitalism and Free Enterprise Chapter 23 Government and the Economy Section 1: The Role of Government Section 2: Measuring the Economy Section 3: Government, the Economy, and You Chapter 24 Money and Banking Section 2: The Federal Reserve System Chapter 25 Government Finances
	Section 1: The Federal Government Section 2: State and Local Governments Section 3: Managing the Economy
17 Costs of government policies sometimes exceed benefits. This may occur because of incentives facing voters, government officials, and government employees, because of actions by special interest groups that can impose costs on the general public, or because social goals other than economic efficiency are being pursued.	Chapter 18 What Is Economics? Section 3: Being an Economically Smart Citizen Chapter 23 Government and the Economy Section 1: The Role of Government Section 2: Measuring the Economy Section 3: Government, the Economy, and You
	Chapter 25 Government Finances Section 1: The Federal Government Section 2: State and Local Governments Section 3: Managing the Economy

For each standard, students will understand that:	Civics Today: Citizenship, Economics, and You Chapter and Section Coverage	
18 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.	Chapter 19 Section 1: Section 2: Section 3: Section 4:	The American Economy Economic Resources Economic Activity and Productivity Capitalism and Free Enterprise The Economy and You
	Chapter 23 Section 1: Section 2: Section 3:	Government and the Economy The Role of Government Measuring the Economy Government, the Economy, and You
	Chapter 25 Section 1: Section 3:	Government Finances The Federal Government Managing the Economy
19 Unemployment imposes costs on individuals and nations. Unexpected inflation imposes costs on many people and benefits some others because it arbitrarily redistributes purchasing power. Inflation	Chapter 19 Section 3: Section 4: Chapter 23	The American Economy Capitalism and Free Enterprise The Economy and You Government and the Economy The Pole of Covernment
can reduce the rate of growth of national living standards because individuals and organizations use resources to protect themselves against the uncertainty of	Section 1: Section 2: Section 3:	The Role of Government Measuring the Economy Government, the Economy, and You
future prices.	Chapter 24 Section 3:	Money and Banking How Banks Operate

NCEE STANDARDS

For each standard, students will understand that:	Civics Today: Citizenship, Economics, and You Chapter and Section Coverage	
20 Federal government budgetary policy and the Federal Reserve System's monetary policy influence the overall levels of employment, output, and prices.	Chapter 19 Section 3: Section 4:	The American Economy Capitalism and Free Enterprise The Economy and You
	Chapter 23 Section 1: Section 2: Section 3:	Government and the Economy The Role of Government Measuring the Economy Government, the Economy, and You
	Chapter 24 Section 2: Section 3: Chapter 25 Section 1:	Money and Banking The Federal Reserve System How Banks Operate Government Finances The Federal Government
	Section 3:	Managing the Economy

The following section provides research articles that evaluate the reading and learning strategies used in textbooks and supporting educational resources. This section includes both academic and practical approaches to current reading and learning pedagogy.

Glencoe Reading Strategies

Glencoe's unique reading strategies make social studies accessible, understandable, and engaging by providing students with strategies before, during, and after their reading. Reading success is a priority to Glencoe. The active-reading strategies directed particularly to reading in the content area are research-based and develop better readers and better understanding. Each lesson includes an active reading strategy to ensure student comprehension at the introduction of a unit, chapter, and section. The following comprise the active reading strategies in Glencoe's *Civics Today: Citizenship*, *Economics*, & *You:*

- Unit Openers provide a reason for learning in "Why It Matters." The Primary Source Library allows students to build background knowledge of the upcoming information by studying documents, artifacts, photographs, diaries, and so on from the topic covered.
- **Chapter Openers** continue to immerse the students in the content by providing further information about the topic and the importance of learning it. The chapter video appeals to visual and auditory learners by introducing key concepts and piquing student interest. The book companion Web site provides additional opportunities for students to acquire a broad understanding of the chapter content. Every element on the student page is designed to engage and assist students in understanding the topic they are about to study.
- Reading and Study Skills Foldables[™] appear in the text as well as in a separate booklet. These student-made, interactive, 3-D graphic organizers help students organize and retain information as they read. Foldables[™] can be used as reading, assessment, or study tools.
- **Section Openers** include the Guide to Reading, which points out main ideas, lists key terms, and presents students with a graphic organizer with which to organize information as they read. The "Read to Learn" questions set a purpose for reading, and a short human-interest feature entitled "Americans in Action" provides a structure for reading and a transition into the main text of the section.

- **Reading Checks** help students build essential knowledge and appear within the text to guide student comprehension. These checks help students "chunk" the information they read into smaller, manageable pieces.
- Section Assessments include reading and writing prompts so that students
 can apply what they have learned in the section to an interdisciplinary
 activity.
- **Chapter Assessments** offer a variety of assessment methods and activities, from matching and multiple choice questions to short answers and essays. Document-based questions give students practice in interpreting maps and graphs, and research projects provide opportunities for further study and extension. A standardized test practice section is also included in each chapter assessment.
- Additional Reading Support can be found in many of the ancillary products, including the Unit Resource Booklets and the Reading Essentials and Study Guide. StudentWorks Plus is another essential reading-support tool, offering an electronic version of the Student Edition with embedded audio so that struggling students and English learners can read along with the text.
 - Unit Resource Booklets contain Guided Reading Activities, which
 help students identify and comprehend important information in
 each textbook chapter, and Vocabulary Activities, which use a
 variety of formats to give students practice in using the terms
 introduced in each section of the textbook.
 - Active Reading Note-Taking Guide gives students practice in taking notes, writing outlines, working with graphic organizers, and extending their vocabulary and language knowledge.
 - Reading Essentials and Study Guide is the entire text of the Student Edition rewritten at a lower reading level. It is designed to help struggling students and English learners use recognized reading strategies to improve their reading-for-information skills.
 - **Reading in the Content Area,** Middle School and High School versions, offer pre-reading, as-you-read, and post-reading strategies to help students comprehend and retain what they read.
 - **Spanish Resource Binder** offers translations of many of the ancillary components into Spanish.
 - A Variety of Technology Components complements the reading strategies by teaching vocabulary and reviewing content. These components allow teachers the flexibility to differentiate instruction for varying ability levels.

Glencoe Social Studies programs teach specific reading comprehension skills to students. Students learn, practice, and apply effective reading comprehension strategies to construct meaning from text. The importance of being able to understand, analyze, and act upon what is read is an essential skill for student success today and tomorrow.

Project CRISS

by Carol M. Santa, Ph.D., Lynn T. Havens, and Evelyn M. Maycumber

The following article is a selection from A National Diffusion Network Exemplary Program. We designed Project CRISS, **CR**eating Independence through **S**tudent-owned **S**trategies, to help students learn more effectively throughout the curriculum. Our project focuses on teaching students how to learn through reading, writing, talking, and listening. Students learn to apply CRISS in all subject areas.

Identifying the Author's Craft and Design

Before assigning a selection for our students to read, we need to have an understanding of the strengths and weaknesses of the reading material. Instructional approaches and students' strategic behaviors are inherently bound to text, whether this text is fiction, nonfiction, or technical. In each case, reading comprehension involves interaction between the student and the text. Knowing the author's craft or style of presentation helps enhance this interaction.

Two strands of research lay the groundwork for the instruction strategies outlined in this chapter. The first strand deals with the relationship between text structure and comprehension; the second focuses on the importance of teaching students ways to identify the author's craft.

Text Structure Research affirms the common-sense and powerful notion that better-written texts are more effective instructional tools. When students read well-written materials, they learn more than when they read poorly written materials (Meyer & Rice, 1984). For example, students learn more when main ideas and details are clearly presented. Bauman (1986) rewrote science passages from four popular textbooks. In these revisions, he presented general topics in the titles and subheadings and made sure that main ideas were explicit in paragraphs. Fifth-grade students read either the original passages or the revisions. Then they were tested on the key ideas in the selection. Students reading the rewritten passages outperformed those reading the originals.

"Research affirms the common-sense and powerful notion that betterwritten texts are more effective instructional tools."

—Santa, Havens, and Maycumber

"...research
indicates that
students' knowledge
of text structure
plays an
important role in
comprehension."

—Santa, Havens, and Maycumber

"...we have to move beyond the 'splash' of beautiful pictures, boldface print, and fancy graphics and really analyze the author's style of presentation."

—Santa, Havens, and Maycumber

Student Knowledge of Text Structure The next strand of research indicates that students' knowledge of text structure plays an important role in comprehension. If students know how authors structure their writing, they can more readily understand and remember what they read. Students who have more knowledge of text structure learn more from expository material than students who are not aware of structure (Slater & Graves, 1988).

Moreover, teaching students about structure helps with comprehension (Richgels, McGee, and Slaton, 1988). Many students pay no attention to the ways authors structure their writing. Usually, they remain oblivious to introductory paragraphs, placement of main ideas, presence of boldface print, and topical headings unless they receive explicit instruction. Taylor (1982) and her colleagues (Taylor & Beach, 1984) found that teaching students to use headings, subheadings, and signals indicating main points in paragraphs helped comprehension and retention.

This brief overview of research leaves us with several insights. First, as teachers we must seek well-written materials for our classroom. Our students deserve to read considerate texts. We need to be sensitive to differences between well-written and poorly-written materials and choose selections carefully. Second, we need to help our students become more conscious of how authors write so that they can use the author's style of presentation as a comprehension tool. We want our students to "get inside the author's head" and see the author's plan of presentation.

The next portion of this article describes the qualities of a well-written text and provides a checklist for analyzing whether or not a text is considerate.

The Search for Considerate Text

In order to select considerate text for our students, we have to move beyond the "splash" of beautiful pictures, boldface print, and fancy graphics and really analyze the author's style of presentation. This involves taking an editorial stance and carefully analyzing the author's strengths and weaknesses.

There is a series of steps to follow for determining whether nonfiction classroom materials are considerate. These materials might be traditional classroom texts or nonfiction trade books. In either case, the steps are the same. First is the evaluation of the overall content. Do the materials match up with the school curriculum and course objectives? Next, do the materials provide adequate structure and guidance to help the students with the "before," "during," and "after" stages of reading comprehension and retention? Within these stages we will specifically look for help with (1) activating students' background knowledge, (2) setting purposes for reading, (3) identifying the main idea, (4) supporting the main idea with clear, complete explanations, (5) organizing the information, (6) comprehending vocabulary and concepts, and (7) metacognition.

At the end of this chapter, you will find a checklist that you may find helpful when analyzing content materials. Feel free to photocopy it and adapt it for your own use. The checklist evaluates the following areas:

Overall Content Begin your examination of the book by first evaluating the **content.** Is the content appropriate to your own and your district's instructional goals? Does the content fit your district curriculum? Is the content gender fair and representative of multiple cultures?

Pre-Reading Features Choose a chapter from the book and assess its "before reading" features. Note whether the chapter contains an introduction that provides an overview of the key concepts in the chapter. In this overview, does the author **activate background knowledge** that students will need to understand the upcoming selection? Does the introduction help students recall information previously learned about this subject? Does the introduction help students relate their life experiences to the chapter topic? These features will help students integrate the new information with what they already know.

Note whether the chapter begins with an introduction or a list of objectives, statements, or questions indicating what students will learn in this chapter. These will **set a purpose for reading** for students, helping them determine what the most important ideas are. Next, read the material following the introduction. Has the author developed topics indicated in the introduction and/or objectives? Are these ideas presented clearly? Check the headings and subheadings provided by the author throughout the chapter. Do they reflect the main idea(s) of the section they label? Can they be changed into clear and focused, purpose-setting questions? If students are unable to determine what information is critical for them to include in their notes, they most likely will not take notes.

"Choose a chapter from the book and assess its 'before reading' features."

—Santa, Havens, and Maycumber

"Evaluate whether the author has organized information around bold-print topics and subtopics."

—Santa, Havens, and Maycumber

Research tells us that "frontloading" an assignment (activating prior knowledge and establishing clearly defined purposes for reading) is the most critical component of reading comprehension. If we can select texts that guide students into this frontloading, they can then use these strategies without teacher intervention. We have made one giant step forward in helping our students become effective independent learners.

Active Reading Evaluate whether the author has organized information around bold-print topics and subtopics. Do titles of each section within the chapter **indicate the main idea** of that section? Note whether or not main ideas are stated in a single sentence and whether they are obvious and easy for students to understand. Explicitly stated main ideas located in the beginning of paragraphs are typically easier for students to understand than those in other positions within the paragraph (Baumann, 1986).

The most common complaint about content texts is their lack of adequate explanations. It is very important that texts **support and reinforce the main idea.** Choose several key concepts and examine the explanations. Are the concepts explained thoroughly? Are they explained with vocabulary and examples that students understand?

An intriguing study done by Hermann (1984) may help clarify this analysis. She examined the effects of inadequate explanations on students' learning. She presented eighth-grade students with two versions of an explanation of how the heart works. The original version, published in a popular junior high text, was tersely written. The revised version was designed to provide students with a better explanation of the same topic. It contained more detail and an explanation of how various parts of the heart are related. Text passages below show the original and the revised explanations:

Original Version (Heimler & Lockard, 1977)

A human heart is a cone-shaped muscular organ about the size of a large fist. The heart is located in the center of the chest behind the breastbone and between the lungs.

A human heart contains four chambers—right atrium (AY tree uhm), left atrium, right ventricle (VEN trih kuhl), and left ventricle. Right and left refer to the body's right and left sides. A wall separates the chambers on the right from the chambers on the left.

Revised Version (Hermann, 1984)

The heart is the part of the circulatory system that pumps blood throughout the body. The heart is located in the center of the chest behind the breast-bone and between the lungs. The human heart is suited for pumping because it is a hollow, cone-shaped, muscular organ about the size of a large fist. Being hollow, the heart can easily fill up with blood. Once filled, the heart muscle provides the power necessary for pumping the blood through the body.

A human heart contains four hollow chambers made for receiving and sending blood. The right atrium (AY tree uhm) and right ventricle (VEN tru kuhl) receive and send blood to the lungs, while the left atrium and left ventricle receive and send blood to the rest of the body. (Note that right and left refer to your body's right-hand and left-hand sides.) The right and left sides of the heart are separated by a wall of muscle. This wall keeps blood going to the lungs separate from the blood going to the body.

As predicted, students learned more about the heart from the revised version. These eighth graders benefited from an elaborated explanation. The quality of explanations is a critical feature of content materials.

Too often authors list concepts without really explaining them fully. We call this the "mentioning" problem. One concept is mentioned after another without a full explanation. So take some time and examine how concepts are developed in your text. Keep in mind several key variables: First, does the author link new concepts to something familiar in the students' background? Second, is explanatory information relevant to the concept? Inclusion of irrelevant information and extraneous detail confuses readers. Third, are there clear examples of the concept, and are these examples more familiar than the concept being explained? Is this concept explained through everyday phenomena and tied to known information? In summary, is there sufficient elaboration and explanation, or does the author simply mention issues and concepts without sufficient explanation?

Classroom materials should not only be well organized, but their **organization should be consistent** and apparent to the reader. Is the organization consistent across chapters? Considerate authors practice their craft conscientiously and follow the same organizational style throughout the text.

"The quality of explanations is a critical feature of content materials."

—Santa, Havens, and Maycumber

"The text should be arranged logically so that students can easily take notes."

—Santa, Havens, and Maycumber

The text should be arranged logically so that students can easily take notes. The authors should also include signal words to show how ideas within a section are related to one another. Keep the following questions in mind as you read through sections of the material:

- (1) Does the author use explicit signals to indicate sequencing of ideas? (first, second, third)?
- (2) Does the author use emphasis words to indicate important concepts (most important, key idea)?
- (3) Does the author use explicit signals to indicate comparisons (**but**, **nevertheless**, **on the other hand**, **at the same time**, **similarly**)?
- (4) Does the author use explicit signals for illustration (**for example, such as**)?
- (5) Does the author use explicit signals for conclusions (**therefore**, **as a result**)?

Another consideration is **vocabulary appropriateness.** Texts that are not considerate will often contain excess jargon. Some high school chemistry texts, for example, contain an estimated 3,000 words that are unfamiliar to high school students. The number of words presented in most science books far exceeds the number of words in most foreign language classes (Holliday, 1991).

Experts warn us about overloading students with inappropriate vocabulary (National Research Council, 1990). Bill Holliday (1991) notes that authors often label important concepts and phenomena that probably don't need labels. He suggests that technical vocabulary becomes jargon when words are (1) difficult for most students to learn, (2) used only by experts, (3) used only for academic testing purposes, or (4) introduced too soon in a student's schooling.

With this in mind, examine the technical vocabulary in your reading assignments. Is the vocabulary overly technical for the concepts being explained? Critical terms should be highlighted in some way and explained within the context of the material. Look for more than just a direct definition. Students will understand and remember terms better if the author includes pictures or other graphics, examples, analogies, essential components, and so on.

"A considerate text provides aids to help students monitor their comprehension."

—Santa, Havens, and Maycumber

Post-Reading Features *Metacognition:* A considerate text provides aids to help students monitor their comprehension. Skim through a chapter or section of the text. Does the author incorporate questions into the body of the selection? Does the author provide opportunities for the students to test their knowledge by applying it to new situations, labs, investigations, hands-on activities? Does the summary provide a good overview of the key ideas in the selection or chapter? Check to see whether the author has included study questions so that students can self-review the chapter's concepts. Do the questions cover more than details and facts? Do they relate to the objectives at the beginning of the section?

Sentence Structure Sentence complexity influences text difficulty. Well-written prose contains sentences of varied length. Students have more difficulty with reading material that has consistently long, complex sentences than with content materials written with simpler sentences. Good writers choose the simplest and most direct way to communicate.

Simpler sentence patterns contain active rather than passive verbs. The sentence "Jargon and passive voice create sentence complexity" is strong and direct. "Sentence complexity is usually caused by excessive use of jargon and passive voice" is weak and indirect. Passive voice creates cluttered writing and automatically lengthens sentences.

Verbs are the energy source of a sentence. They make writing move. Many authors use bland, imprecise verbs and try to spruce them up with extraneous adverbs. The sentence, "He walked slowly along the path," improves when the author uses a verb to convey the same message: "He plodded along the path."

Randomly choose excerpts from your reading materials and examine sentence structure. Are sentences of varied lengths? Are the sentences in active voice? Are verbs specific, or are they imprecise and bland? You may want to examine some of the books and supplementary materials used in your classroom and use them to assess books you might adopt in the future.

"Randomly choose excerpts from your reading materials and examine sentence structure."

—Santa, Havens, and Maycumber

References

- Bauman, James. "Effect of Rewritten Textbook Passages on Middle-grade Students' Comprehension of Main Ideas: Making the Inconsiderate Considerate." *Journal of Reading Behavior.* (1986): 18, 1–22.
- Hermann, P.A. "Incidental Learning of Word Meanings from Expository Texts That Systematically Vary Text Features." Paper presented at the National Reading Conference, St. Petersburg, FL, 1984.
- Holliday, William G. "Helping Students Learn Effectively From Text."

 Science Learning: Processes and Applications. Carol Santa and Donna
 Alvermann (Eds.). Neward, DE: International Reading Association, 1991.
- Meyer, B. and G.E. Rice. "The Structure of Text." P. David Pearson (Ed.). *The Handbook of Reading Research.* New York: Longman, 1984.
- Richgels, Donald; Lea McGee; and Edith A. Slaton. "Teaching Expository Text Structure in Reading and Writing." *Children's Comprehension of Text: Research into Practice.* Denise Muth (Ed.). Neward, DE: International Reading Association. (1989): 167–184.
- Slater, Wayne and Michael Graves. "Research on Expository Text: Implications for Teachers." *Children's Comprehension of Text: Research into Practice.* Denise Muth (Ed.). Neward, DE: International Reading Association, 1989. 140–166, 184.
- Taylor, Barbara. "Text Structure and Children's Comprehension and Memory for Expository Material." *Journal of Educational Psychology.* (1982): 74, 323–340.
- Taylor, Barbara and R. Beach. "The Effects of Text Structure Instruction on Middle Grade Students' Comprehension and Production of Expository Text. *Reading Research Quarterly.* (1984): 19, 134–146.

Children's Book and Content Text

Heimler, C. and J. Lockard. Life Science. Columbus, OH: Merrill, 1977.

What Are "Just Right" Books?

by Bonnie Valdes, Reading Specialist and Master CRISS Trainer

There is great controversy today concerning the grade level appropriateness of content materials students are using in U.S. schools. We are reading and hearing a great deal about single-source content textbooks and multi-genre, multi-leveled texts.

To begin, there is a tremendous difference between the appropriateness of materials used for instructional purposes and those assigned for independent reading. Some educators consider both instructional and independent reading materials to be one and the same, but this theory is not valid. Students who are unable to decode or comprehend the assigned material become frustrated learners and often just give up. Even good students may become frustrated if they do not fully understand the material assigned.

On the other hand, teachers can make comprehension creative and constructive by providing a safe and supportive learning atmosphere. Dr. Carol Santa, past International Reading Association President and original developer of Project CRISS (CReating Independence through Student-owned Strategies), tells teachers that they spend far too much time testing comprehension and not nearly enough time instructing students on ways to comprehend text. Good teachers demonstrate comprehension strategies, leading students to own and apply these strategies as independent learners.

Understanding the author's craft is one of the first things teachers and students need to address before reading and learning new material.

- What does the author do to help the student learn?
- What does the author do to help students discover the main ideas in text?
- How is the information introduced in the text?
- Does the author identify key vocabulary terms and give clear examples?
- Does the student set purpose?
- Does the author use maps, charts, graphs, and other visual aids to help explain the material?
- Does the author use transition words so that students understand the information sequentially to help them form a story line?

"...there is a tremendous difference between the appropriateness of materials used for instructional purposes and those assigned for independent reading."

—Bonnie Valdes

"Good teachers demonstrate comprehension strategies, leading students to own and apply these strategies as independent learners."

—Bonnie Valdes

If students can figure out the author's plan, then they can understand the text more effectively. Enabling students to look at nonfiction materials and think about how the author helps them learn is paramount. Knowing the author's plan is key to understanding the material!

Glencoe/McGraw-Hill and the authorship team of *Civics Today: Citizenship*, *Economics*, & *You*—Remy, Patrick, Saffell, and Clayton—have laid out their plan in the *Guide to Reading* that accompanies each section opener. The *Main Idea* presents the central theme of the section and helps students set a purpose for their reading. Also, the authors clearly identify important vocabulary in *Key Terms* and offer a way to reorganize information in the *Reading Strategy* section. *Read to Learn* reinforces the purpose for reading. Finally, the *Americans in Action* feature at the beginning of each section connects students to the text and helps them see how the information they are about to read applies to and impacts their own lives.

Dinah Zike's Foldables™ Study Organizers, Backed by Research

Dinah Zike began designing Foldables[™] over 30 years ago as a means to increase student responsibility for learning and organizing content information while integrating student writing, self-questioning, notetaking, and other teaching strategies that she had studied and used. Over the years, these organization techniques have been collectively called graphic organizers.

Graphic organizers exist in many forms, one of which is Foldables™, or three-dimensional graphic organizers. Dinah found that adding a kinesthetic aspect to a proven visual instructional aid provides another dimension to the learning experience. For example, if main ideas are written on the front tabs of a Foldable™ and supporting facts are written under the tabs, the Foldable™ not only organizes data but it also becomes a self-check study aid. Students are constantly immersed in main ideas as they look at the front tabs, and they are forced to mentally recall what they know about each main idea before reading the phrases, vocabulary terms, names, dates, and so on that they wrote under the tables. Please note that 3-D Foldables™ include the following: concept maps, flowcharts, Venn diagrams, journals, tables, reporting formats, and more. As with other graphic organizers, Foldables™ can be used at any level and with any subject.

There are numerous research articles on the advantages of using graphic organizers in instruction, but please find one of Dinah's favorite articles explaining their advantages and a list of reference sources below. Dinah's biography and other information are available at www.dinah.com. We are proud to be associated with Dinah and to share her 3-D interactive graphic organizers with students through the Glencoe textbooks. Dinah is a frequent speaker at conferences and state conventions.

Supporting Research

The following abstracts summarize extensive research on Dinah Zike's Foldables $^{\text{\tiny{TM}}}$.

Graphic organizers provide a visual, holistic representation of facts and concepts and their relationships within an organized frame. They have proven to be effective tools to aid learning and thinking by helping students and teachers represent abstract information in more concrete form, depict relationships among facts and concepts, relate new information to prior knowledge, and organize thoughts for writing. Graphic organizers exist in a variety of forms. Perhaps the most widely known is the web. Other types of graphic organizers include the concept map, sequence chain, story map, main idea table, flowchart, matrix, and Venn diagram. Graphic organizers may be productively utilized before instructional activities, such as reading or viewing a film, to activate prior knowledge, to provide a conceptual framework for integrating new information, and to encourage student prediction. During instruction, they can help students actively process and reorganize information. And after instruction, graphic organizers may be used to summarize learning, encourage elaboration, help organize ideas for writing, provide a structure for review, and assess the degree of student understanding. When introducing students to a new graphic organizer, teachers should describe its purpose, model its use, and provide students with opportunities for guided practice. Once students become comfortable with using organizers, more independent applications are appropriate. Finally, teachers can then encourage students to create their own organizers.

This article can be found at this Web address: http://www.mdk12.org/practices/good_instruction/projectbetter/thinkingskills/ts-33-35.html

Semantic feature analysis as compared to traditional vocabulary "look up" activities gave structure to discussions for learning-disabled adolescents and resulted in significantly better performance on measures of comprehension and concept learning.

Anders, P.L., Bos, C.S., and Filip, D., (1984). The effect of semantic feature analysis on the reading comprehension of learning disabled students. Changing Perspectives on Reading/Language Processing and Instruction. Niles, J.A, and Harris, L.A., (Eds.), (pp. 162–166). Rochester, NY.: The National Reading Conference.

This study examined the effectiveness of the use of "mapping" techniques for eighth-grade students. The results showed that students who mapped short expository prose passages recalled a greater number of ideas from the passage after a twenty-four hour delay than did the control groups. Also, the probability of recalling ideas that have been organized into a map was significantly greater than the probability of recalling ideas that were not organized in this fashion.

Armbruster, B., and Anderson, R., (1980). The Effect of Mapping on Free Recall of Expository Text (Technical report 160). Center for the Study of Reading, University of Illinois, Urbana-Champaign.

The author reviews research with children and adults demonstrating that "category clustering" (grouping items based on perceived similarities) leads to greater recall, and that children as young as 3 years old have some ability to use clusters to aid recall. The research studies presented here, working with children ages 4–8, demonstrate that the more one's knowledge is organized into schemas, or organized frameworks, the easier it is to remember and extend that knowledge...

Chi, M., (1985), Interactive roles of knowledge and strategies in the development of organized sorting and recall. Thinking and learning skills, Vol. 2: Research and open questions. Chipman, S.F., Siegal, J.W., & Glaser R., (Eds.), Hillsdale, NJ: Lawrence Erlbaum Associates.

This research involved college students in a "Techniques of College Learning" class. Two matched groups of students studied a passage from a geology text. Students in the experimental group received instruction on conceptual frames for understanding scientific theories (a "knowledge schema"); control group subjects received instruction in concentration management. Students in the treatment group outperformed control subjects on an essay-format posttest that assessed recall and comprehension of the text material.

Dansereau, D.F., (1985). Learning strategy research. Thinking and learning skills, Vol. 1: Relating instruction to research. Segal, J.W., Chipman, S.F., & Glaser, R. (Eds.), Hillsdale, NJ: Lawrence Erlbaum Associates.

This report reviews the theory and research relevant to semantic mapping and gives examples of classroom applications.

Hagan-Heimlich, J.E., and Pittelman, S.D., (1984). Classroom Applications of the Semantic Mapping Procedure in Reading and Writing. (Program Report 84-4).

In studies using college students and seventh-grade students, those who had received training in "matrix outlining and analysis" (a form of graphic organizer) outperformed control subjects in both recall of unordered information about a topic of instruction and essay writing on that topic.

Jones, B.F., Amiran, M., & Katims, M., (1985) Teaching cognitive strategies and text structures within language arts programs. Segal, J.W., Chipman, S.F., & Glaser, R., (Eds.), Thinking and learning skills, Vol. 1: Relating instruction to research. Hillsdale, NJ: Lawrence Erlbaum Associates.

Improving Adolescent Literacy Through Note Taking

by Douglas Fisher and Nancy Frey

Why Teach Students How to Take Notes?

During a recent conversation with a group of teachers, we asked about the strategies used to teach students to store and retrieve information from class lectures and textbooks. Interestingly, note taking was a given, something that all students should do. As one of the teachers said, "We all know how to take notes, and we all have our own ways of doing so. We don't need to teach students to take notes; they come to us knowing this already." Another teacher countered, "While people may have different ways of taking notes, I do believe that it's a skill that can be taught. I also believe that students need to be shown how to take notes—good notes—that they can use later." We concur with the second teacher and hope that secondary school teachers focus instruction on this area. We believe that this difference in opinion is based on the omnipresence of note taking in secondary and post-secondary schools. We also believe that all students can learn to take effective notes; the key is to identify for students why their notes can be useful to them later. As Jim Burke (2002) noted:

Taking notes is an essential skill, one that has many other subskills embedded within it. Taking good notes trains students not only to pay attention but what to pay attention to. It teaches them to evaluate the importance of information and the relationship between different pieces of information as they read textbooks and articles. It also teaches them to organize that information into some format that serves their purposes. After all, we take different notes if we will use them to write a research paper. (p. 21)

Setting Students Up for Successful Note Taking

While it is important to teach students how to take and use notes effectively, educators also have a responsibility to organize their lectures in ways that make it possible to create notes. It is instructionally sound to introduce the sequence of topics and concepts for the day's class because it prepares students for learning. This simple preview also gives students a way to organize their notes. Once notes are previewed, students should expect that the sequence will not be drastically altered and that the teacher will present concepts in an organized fashion. Detailed information, including technical vocabulary, names, dates, and formulas, should be presented visually as well as verbally, and well-timed pauses should be used to give students time to record this information. Signal words and phrases like *this is important* or even *be sure to write this down* will alert students to include items in their notes. Ending the class with a review enhances memory and retention and allows students to make corrections to the day's notes.

Distinguishing Note Taking From Note Making Before we venture any further, a definition or two is in order. We use the term *note taking* to refer to students' written notes from a lecture or class discussion. We use the term *note making* to refer to the slightly different phenomenon of recording notes from printed materials. Many of the instructional strategies are the same, but we have to remember that students cannot go back again for more information in note taking (because the lecture is over), but they can in note making (by rereading the text).

In terms of research on note taking and note making, the evidence is fairly conclusive. Better note takers generally do better in school, and specific types of note taking produce better results (Faber, Morris, & Lieberman, 2000; Kiewra, Benton, Kim, Risch, & Christensen, 1995). The reasons for this are interesting.

Dating back to the seminal work of DiVesta and Gray (1972), the evidence suggests that note taking requires both a process and a product function. It seems that both of these are important to produce improved results in comprehension and retention of material.

"Students
sometimes view
note taking as a
process function
only—to scribe.
When notes are
used in subsequent
learning activities,
students see the
value in quality
notes."

—Douglas Fisher and Nancy Frey

Process and Product Functions The process function—recording the notes—and the product function—reviewing notes later—are both required to create valuable notes (Henk & Stahl, 1985; Katayama & Crooks, 2001). Stahl, King, and Henk (1991) refer to these as the "encoding and external storage functions" (p. 614). The encoding function requires students to pay attention to the lecture while they write. This, in turn, allows students to transform information and deepens their understanding. The external storage function allows students an opportunity to review their notes, and thus the main ideas presented, before using the information on a test, in an essay, or in a lab.

In addition to the use of graphic organizers used in note taking, a number of common formats have been suggested. Figure 1 contains "12 time-honored criteria for successful note taking" (Stahl, King, & Henk, 1991, p. 615). These authors have also developed an assessment and evaluation system for teaching students about note taking called NOTES (Note taking, Observation, Training, and Evaluation Scales).

- 1. Date and label notes at the top of the page.
- 2. Divide page into two columns and keep all running lecture notes in one column.
- 3. Use the other column for organization, summarizing, and labeling.
- 4. Indent to show importance of ideas.
- 5. Skip lines to indicate change of ideas.
- 6. Leave space for elaboration and clarification
- 7. Use numbers, letters, and marks to indicate details.
- 8. Be selective.
- 9. Abbreviate when possible.
- 10. Paraphrase.
- 11. Use underlining, circling, and different colors of ink to show importance.
- 12. Cover up one column when studying.

from: Stahl, Norman A., King, James R., & Henk, William A. (p. 615). (1991, May). Enhancing students notetaking through training and evaluation. Journal of Reading, 34 (8), 614-622. Reprinted with permission of Norman A. Stahl and the International Reading Association. All rights reserved.

Figure 1
General Note-taking
Procedures

"While the instructional strategies are similar, remember that note making typically focuses on gaining information from texts while note taking focuses on lectures and class discussions."

—Douglas Fisher and Nancy Frey

Note Making in Social Studies

"What questions might we ask about the Cold War, just by looking at this page of text?" Ms. Tsai queries her U.S. history class as they participate in a pre-reading activity to prepare for the next chapter in their text. She knows that creating a skeletal note structure of the text is a powerful pre-reading skill her students must acquire in order to become effective note takers and note makers.

Technology and Note Taking Ms. Tsai uses a combination of a Directed Notetaking Activity [DNA] (Spires & Stone, 1989) and computer-assisted outlining (Anderson-Inman, 1996) as she engages her students in history lessons. DNA is a process approach to note taking that includes three instructional principles:

- 1. a structured format for taking notes commonly referred to as the split-page method;
- 2. a self-questioning strategy for monitoring levels of involvement before, during, and after note taking; and
- 3. direct, explicit teaching of the note-taking process adapted for note-taking instruction from Pearson's model (1985) for teaching reading comprehension (Spires & Stone, 1989, p. 37).

Consistent with the DNA process approach, Ms. Tsai wants her students to become familiar with the structure of the text, preview the targeted vocabulary, form questions, question themselves and others, and gain background knowledge from all of the charts, maps, illustrations, photographs, and captions.

Stepping into the classroom, one can see how Ms. Tsai incorporates this note-making activity with the use of a PowerPoint® presentation, a series of maps pertinent to the geographical areas and time period, and chart paper to list student-generated questions. She orchestrates a class discussion that requires the students to refer to their notes, follow a multimedia display of text and maps on two separate screens, and contribute to the new set of notes that she transcribes into a PowerPoint® display. The expanding PowerPoint® presentation Ms. Tsai creates with her students' guidance becomes another structure for them to incorporate into their note making as they read the text. As Anderson-Inman (1996) notes, computer-assisted outlining does not confine students to predetermined amounts of space in which to take notes. Further, computer-assisted outlining allows for multiple additions, modifications, and deletions.

With books open, Ms. Tsai and her students skim the chapter page by page as they contribute ideas to the class notes displayed on one of two screens set up at opposite ends of the room. An outline of the chapter takes shape as the class decides on bullets for main ideas from the headings and subheadings of each textbook page and from their discussion notes. Ms. Tsai then leaves empty bullets under each main idea, areas requiring support information, to be completed later as students read each section of the chapter.

Engaging Students at Multiple Levels Students are required to preview any visual aids on each text page such as graphs, charts, pictures, diagrams and maps and add pertinent bulleted information to their skeleton outline. They also list all of the italicized and boldface terms in the vocabulary section of their notebooks. These terms become the target vocabulary, to be incorporated into their notes with definitions added. As part of her DNA instruction, Ms. Tsai periodically asks students to consider their level of participation in the notetaking activity. She may ask students to think about their level of motivation and their purpose for listening and participating or whether they are separating main ideas from details.

Using Notes in Class When the skeleton outline is complete, Ms. Tsai uses it in a PowerPoint® presentation as she gives the students an overview of the chapter. On subsequent days, she will use the maps on the walls as contextual aids, and she will have students begin posing questions based on the main ideas of the bulleted outline. The series of student-generated questions is added to a growing list of questions on a chart in the front of the room.

As her students review their notes regarding the Allies' plan for the postwar world, Tsai repeats the inquiry, "What questions might we ask about the rationale of the Truman Doctrine?" She asks students to consider how geography and politics impacted the Truman Doctrine. She hopes for a deeper level of thinking than that required when students simply memorize facts.

"Do you think Truman's economic aid contributed to the containment of communism in Europe after the war? Why?" Ms. Tsai smiles as she surveys the scene of students flipping through notes taken over the past week of lecture, class discussions, and textbook facts. A student scribe writes these questions on the large sheet of chart paper attached to the wall. Now the students have access to the map on the overhead projector displayed on the front screen as well as to the notes they have constructed from the textbook. Ms. Tsai guides their thinking with the questions being written on the chart paper hanging next to the data projector screen. This screen now displays the main idea of this discussion: **The Truman Doctrine.**

"Students need to know how to think about these visual and graphic representations of information as well as how to synthesize details across them."

—Douglas Fisher and Nancy Frey

Ms. Tsai hits the return button on her podium and a subtopic bullet appears while the cursor blinks expectantly.

"OK? What do you think? Look over your notes, look at the map, and consider the world of the late 1940s. Europe is crippled; America has emerged from the war as a world leader. What do you suppose were some of President Truman's reasons for asking Congress to give economic aid to Turkey and Greece?"

Brian hesitates at first and then with confidence reads from his notes, "Truman believed that the United States should support those countries that were fighting communism. And since Turkey and Greece were weak after the war, they were ripe for a takeover."

"Hmm, good point," says Ms. Tsai as she types into her PowerPoint® template. The vacant bullet is now filled with a summary of Brian's idea:

Stop the spread of communism. Ms.Tsai's students know she means business when the new notes incorporate Brian's ideas, and they copy this point into their notes. A few others begin to search their notes and textbooks for information to share. Ms. Tsai recognizes the familiar reaction of students who know that their ideas are validated. She deliberately uses her students' questions and ideas—either on the chart paper or the PowerPoint® template—to validate their thinking. She believes that the synthesis of students' questions and concerns with historical data is evidence that they are making meaning.

"Yeah, but some Americans believe that we were just messing in other countries' business," José points out.

"Yeah, I heard that is what is going on in the Middle East now," Miriam interjects.

Ms. Tsai pauses; she does not type that idea into the note-making frame visible on the screen. Instead, she asks the class whether that is a question to include in the growing list of ideas to consider in the future. Most students agree that it should be part of future class discussions. The class scribe adds the new idea to the chart paper.

Miriam waves her hand, and Ms. Tsai nods in her direction and asks, "Did you find other information in your notes to add to the Truman Doctrine?"

Miriam reads from her class notes. "Because the United States was the only nation with money to help, we had to do something to stop the possibility of more war." Ms. Tsai smiles and types the next bullet: \$400 million in economic and military aid.

"OK. Do you think this idea was only a generous act, or could there be other reasons for the Truman Doctrine?" Ms. Tsai turns on the overhead projector. A map of Europe appears, illustrating the Mediterranean Sea, the Black Sea, and surrounding countries.

Structured Outline Support Before, During, and After Activities This repeated practice and use of note making demonstrates to students the ease and efficacy of structuring notes before reading, during independent reading of the text, and in class discussions. Students also learn to monitor their involvement and comprehension in that they can change behaviors if they are not learning. The combination of the Directed Notetaking Activity (DNA) and computer-assisted outlining ensures that students move gradually toward independent skills in note making.

"Because students can refer back to notes, they are able to affirm information."

—Douglas Fisher and Nancy Frey

Glencoe's Active Reading Note-Taking Guide by Douglas Fisher

There is a considerable body of research to support "what works" to help students understand difficult concepts and content. Students must learn how to take notes, use graphic organizers, focus on vocabulary, and develop their thinking through writing. The development of the Glencoe/McGraw-Hill history and social studies Active Reading Note-Taking Guide was guided by this body of research.

Note Taking

The ability to take and organize notes is a significant predictor of student success. Notes serve an external storage function, which builds comprehension and understanding of the content. Over time, and with instruction, students use their notes not only for external storage of information but also for encoding their ideas. In a review of note-taking instruction, Ganske (1981) suggests that note taking is a critical skill that must be fostered. Similarly, Pauk (1974) observed that note taking was a critical skill for college success. Further, Peverly, Brobst, Graham, and Shaw (2003) showed that background knowledge and note taking were significant predictors of success on tests.

In other words, note taking is a critical skill. However, what kind of note-taking system works? According to a number of studies, a two-column format such as the Cornell Note-Taking System is effective (Fisher, 2001). Using this format, students take notes and complete the tasks on the right side of the page while the left side provides a guide and key points. These key points help students quickly find information, locate references, and study for exams. As Faber, Morris and Lieberman (2000) found, the Cornell Note-Taking System increases comprehension (and test scores!).

Graphic Organizers

Graphic organizers, such as concept maps, semantic webs, and cause-and-effect charts, help students organize information presented in text format because such organizers organize key points visually (Fisher, Frey, & Williams, 2002; Vasilyev, 2003). In addition, graphic organizers are good tools for summarizing information and can help students remember and recall content (Irwin-DeVitis & Pease, 1995; Wilson, 2002). Graphic organizers have been used successfully with English language learners (Carlson, 2000), struggling readers or students with disabilities (Mastropieri, Scruggs, & Graetz, 2003), and students who are gifted and talented (Cassidy, 1989; Howard, 1994). In other words, the use of graphic organizers is well documented as a powerful method to ensure that students learn and understand the content.

Vocabulary

The vocabulary demands in secondary schools are intense. Students are expected to learn thousands of words per year in multiple content areas. In one study of secondary students, Espin and Foegen (1996) found that vocabulary is a significant predictor of content-area performance. Farket and Elmore (1992) found vocabulary knowledge to be a stronger predictor of reading comprehension than most other variables, including cognitive ability. To be successful, students need to learn three types of vocabulary (Vacca & Vacca, 1999):

- Generalized—commonly used terms, often with widely agreed-upon definitions, such as *deny, allow,* and *fight*.
- Specialized—terms with differentiated meanings varying across disciplines, such as the word *loom*. In social studies, the word is used to indicate that an event is impending, but in family and consumer sciences, it means "a tool for weaving."
- Technical—terms used specifically for a discipline, such as *Senate*, *Bill of Rights*, and *equator*.

Most content-area teachers are comfortable teaching the technical terms in their disciplines; texts, however, use all three types of terms. Students require instruction in each type to comprehend the content (Flood, Lapp, & Fisher, 2003).

"Graphic organizers, such as concept maps, semantic webs, and cause-and-effect charts, help students organize information presented in text format."

—Fisher, Frey, & Williams

In summary, when researchers study successful students, they often find that vocabulary knowledge is an important factor in student learning (Martino & Hoffman, 2002). Teachers must ensure that their students develop a vocabulary that is sufficient for use within the discipline, but they also need to provide students tools to understand the vocabulary of other subjects that they study.

Writing to Learn

Writing is an excellent way to learn. Did you know that we all make our thinking clearer when we write? Students often say that they did not know what they thought about a topic until they wrote about it. Not only does writing help students clarify their thinking, but it also provides the teacher with information about what students understand and what they do not understand (Fisher & Frey, 2004). Therefore, writing prompts must be constructed in a way that ensures that students engage with the material when they write.

Many of the writing prompts in the Glencoe/McGraw-Hill program require students to do what good readers automatically do—*summarize* information, *predict* events and outcomes, *connect* the text to their lives, *question* the information in the text and the author of the text, *clarify* information and ideas, *visualize* events in the text, and *infer* meaning or draw conclusions based on facts and ideas (Harvey & Goudvis, 2000).

Summary

In summary, *learning is language based*. To comprehend history and social studies, students must engage in various reading, writing, speaking, listening, and viewing activities. These activities must be grounded in well-developed history and social studies content *and* they must be accessible to students. All reading strategies are not created equally. Specific instructional strategies and techniques are founded on firm research. Glencoe/McGraw-Hill Active Reading Note-Taking Guides were designed on such a firm base of research.

"Students often say that they did not know what they thought about a topic until they wrote about it."

—Douglas Fisher

"Many of the writing prompts in the Glencoe/McGraw-Hill program require students to do what good readers automatically do..."

—Fisher, Harvey, & Goudvis

References

- Carlson, C. (2000). Scientific literacy for all. Science Teacher, 67(3), 48–52.
- Cassidy, J. (1989). Using graphic organizers to develop critical thinking. *Gifted Child Today*, 12(6), 34–36.
- Espin, C.A., & Foegen, A. (1996). Validity of general outcome measures for predicting secondary students' performance on content-area tasks. *Exceptional Children*, 62, 497–514.
- Faber, J.E., Morris, J.D., & Lieberman, M.G. (2000). The effect of note taking on ninth grade students' comprehension. *Reading Psychology*, 21, 257–270.
- Farley, M.J., & Elmore, P.B. (1992). The relationship of reading comprehension to critical thinking skills, cognitive ability, and vocabulary in a sample of underachieving college freshmen. *Educational and Psychological Measurement*, 52, 921–931.
- Fisher, D. (2001). "We're moving on up": Creating a schoolwide literacy effort in an urban high school. *Journal of Adolescent & Adult Literacy*, 45, 92–101.
- Fisher, D., & Frey, N. (2004). *Improving adolescent literacy: Strategies at work*. Upper Saddle River, NJ: Merrill Prentice Hall.
- Fisher, D., Frey, N., & Williams, D. (2002). Seven literacy strategies that work. *Educational Leadership*, 60(3), 70–73.
- Flood, J., Lapp, D., & Fisher, D. (2003). Reading comprehension instruction. Flood, J., Lapp, D., Jensen, J.M, & Squire, J.R., (Eds.), *Handbook of research on teaching the English language arts* (2nd ed., pp. 931–941). Mahwah, NJ: Lawrence Erlbaum Associates.
- Ganske, L. (1981). Note-taking: A significant and integral part of learning environments. *Educational Communication and Technology: A Journal of Theory, Research, and Development,* 29, 155–175.
- Harvey, S., & Goudvis, A. (2000). *Strategies that work: Teaching comprehension to enhance understanding.* York, ME: Stenhouse.

- Howard, J.B. (1994). Addressing needs through strengths: Five instructional practices for use with gifted/learning disabled students. *Journal of Secondary Gifted Education*, 5(3), 23–34.
- Irwin-DeVitis, L., & Pease, D. (1995). Using graphic organizers for learning and assessment in middle level classrooms. *Middle School Journal*, 26(5), 57–64.
- Martino, N.L., & Hoffman, P.R. (2002). An investigation of reading and language abilities of college freshmen. *Journal of Research in Reading*, 25, 310–318.
- Mastropieri, M.A., Scruggs, T.E., & Graetz, J.E. (2003). Reading comprehension instruction for secondary students: Challenges for struggling students and teachers. *Learning Disability Quarterly*, 26, 103–116.
- Pauk, W. (1974). How to study in college. Boston: Houghton Mifflin.
- Peverly, S.T., Brobst, K.E., Graham, M., Shaw, R. (2003). College adults are not good at self-regulation: A study on the relationship of self-regulation, note taking, and test taking. *Journal of Educational Psychology*, 95, 335–346.
- Vacca, R.T., & Vacca, J.L. (1999). *Content area reading: Literacy and learning across the curriculum* (6th ed.). New York: Longman.
- van Leeuwe, J., & Aarnoutse, C. (1998). Relation between reading comprehension, vocabulary, reading pleasure, and reading frequency. *Educational Research and Evaluation*, 4, 143–166.
- Vasilyev, Y. (2003). The network of concepts and facts: Forming a system of conclusions through reflection. *Thinking Classroom*, 4(2), 29–33.
- Wilson, E. (2002). Literature and literacy in the social studies classroom: Strategies to enhance social studies instruction. *Southern Social Studies Journal*, 28(1), 45–57.

What Matters in Text Formatting and Layout? Columns and Considerate Texts

by Douglas Fisher, San Diego State University

Ensuring that all students meet rigorous standards is a national priority. Every sector of the education enterprise has stepped up efforts to ensure that no child is left behind and that every student has the opportunity to learn. As educational publishers who are part of the learning solution, we asked ourselves and several noted researchers how texts could be best organized so that students could learn with and through them. One area of concern focused on our textbooks' formatting, especially in the area of the number of columns in which text should be organized.

What we found after an exhaustive search of the three largest educational research databases—the Educational Resources Information Center (ERIC), the EBSCO Academic Search Elite, and the Wilson Web Education Full Text—is that there is no evidence that the column format of a text influences comprehension or achievement in any way. These databases contain literally thousands of research studies on what works in teaching and learning. Although studies have revealed that some students seem to prefer two columns for aesthetic reasons (e.g., Kuhn, 2003; Hartley, 1980; Wilson, 1981), these studies did not comment on achievement outcomes based on column format.

These results should not surprise most teachers. Teachers know that students must learn to read and read to learn from texts with a variety of formats, including novels printed in one column, magazine articles printed in two columns, and newspapers printed in multiple columns. If we want to prepare our students for life after public school, we must ensure that they are taught how to access texts of many different column formats.

It seems reasonable, then, to ask, "Given that the Glencoe/McGraw-Hill textbook programs are research- and evidence-based, what advice does the research literature offer about textbook formats and features?" An analysis of research on textbook features is very conclusive. While the number of columns does not matter, the way in which the textbook is designed and taught is very important. There are a number of features that aid students in understanding informational texts.

In *Content Area Reading and Learning, Instructional Strategies*, edited by Diane Lapp, James Flood, and Nancy Farnan, Bonnie Armbruster (1996) of the University of Illinois at Champaign-Urbana coined the term "considerate texts" to describe texts that aid comprehension and learning from reading. Research has suggested that there are three overlapping features of text that contribute to comprehension and learning: structure, coherence, and audience appropriateness (e.g., Boscolo & Mason, 2003; Chambliss, 1994; Kobayashi, 2002; Meyer, 2003; Mosenthal & Kirsch, 1992; Tyree & Fiore, 1994). Let's examine each of these features in greater detail and review current research on each of them.

Structure

There is significant evidence that the way in which ideas or topics are structured in a text greatly impacts student comprehension (Bakken & Whedon, 2002; Ciardiello, 2002; Parsons, 2000). A number of features of the Glencoe/McGraw-Hill programs specifically address the issue of text structure. First, the textbooks provide headings and subheadings that guide readers through information. Second, the textbooks use signals or hints (such as introductions) about how a text is structured; specific words (such as first, second, and third for description and because, since, and as a result for cause and effect) that convey the structure; learning objectives that indicate the structure; and margin information to aid the reader. And third, Glencoe/ McGraw-Hill textbooks employ extensive graphic support, including Venn diagrams, structured overviews, semantic feature analyses, and a variety of maps, charts, and other visual aids. Taken together, these key features ensure that students not only learn the social-studies content of their textbook, they also acquire valuable tools to help them decipher other informational texts outside the social-studies content area.

Coherence

The second factor that determines whether texts are considerate of their readers relates to how concepts, phenomena, and events are explained and whether they are tied together in a meaningful way. We call this concept **coherence**. Again, research shows that a text's coherence is an important factor in student comprehension (McNamara & Kintsch, 1996; Meyer, 2003; Sanders, 1997).

As with structure, a number of features of Glencoe/McGraw-Hill's textbooks specifically address the issue of text coherence. First, the main ideas are explicitly stated in the chapter openings and at the beginning of each section. Second, each paragraph or section's information clearly connects back to the main idea. Third, events fall in a logical order, and the relationships between events and topics are clearly delineated. Finally, transitions between topics are smooth and lead the reader logically from one main idea to the next. These are all significant factors to consider when analyzing a text and its ability to engage readers.

Audience Appropriateness

The final factor that makes a text considerate concerns the extent to which the material corresponds with the knowledge of the intended audience. In other words, **audience appropriateness** is a measure of how well a text matches students' probable background and prior knowledge. These are two important considerations. Textbook writers must consider how much information students already know and should "elaborate new concepts sufficiently to be meaningful to readers and to facilitate learning" (Armbruster, 1996, p. 54). Of the three factors we have looked at thus far, the research on audience appropriateness is particularly strong (Alexander, Schallert & Hare, 1991; Heffernan, 2003; Seda, Ligouri, & Seda, 1999).

As with structure and coherence, there are a number of features in the Glencoe/McGraw-Hill program that specifically address the issue of audience appropriateness. First, the Glencoe/McGraw-Hill authors and editors continually evaluate their textbooks' conceptual density (the number of new concepts per unit of text) to ensure that there is a balance between this density and the core content standards they must cover. Second, instead of providing limited information on an overwhelming number of topics, the textbooks focus intensively on a manageable number of topics, thus allowing students and teachers to concentrate on the content standards. In doing so, the textbooks use and extend the information students already have about a topic. Third, the textbook specifically addresses the common misconceptions readers have. These misconceptions are often the source of audience mismatch as students may not be able to integrate new information unless their misunderstandings are specifically addressed.

Conclusion

In sum, the accessibility of a text, or whether or not it is considerate of readers, has little or nothing to do with the number of columns in which the text is printed. Instead, the text must include specific structural features to guide readers. It must be coherent and allow readers to follow the logical flow of the book, and it must be written in such a way that the audience is considered and addressed. Combined with high-quality teaching (Simpson & Nist, 2000), these three text factors, rather than column formatting, will determine a student's success.

References

- Alexander, P.A., Schallert, D.L., & Hare, V.C. (1991). Coming to terms: How researchers in learning and literacy talk about knowledge. *Review of Educational Research*, 61, 315–343.
- Anderson, T.H., & Armbruster, B.B. (1984). Content area textbooks. In R.C. Anderson, J. Osborn, & R.J. Tierney (Eds.), *Learning to read in American schools: Basal readers and content texts* (pp. 193–226). Hillsdale, NJ: Erlbaum.
- Armbruster, B.B. (1984). The problem of "inconsiderate text." In G.G. Duffy, L.R. Roehler, & J. Mason (Eds.), *Comprehension instruction: Perspectives and suggestions* (pp. 202–217). New York: Longman.
- Armbruster, B.B. (1996). Considerate texts. In D. Lapp, J. Flood, & N. Farnan (Eds.), *Content area reading and learning: Instructional strategies* (pp. 47–58). Boston: Allyn & Bacon.
- Armbruster, B.B., & Anderson, T.H. (1984). Structures for explanations in history textbooks, or so what if Governor Stanford missed the spike and hit the rail? *Journal of Curriculum Studies*, 16, 181–194.
- Bakken, J.P., & Whedon, C.K. (2002). Teaching text structure to improve reading comprehension. *Intervention in School and Clinic*, 37, 229–233.
- Baumann, J.F. (1986). Effect of rewritten content textbook passages on middle grade students' comprehension of main ideas: Making the inconsiderate considerate. *Journal of Reading Behavior*, 18, 1–21.
- Boscolo, P., & Mason, L. (2003). Topic knowledge, text coherence, and interest: How they interact in learning from instructional texts. *Journal of Experimental Education*, 71(2), 126–148.
- Chambliss, M.J. (1994). Evaluating the quality of textbooks for diverse learners. *Remedial & Special Education*, 15, 348–363.
- Ciardiello, A.V. (2002). Helping adolescents understand cause/effect text structure in social studies. *Social Studies*, 93(1), 31–36.
- Hartley, J. (Ed.). (1980). *The psychology of written communication: Selected readings.* New York: Nichols.
- Kobayashi, M. (2002). Method effects on reading comprehension test performance: Text organization and response format. *Language Testing*, 19, 193–220.

- Konopak, B.C. (1988). Effects of inconsiderate vs. considerate text on secondary students' vocabulary learning. *Journal of Reading Behavior*, 20, 25–41.
- Kuhn, D. (2003). *Text features, student preferences, and achievement in social studies.* Unpublished master's thesis, San Diego State University.
- McNamara, D.S., & Kintsch, W. (1996). Learning from texts: Effects of prior knowledge and text coherence. *Discourse Processes*, 22, 247–288.
- Meyer, B.J.F. (2003). Text coherence and readability. *Topics in Language Disorders*, 23, 204–224.
- Mosenthal, P.B., & Kirsch, I.S. (1992). Types of document knowledge: From structures to strategies. *Journal of Reading*, 36, 64–67.
- Parsons, J. (2000). Helping students learn how textbooks are written. *Canadian Social Studies*, 35, 1–3.
- Sanders, T. (1997). Semantic and pragmatic sources of coherence: On the categorization of coherence relations in context. *Discourse Processes*, 24, 119–148.
- Seda, M.M., Ligouri, O.Z., & Seda, C.M. (1999). Bridging literacy and social studies: Engaging prior knowledge through children's books. *TESOL Journal*, 8(3), 34–40.
- Simpson, M.L., & Nist, S.L. (2000). An update on strategic learning: It's more than textbook reading strategies. *Journal of Adolescent & Adult Literacy*, 43, 528–541.
- Tyree, R.B., & Fiore, T.A. (1994). Instructional materials for diverse learners. *Remedial & Special Education*, 15, 363–378.
- Wilson, T.C. et al. (1981). *The design of printed instructional materials:**Research on illustrations and typography. New York: ERIC Clearinghouse on Information Resources.

Teaching Academic Vocabulary

by Robin C. Scarcella

By the time children have completed elementary school, they must have acquired the knowledge needed to understand academic vocabulary. How many words must they acquire to be able to access their textbooks? According to Nation (1990), a basic 2,000-word vocabulary of high-frequency words makes up 87% of the vocabulary of academic texts. Eight hundred other academic words comprise an additional 8% of words. Three percent of the remaining words are technical words. These technical words, which consist of 1,000 to 2,000 words, differ from one field to another. The remaining 2% of words in academic texts are low-frequency words. There may be as many as 123,000 low-frequency words in academic books. Despite the large volume of such words, they may be mentioned only once in a given text and, according to Nation, they do not usually merit specific learning. One half of general words and two-thirds of all academic, technical, and low-frequency words come from Latin, French (through Latin), or Greek.

English learners who have mastered a basic 2,000-word vocabulary are ready to acquire the majority of the *general words* found in their academic texts. Several lists of general words have been compiled in the last 50 years. The most well-known is West's General Service List of English Words (1953). Like other word lists, West's list is based on the frequency of a word's use, its range of use over different types of texts, the needs of language learners, and the difficulties involved in learning the word. The General Service List is a set of 2,000 words selected to be of the greatest "general service" to ELs. They are not the most common 2,000 words, though frequency was one of the factors taken into account in making the selection. Each of the 2,000 words is a headword representing a word family. Frequency numbers are given, derived from Thorndike and Lorge (1944). Although dated, the list is one of the few that is based on teaching ELs. Since words change very slowly, it is still useful to educators today. While teachers may be able to predict what vocabulary their students have learned from the use of required textbooks, teachers will find wide differences in their ELs' vocabulary knowledge. High school teachers who wish to estimate the size of their students' vocabulary may find the Vocabulary Levels Test (Nation, 1990, 2001) useful.

"Knowledge of academic words combined with continued acquisition of general words, can significantly boost an English learner's comprehension level of academic texts."

Knowledge of academic words, combined with continued acquisition of general words, can significantly boost an English learner's comprehension level of academic texts. Nation combined academic word lists into one 800-item University Word List (Xue & Nation, 1984). The list is designed to serve as a guide for teachers and as a checklist and goal for students. The Academic Word List (commonly known as the AWL) consists of vocabulary that students are likely to encounter across all academic fields (Coxhead, 2000). It includes the most common 570 words in academic texts, excluding the 2,000 words of West's General Service List. (A sample of words from the General Service List are: the, in, of, about, under, dog, cat, that, eat, take, door.) English learners who learn and practice the words on this list before they graduate from high school are likely to be able to master academic material with more confidence and speed, wasting less time and effort in guessing words or consulting dictionaries than those who only know the basic 2,000 words that characterize ordinary conversation. Knowledge of this type of vocabulary is an important factor in achieving high scores on the SAT-I and ACT as well as writing exams such as the SAT-II/Writing, tests that are often prerequisites to entering colleges in the United States. A more complete discussion of the General Service List, and word lists in general, can be found in Nation (1990, pp. 21-24), Carter & McCarthy (1988), and Coxhead (2000).

The Academic Word List consists of 800 words arranged alphabetically. The additional information provided is a score ranging from 1 to 11 that reflects word frequency and range. Additional information about the list can be obtained from the following Web site: http://www.vuw.ac.nz/lals/staff/averil-coxhead/awl/index.html.

The Academic Word List

The following list consists of the headwords in the AWL. Michael Stubbs has taken the 570 headwords in Coxhead's (2000) list, and he has re-ordered them by frequency groups. Group 1 is the most frequent, and Group 10 is the least frequent. (See http://www.uni-trier.de/uni/fb2/anglistik/Projekte/stubbs/awl.htm.)

Group 1

analyze approach area assess assume authority available benefit concept consist constitute context contract create data define derive distribute economy environment establish estimate evident export factor finance formula function identify income indicate individual interpret involve issue labour legal legislate major method occur percent period policy principle proceed process require research respond role section sector significant similar source specific structure theory vary

Group 2

achieve acquire administrate affect appropriate aspect assist category chapter commission community complex compute conclude conduct consequent construct consume credit culture design distinct element equate evaluate feature final focus impact injure institute invest item journal maintain normal obtain participate perceive positive potential previous primary purchase range region regulate relevant reside resource restrict secure seek select site strategy survey text tradition transfer

Group 3

alternative circumstance comment compensate component consent considerable constant constrain contribute convene coordinate core corporate correspond criteria deduce demonstrate document dominate emphasis ensure exclude framework fund illustrate immigrate imply initial instance interact justify layer link locate maximize minor negate outcome partner philosophy physical proportion publish react register rely remove scheme sequence sex shift specify sufficient task technical technique technology valid volume

Group 4

access adequate annual apparent approximate attitude attribute civil code commit communicate concentrate confer contrast cycle debate despite dimension domestic emerge error ethnic goal grant hence hypothesis implement implicate impose integrate internal investigate job label mechanism obvious occupy option output overall parallel parameter phase predict principal prior professional project promote regime resolve retain series statistic status stress subsequent sum summary undertake

Group 5

academy adjust alter amend aware capacity challenge clause compound conflict consult contact decline discrete draft enable energy enforce entity equivalent evolve expand expose external facilitate fundamental generate generation image liberal licence logic margin medical mental modify monitor network notion objective orient perspective precise prime psychology pursue ratio reject revenue stable style substitute sustain symbol target transit trend version welfare whereas

Reading Strategies

Group 6

abstract accurate acknowledge aggregate allocate assign attach author bond brief capable cite cooperate discriminate display diverse domain edit enhance estate exceed expert explicit federal fee flexible furthermore gender ignorant incentive incidence incorporate index inhibit initiate input instruct intelligence interval lecture migrate minimum ministry motive neutral nevertheless overseas precede presume rational recover reveal scope subsidy tape trace transform transport underlie utilize

Group 7

adapt adult advocate aid channel chemical classic comprehensive comprise confirm contrary convert couple decade definite deny differentiate dispose dynamic eliminate empirical equip extract file finite foundation globe grade guarantee hierarchy identical ideology infer innovate insert intervene isolate media mode paradigm phenomenon priority prohibit publication quote release reverse simulate sole somewhat submit successor survive thesis topic transmit ultimate unique visible voluntary

Group 8

abandon accompany accumulate ambiguous append appreciate arbitrary automate bias chart clarify commodity complement conform contemporary contradict crucial currency denote detect deviate displace drama eventual exhibit exploit fluctuate guideline highlight implicit induce inevitable infrastructure inspect intense manipulate minimize nuclear offset paragraph plus practitioner predominant prospect radical random reinforce restore revise schedule tense terminate theme thereby uniform vehicle via virtual visual widespread

Group 9

accommodate analogy anticipate assure attain behalf bulk cease coherent coincide commence compatible concurrent confine controversy converse device devote diminish distort duration erode ethic format founded inherent insight integral intermediate manual mature mediate medium military minimal mutual norm overlap passive portion preliminary protocol qualitative refine relax restrain revolution rigid route scenario sphere subordinate supplement suspend team temporary trigger unify violate vision

Group 10

adjacent albeit assemble collapse colleague compile conceive convince depress encounter enormous forthcoming incline integrity intrinsic invoke levy likewise nonetheless notwithstanding odd ongoing panel persist pose reluctance so-called straightforward undergo whereby

Handing this list out to high-school or middle-school students and expecting them to master it on their own is a bad idea. The list requires guidance from the teacher if it is to be successfully integrated into instruction.

English learners at the intermediate to high-intermediate and advanced levels in middle school, high school, and college need to learn academic vocabulary. All learners need to learn age-appropriate vocabulary tied to school contexts. They also need explicit instruction, the type of instruction in which teachers teach students word parts, word relationships, grammar, and other lexical information. Pointing out new words in the students' textbooks and supplementary reading materials and teaching students how to use specific words in their written and oral assignments is critical. It is important to expose students repeatedly to the targeted words. Targeted words must be recycled and reviewed so that students can learn their different grammatical forms, registers, associations, and collocations in a variety of contexts.

Teachers who want to assess their students' knowledge of academic words can use a simple procedure available at this website: http://www.er.uqam.ca/nobel/r21270/cgi-bin/webfreqs/web_vp.cgi.

"Pointing out
new words in the
students' textbooks
and supplementary
reading materials
and teaching
students how to use
specific words in
their written and
oral assignments
is critical."

References

- Allen, V.F. (1983). *Techniques in teaching vocabulary*. New York: Oxford University Press.
- Baumann, J.F., & Kameenui, E.J. (1991). Research on vocabulary instruction: Ode to Voltaire. In J. Flood, J. Jenson, D. Lapp, & J.R. Squire (Eds.), *Handbook of research on teaching the English language arts* (pp. 604–632). New York: Macmillan.
- Beck, I.L., & McKeown, M.G. (1991). Social studies texts are hard to understand: Mediating some of the difficulties. *Language Arts*, 68, 482–490.
- Blachowitz, C.L. (1986). Making connections: Alternatives to the vocabulary notebook. *Journal of Reading*, *29*, 543–549.
- Carter, R., & McCarthy, M. (1988). *Vocabulary and language teaching*. London: Longman.
- Chomsky, N. (1957). Syntactic Structures. The Hague: Mouton.
- Clark, E., & Clark, H. (1977). *Psychology and language: An introduction to psycholinguistics*. New York: Harcourt Brace Jovanovich.
- Coady, J., & Huckin, T. (1997). *Second language vocabulary acquisition*. New York: Cambridge University Press.
- Coxhead, A. (2000). A new academic word list. TESOL *Quarterly 34*, 213–238.
- Gairns, R., & Redman, S. (1986). Working with words, A guide to teaching and learning vocabulary. New York: Cambridge University Press.
- Hatch, E.M., & Brown, C. (1995). *Vocabulary, semantics, and language education*. New York: Cambridge University Press.
- Huckin, T., Haynes, M., & Coady, J. (Eds.). (1993). Second language reading and vocabulary learning. Norwood, New Jersey: Ablex.
- Kagan, S. (1995). *Cooperative learning*. San Juan Capistrano: Cooperative Learning, Inc.
- Lenski, S.D., Wham, M., & Johns, J. (1999). *Reading and literature: Strategies for middle and high school students.* Iowa: Kendall Hunt Publishing Co.
- Lowry, M. (2000). Lexical issues in the university ESL writing class. *CATESOL Journal*, *1*1, 1, 15–16.

- Mathews, J. (2001). A school where a G-word ranks with the 3 Rs, *Los Angeles Times*. Wednesday, September 19, 2000, B2.
- McCarthy, M. (1990). Vocabulary. Oxford: Oxford University Press.
- Mestre, J. (1988). The role of language comprehension in mathematics and problem solving. In R. Cocking & J. Mestre (Eds.), *Linguistic and cultural influences on learning mathematics: The psychology of education and instruction* (pp. 201–220). Hillsdale, New Jersey: Lawrence Erlbaum.
- Moll, L. (1998, February). Funds of knowledge for teaching: A new approach to culture in education. Keynote address delivered to the Illinois State Board of Education Twenty-first Annual Statewide Conference for Teachers of Linguistically and Culturally Diverse Students.
- Morgan, J., & Rinvolucri, M. (1986). *Vocabulary.* Oxford: Oxford University Press.
- Nation, I.S.P. (2000). *Learning vocabulary in another language*. New York: Cambridge University Press.
- Nation, I.S.P. (1990). *Teaching and learning vocabulary*. New York: Newbury House/Harper Row.
- Nation, P. (2001). *Learning and vocabulary development in a second language*. New York: Cambridge University Press.
- Pressley, M., Levin, J.R., & McDaniel, M.A. (1987). Remembering versus inferring what a word means: Mnemonic and contextual approaches. In M.C. McKeown and M.E. Curtis (Eds.), *The nature of vocabulary acquisition* (pp. 107–127). Hillsdale, New Jersey: Lawrence Erlbaum.
- Redman, S., Ellis, R., Viney, B., & Mark, G. (1997). *A way with words resource packs 1 and 2.* Cambridge: Cambridge University Press.
- Rosch, E.H., Mervis, C.B., Gray, W.B., Johnson, D.M., & Boyes-Braem, P. (1976). Basic objects in natural categories. *Cognitive Psychology, 8*, 382–439.
- Taylor, L. (1990). Teaching and learning vocabulary. New York: Prentice Hall.
- Thorndike, R.L., & Lorge, I. (1944). *The teachers' word book of 30,000 words.* New York: Columbia University.
- West, M. (1953). *A general service list of English words*. London: Longman, Greene & Company.

- Wong Fillmore, L. (2000, September, 26). Class lecture notes: Language acquisition—the doggy text. Education, 240A. Week 5.
- Wong Fillmore, L., & Snow, C. (2001). What educators—*Especially teachers—need to know about language: The bare minimum.* Unpublished paper. http://www.cal.org/ericcll//.
- Xue, G., & Nation, I.S.P. (1984). A university word list. *Language Learning* and *Communication*, *3*, 215–229.

Learning Styles

Visual Reading Features

Glencoe/McGraw-Hill social studies textbooks use visual reading features such as graphs and charts as powerful learning tools. By using images rather than words, these tools present complex information in an easy-to-understand format.

Graphs

Graphs are a way of showing numbers or statistics in a clear, easy-to-read way. Because graphs summarize and present information visually, readers have an easier time understanding the data and drawing conclusions. The most common types of graphs are bar graphs, line graphs, circle graphs, and pictographs.

Bar Graphs show how two or more subjects or statistics compare. A bar graph provides information along two sides, or axes. The horizontal axis is the line across the bottom of the graph. The vertical axis is the line along the side. The bars may be either vertical or horizontal. In most cases, the labels on one axis show quantity, and the labels on the other axis show the categories of data being compared.

Line Graphs show change over time. Like a bar graph, a line graph organizes information along horizontal and vertical axes. The horizontal axis usually shows passing time, such as months, years, or decades. The vertical axis usually shows quantity. Sometimes more than one set of data is shown on a line graph. A double-line graph, for instance, plots data for two related quantities, which may be represented in different colors or patterns.

LEARNING STYLES

Circle Graphs, also called pie graphs, show how each part or percentage relates to the whole. A circle graph enables the viewer to make comparisons between parts and to analyze the relationship of each part to the whole.

Pictographs use rows of small symbols or pictures, each representing a particular amount. Like a bar graph, a pictograph is useful for making comparisons.

Charts

Although all charts present information or data in a visual way, the type of chart is often dictated by the nature of the information and by the chartmaker's purposes.

Tables show information, including numerical data, in columns and rows. This organized arrangement facilitates comparisons between categories of information. Labels are usually located at the top of each column and on the left-hand side of the table.

Diagrams are specialized drawings. They can show steps in a process; point out parts of an object, organization, or idea; or explain how something works. Arrows or lines may join parts of a figure and can show relationships between parts or the flow of steps.

The Importance of Photographs

by Steve Mico, Vice President and Editor in Chief, National Geographic School Publishing

A picture is worth a thousand words. A cliché—yes. But photographs from the files of National Geographic really do tell a fascinating story about Earth and its people. The name National Geographic evokes an image of trust, quality, and substance. Photographs have played a crucial role in creating and maintaining that image, and National Geographic is proud to share this rich resource with the Glencoe social studies textbook program.

Photographs allow us to visit distant places without leaving our desks. They even let us travel back in time to revisit places or events in the past. And because photographs are static, they give us time to examine, ponder, and reflect on what we see and consider what it means.

Contemporary photographs from National Geographic are featured in *The World and Its People*. Each chapter opens with a photo feature, "Exploring Our World," that sets the tone for the content that follows. Students can visualize the world of ancient Greece as they look at a photograph and read about the Parthenon, "High on a hill overlooking the city of Athens..." (p. 336). The words would surely be less effective without the accompanying photographic image of this classical Greek structure. Photographs featured in "On Location" not only capture moments in daily life but also encourage students to think about questions based on key geographic themes. For example, images of urban and rural scenes in contemporary Russia prompt the question, "How have economic changes affected where Russia's people live?" (p. 434).

In *Glencoe World Geography*, each chapter opens with "A Geographic View," a feature that combines photographs and passages from articles that have appeared in past issues of *National Geographic Magazine*. The images come alive as students read words penned by researchers on the site, and article citations provide an opportunity for further discovery in the pages of the magazine. In addition, each chapter includes "World Explorer" features that apply geographic themes to topics introduced through photographs. For example, a photograph of a forest in Bhutan is accompanied by the question, "How does overcutting impact the environment?" (p. 574).

"Photographs
featured in 'On
Location' not only
capture moments
in daily life but also
encourage students
to think about
questions based
on key geographic
themes."

-Steve Mico

LEARNING STYLES

Historical photographs provide a window on the past in "Moment in History" in *The American Vision* (and *The American Republic Since 1877*). The black-and-white images are compelling glimpses into the lives of people who experienced the events described on the pages of the textbook. Words could never capture the despair imprinted on the face of a mother, photographed in 1936, facing the hopelessness of the Great Depression (p.662). Historical photographs like this one are compelling primary resources and can be windows into the past.

Photographs do much more than break the density of words on a page. Photographs give life and substance to the words and sometimes convey meanings and emotions that words could never express.

Teaching with Photographs

Photographs are not only an important part of each chapter in the textbook. Photographs are also powerful teaching tools in themselves.

- (1) Use the photographs in your textbook to extend the lesson.
 - Select several photographs from a chapter in the textbook. Have students work in small groups to "read" the photographs. What do the photographs reveal about the place and the people who live there? What physical and human characteristics of the place can students observe? Is the time period depicted in the photograph contemporary or historical? Have students create a chart to organize their observations. How does the photo analysis enhance the caption or text that accompanies the image?
 - Refer to Geography's Six Essential Elements described in the Geography Handbook in the textbook. Use these elements as a framework for analyzing the photographs in a chapter in the textbook. In particular, what can be determined about physical and human systems and about environment and society by examining photographs? Create a chart to record students' observations.

"Photographs do much more than break the density of words on a page."

-Steve Mico

- (2) Use photographs from other sources to extend the lesson.
- Have students identify a place or an event related to a topic currently being studied in class. Encourage students to use an Internet search engine to locate photographs of the place or event. (Note: Most search engines can be limited to search only for images.) Have students save the images they locate. When the search is complete, have students create an electronic poster presentation in which they communicate main geographic and historical themes by means of photographic images with captions. Remind students to include sources for all photographic images.
- Use an index to *National Geographic Magazine*, either in the library or online at www.nationalgeographic.com, to locate an article related to a topic being studied in class. Note the role that photographs play in the article. Would the article be as effective without the images? What do the photographs tell you about the place or event? What characteristics of the physical environment can be observed? What unique human characteristics are evident? Are there examples of linkages with other places? Make a list of questions that have been raised as a result of analysis of the photographs. What sources can you use to answer these questions?

Students have many demands on their time in today's busy world. In the rush to finish an assignment, it is easy to pass over photographs that complement the narrative text. Help students recognize the importance of the images in each chapter by modeling photographic analysis.

Research on the Effectiveness of Glencoe's Social Studies Textbooks

QUANTITATIVE AND QUALITATIVE RESEARCH

Significant research has been conducted on Glencoe/McGraw-Hill's social studies textbooks. This section includes compilations of sample questions and results from surveys, teacher discussion groups, and classroom visits.

Independent research on both the quantitative and qualitative components of Glencoe/McGraw-Hill's social studies textbooks is summarized in graphs, charts, and anecdotal quotes from a geographically representative population of students and teachers.

Assessment Validity and Reliability

During the development of Glencoe/McGraw-Hill *Civics Today: Citizenship*, *Economics*, *and You*, discussions with educators revealed some problems that social studies teachers were having with existing assessment instruments and suggestions were made on how to improve these instruments. Research in assessment and NCSS literature was reviewed. All of the information gathered led to the development of new assessment instruments for *Civics Today* based on the following principles:

- Assessments should be closely integrated with instruction.
- Assessment should be continuous throughout the school year.
- Assessment opportunities should incorporate a variety of modes and types of assessment.

The assessment plan for *Civics Today* was reviewed by the program's authors, experienced social studies educators.

Types of Assessment

Civics Today includes a variety of assessment instruments to support instruction. Section quizzes provide a brief quiz for every section of the text, thus providing for daily assessment. Chapter tests provide in-depth objective and writing-based items for every chapter of the text. Performance-based assessment for each unit is provided in a separate blackline master booklet as well as in the Teacher Wraparound Edition. These items offer opportunities to evaluate what students can do in a wide variety of authentic situations.

QUANTITATIVE AND QUALITATIVE RESEARCH

Validity

All assessment instruments for *Civics Today* evaluate the learning outcomes, or objectives, as defined in the Teacher Wraparound Edition. Tests assess both the content and the skills that students are expected to know. The variety of assessment instruments ensures that all learning outcomes will be measured.

Reliability

Written instructions for teachers and students ensure that all assessment instruments are administered in a uniform manner. Writing questions and activities are rated according to a uniform scoring scale. Evaluation results are consistent both across time and from one rater to another.

Assurance of Non-Bias

As with all components of *Civics Today*, great care has been taken to ensure that assessment instruments and procedures are nondiscriminatory in regard to gender, race/ethnicity, and student disability.

Focus Groups

Qualitative research was conducted by using focus groups, teacher discussion groups, and classroom visits during the textbook development and prototyping project. This approach allowed Glencoe/McGraw-Hill to deploy user feedback directly into the textbooks. Glencoe/McGraw-Hill is committed to focus testing. As a result, Glencoe paid particularly close attention to the design phase of this program. Educator focus groups were used to identify student and teacher needs and to develop and refine prototype materials.

An independent research organization conducted nation-wide focus groups during an eleven-month period for Glencoe social studies textbooks. Teachers who were recruited from public high schools in urban and suburban communities participated in the 90-minute interviews.

Reading Strategies

Reading and reading-related strategies were a common theme in teachers' feedback during focus groups. Teachers noted that social studies educators are not trained to teach reading strategies.

In some focus groups, teachers talked extensively about reading and writing and about their students' inability to gather information from expository text. In focus testing, teachers noted that the two-column format was especially helpful for students who read below grade level. Other teachers commented positively about the reading level, narrative style, and graphic organizers used in Glencoe/McGraw-Hill social studies textbooks.

As teachers noted, reading skills are essential to content-area learning. In the social studies, students must read to learn. Struggling readers risk learning less than those who are proficient in reading. Teachers who infuse literary strategies with social studies content actively engage students in learning. When students internalize reading strategies such as visualizing, predicting, and making connections, they become better social studies students.

Teachers approved of the **Guide to Reading** feature that helps students identify the main idea, preview vocabulary terms, and set a reading strategy.

CRISS was effective in those school districts in which teachers have received CRISS training.

Quantitative AND Qualitative Research

"Good readability means interesting to read and not just easy to read."

—Georgia Social Studies Advisory Board

"The more suggestions, the better, and lots of variety ..."

—Teacher

Readability

Teachers noted that readability is determined by several factors and includes more than reading at a specific grade level. For example, vocabulary is part of readability, and methods of handling vocabulary vary among teachers. Some teachers prefer to preteach vocabulary terms before the class begins the lesson. Other teachers prefer to have students learn from in-text definitions and from context during the lesson.

Research documents the relationship between a strong vocabulary and the ability to read and write proficiently. Vocabulary may be the most important factor in comprehension, showing that ongoing, specific vocabulary instruction must be an integral part of every lesson.

Standards and Assessments

National and state standards are an increasingly important component of educational materials. Some teachers reported that they write the standards on the board, record standards on tests, and ask students to write standards on their homework papers. Some teachers noted that a textbook based only on standards would be incomplete, because teachers use an entire standards framework to review materials in the classroom.

Some teachers expressed a desire for pre-lesson and post-lesson tests to aid in diagnosing student learning needs. Comments indicated that teachers prefer assessment questions without ambiguous answer possibilities.

Differentiated Instruction

Some teachers expressed a desire for a text that is adaptable to a wide range of students with various reading, language, and learning skills.

Teachers have various needs in the area of English learners. Some requested primary sources and textbooks in Spanish, and others favored inclusion strategies that could be implemented easily in the classroom. *Civics Today: Citizenship, Economics, & You* includes supplements for English learners. Tables, pictures, Foldables™, and graphic organizers are tools for inclusion that teachers can use to reach a diverse population of students. Teacher focus groups indicated that the **Glencoe Skillbuilder Interactive Workbook** is particularly helpful in the inclusion process. Teachers requested that more questions be added to this tool.

Teaching Support

Teachers requested additional transparencies with maps and overlays in CD-ROM format to allow easy access. Some comments indicated that teachers often used maps, graphics, activities, movie clips, music, art, and literature to supplement their lessons.

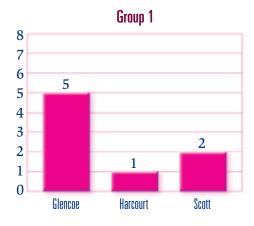
During focus testing and development, some teachers requested more transparencies, graphics, interactive software, videos, and Bell Ringer transparencies to begin the class period.

Presentation Tools Teachers liked the *Presentation Plus* component of the program, but they noted that many classrooms did not have projection devices; therefore, teachers often had to connect their computers directly to a video monitor, which required them to reformat the default font size.

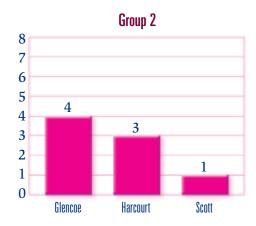
Online Assessments The focus groups also revealed a need for online assessment resources that can help teachers identify the standards that students do not know and prescribe specific activities to help students improve their scores.

Summary Findings

During a focus group for a Glencoe/McGraw-Hill social studies textbook in Pittsburgh, Pennsylvania, users voted on the overall design. Over 70 percent of the participants were users of Glencoe/McGraw-Hill's social studies textbooks. In Group 1, five out of eight people selected the Glencoe/McGraw-Hill textbook.



In Group 2, four out of eight people selected the Glencoe/McGraw-Hill textbook.



In summary, nine of the sixteen educators who voted selected the Glencoe/McGraw-Hill textbook during the focus testing.

Teacher Discussion Groups

This segment of the research is ongoing and includes a rapid prototyping approach to design, pedagogy, and manuscript. These findings are based on the results of nationwide teacher discussion groups.

Overall Textbook Benefits

Teachers noted the following benefits in Glencoe/McGraw-Hill's social studies textbooks.

- Good primary source documents
- Good connections between the past and the present
- Good diary entries by children (for example, journal entries of teens who traveled on the Oregon Trail)

Some teachers remarked that an ideal textbook would be organized around recurring themes.

Good interdisciplinary connections and guidance for team teachers

Textbook Ancillaries

Teacher discussion groups indicated that educators use the following ancillaries.

- Study Guides
- Audio Programs (especially for English learners)
- Workbooks
- Vocabulary Activities
- Reproducible Maps
- Daily Focus Transparencies
- Guided Reading Activities
- Reteaching Activities

Some teachers noted that they would benefit from copies of the textbook on CD in order to tailor the information for special-needs students.

"Textbooks must help teachers teach students how to access and use information and not just to memorize dates and names."

—Teacher Discussion Group

QUANTITATIVE AND QUALITATIVE RESEARCH

Textbook Assessments

Teacher discussion groups indicated that teachers have the following expectations for assessments.

- Assessments must match standards and objectives.
- Assessments must lead students to draw conclusions from the text.
- Assessments should elicit critical thinking skills.
- Good questions have both short- and extended-response answers.
- Good questions are thematic.

Technology

Teacher discussion groups indicated that most teachers have at least one computer in the classroom and that some teachers have more than one. Students use computers to research, to create and give presentations, and to work on writing exercises. Teachers indicated that they use PowerPoint® in their classrooms. Classroom technology usually supports a VHS/VCR format, but not DVD technology. Some teachers indicated that they would like to see more games and simulations for middle school students.

Classroom Visits

Over the course of several weeks in late November and early December, 95 percent of the Glencoe/McGraw-Hill staff for high school and middle school social studies conducted classroom visits in the Central Ohio area and in surrounding areas. This section summarizes the findings from those classroom visits.

When and How Textbooks are Used

Classroom teachers noted that language arts and social studies are often team-taught at the middle school level. Teachers use textbooks for daily reading assignments, both in class and as homework, relying on maps and images as reference materials. Teachers of English learners expressed a desire for a text that could be simplified as needed. Teachers liked the **Did You Know** feature in the Teacher Wraparound Edition.

When and How Ancillaries Are Used

To help students understand what they read, teachers often read aloud to students or play books on tape for them. Transparencies and graphic organizers are the most frequently used ancillary components in the classroom. Ancillary activities included primary source-related activities, role-play activities, and simulations.

When and How Technology Is Used

Teachers pointed out that transparencies are the most frequently used ancillary component. They also indicated that they use videos frequently. Internet activities focused primarily on research. Teachers were challenged with having students apply their critical thinking skills to Internet research instead of reports from the source material. As part of their planning process, teachers use CD-ROMs and textbook-related Web sites.

What Teachers Create for Their Own Use in Classrooms

Responses indicated that more students participate when teachers personalize questions and activities. Note-taking outlines displayed on transparencies allow teachers and students to take notes together. Teachers reported that they often create color-coding strategies, note-taking worksheets, study tactics, and other skill-based learning tools to help students. Some teachers prepare their own pre-reading and post-reading questions. To allow students additional practice in the area of standardized test-taking, some teachers prepare timed reading and timed writing worksheets.

Relevant Student Behaviors to Accommodate

Some teachers noted that even good students are not always avid readers and that students learn best when they are encouraged to interact in small groups to reach common goals. Again, some teachers noted that audio programs are effective ways to accommodate struggling readers.

References

References for Further Study

Glencoe/McGraw-Hill recommends the following resources for further research on teaching reading skills.

- Subjects Matter: Every Teacher's Guide to Content-Area Reading, by Harvey Daniels and Steven Zemelman. Portsmouth, NH: Heineman, 2004.
- When Kids Can't Read: What Teachers Can Do, A Guide for Teachers 6–12, by G. Kylene Beers. Portsmouth, NH: Heinemann, 2003.
- *I Read It, But I Don't Get It: Comprehension Strategies for Adolescent Readers*, by Cris Tovani. Portland, ME: Stenhouse Publishers, 2000.
- *Teaching Reading in Middle School*, by Laura Robb. New York, NY: Scholastic Professional Books, 2000.