

# Making a case and a place for effective content area literacy instruction in the elementary grades

*The need is growing for content area literacy instruction to begin at the elementary level.*

The face of content area literacy instruction is changing. Once associated exclusively with middle and high school instruction, today, as never before, educators are directing their attention to the importance of encouraging content area literacy instruction at even the earliest levels. Professional books (see, for example, Alvermann, Swafford, & Montero, 2004) designed to help teachers involve elementary school children in reading and writing informational texts are proliferating. Interest in information trade books is at an all-time high. The title of an article in the *California Reader* says it all: “New Dimensions in Content Area Literacy—Not Just for Secondary Teachers” (Wood, 2003).

At least three critical factors have converged to create this change: standards-based education, emphasis on standardized-test performance, and technology. The ascendance of standards-based education throughout the United States has clearly helped heighten interest in students’ ability to read informational texts. In almost every state, language arts standards related to reading and writing informational-text genres now appear at kindergarten and extend through the high school level. Requirements that teachers address these standards *at every level* have made educators more aware of their importance.

It is clear that pressure for improved standardized-test performance has helped to drive this emphasis on content area literacy. Teachers are

becoming aware of the need to teach to state standards related to informational text, and they recognize that students will be tested on their ability to understand such texts. A case in point is the *National Assessment of Educational Progress* (NAEP; Grigg, Daane, Jin, & Campbell, 2003), which serves as an audit of each state’s annual assessment of student reading achievement in grades 3–8 as part of the No Child Left Behind legislation (2002). In its most recent version, 50% of fourth-grade-level test content required students to read narrative text and 50% involved reading to gain information. By eighth grade, the bulk of the test involved reading informational text to gain information (43%) or to perform a task (30%).

A third factor is the recognition of the role of technology in our society. The U.S. economy today demands a higher level of literacy than ever before. The literacy demands of today’s technological society require that students not only be able to read and write in the print world but also in the digital world. The ability to use the Internet to access information quickly, sift through volumes of text, evaluate content, and synthesize information from a variety of sources is central to success at school and in the workplace (Schmar-Dobler, 2003). All of these skills, however, require that students capably read the text found on websites, most of which is expository (Kamil & Lane, 1997).

In many ways, we are, today, at a critical crossroads in terms of helping students read to learn. The statistics are bleak. Much has been made of the “fourth-grade slump,” which was first observed by Chall and Jacobs (1983), who noted that many third graders from low income families reading on grade level experienced a sudden drop in reading

scores in the fourth grade. A number of explanations have been offered for this phenomenon: (1) school tasks change significantly from third to fourth grade, (2) assessment instruments shift from an emphasis on decoding to the reading of expository text between third and fourth grade, or (3) previously “unimportant” reading difficulties may appear for the first time in fourth grade when children encounter informational materials (Snow, Burns, & Griffin, 1998). Whatever the reason, for many students, the slump becomes an abyss as they move through school. According to the *Carnegie Reporter*,

We have ample evidence that the overwhelming majority of students in our urban schools who do not develop the comprehension skills necessary to read to learn...never recover. We know that as adolescents they continue to descend into an educational free fall in high school. By the time U.S. students reach the tenth grade, only a third are reading proficiently. Nearly half of 17-year-olds are unable to read at the ninth grade level, and in 35 of the nation's largest cities, almost half of the high schools graduate only 50 percent of their students. (de León, 2002)

The purpose of this article is to examine why and how effective elementary content area literacy instruction might reverse this alarming situation. It will begin by providing background related to elementary content area literacy instruction, including the history of the term. It will then examine the *case* supporting the need for content area literacy instruction and explore the *place* that content area literacy might assume in the classroom, suggesting ways that teachers can make reading to learn a more integral part of their literacy instruction.

## Background

Recognition of the need to provide elementary school students with instruction in reading to learn is not a new idea. As early as 1925, William S. Gray, a pioneer in the profession, emphasized the importance of content area literacy in all grades (Swafford & Kallus, 2002). Articles appearing in this journal and others have long articulated the need for content reading instruction to occur well before the fourth grade so that students are better prepared for the textbook reading required at the upper elementary level. While recognition of the

need to emphasize content area literacy at the elementary level has been around for a long time, it has received limited attention and has only moved from the shadows into the spotlight in the past few years.

A dramatic illustration of the increased interest in this topic is reflected in the contents of *The Reading Teacher* itself. Armbruster (1992) reviewed the number of articles related to content area reading appearing in *The Reading Teacher* from 1969 to 1991. She found only 24 full-length articles, focusing generally on one of two themes: instruction and materials or texts. I informally analyzed issues of *The Reading Teacher* from May 2000 to May 2004 with the same intent and identified 15 articles that appeared over that four-year period—more than half as many as appeared during the two decades analyzed by Armbruster. Most recent articles clustered around two broad topics: the uses of information trade books and the uses of technology as ways to develop content area literacy in the classroom.

## Changing terms

This informal analysis not only demonstrates the increased interest in this topic but also illustrates our changing conception of content area literacy as it moves beyond textbooks to involve multiple text types. The very term *content area literacy* reflects this change. The term *content area reading*, which referred to the concept of reading to learn, has been replaced by the term *content area literacy*, which generally has referred to reading and writing to learn (McKenna & Robinson, 1990). More recently, experts have broadened that definition to include attention to technology and other text types. Thomas Bean, (quoted in Swafford & Kallus, 2002), offered the following definition created by students in his content area literacy class:

Content area literacy is a cognitive and social practice involving the ability and desire to read, comprehend, critique and write about multiple forms of print. [These] multiple forms of print include textbooks, novels, magazines, Internet materials and other sociotechnical sign systems conveying information, emotional content, and ideas to be considered from a critical stance. (p. 10)

As this definition reflects, the term *content area literacy* has come to mean more than simply reading and writing to learn with textbooks. It

refers to all the literacies in students' lives—whether in school or out of school—and the myriad forms that today's texts can take, whether textbook or trade book, e-mail, electronic messaging, or Internet sites. These literacies are clearly a part of the lives of younger children as well as adolescents, and teachers at both the elementary and secondary levels must recognize their importance (Swafford & Kallus, 2002).

### ***The present state of content literacy instruction***

Traditionally, primary classrooms have emphasized helping students learn to read in grades 1 through 3, with a heavy emphasis on helping students “break the code.” At grade 4, the emphasis shifts to reading to learn, in recognition of the content area textbook learning that dominates at the upper elementary level. Most instruction in primary classrooms has focused on teaching children to read through narrative texts. Duke (2000), for example, found that very little informational text was available in the first-grade classrooms she studied, whether displayed on walls or in classroom libraries, and that students spent on average only 3.6 minutes with informational text per day.

Students' exposure to exposition apparently comes from a narrow range of materials—content area textbooks or basal readers—and may be of questionable quantity and quality. While basal readers are used in approximately 85% of elementary classrooms (kindergarten through grade 5), students aren't likely to encounter much informational text in them (Baumann, Hoffman, Duffy-Hester, & Ro, 2000; Flood & Lapp, 1986; Hoffman et al., 1994; Moss & Newton, 2002). A study of basal readers found that only 20% of the pages in second, fourth, and sixth grade were devoted to informational literature (Moss & Newton).

Content area textbooks presumably provide younger and older students with exposure to exposition, but the extent to which students are actually getting practice in reading those texts is a matter of debate. Studies consistently indicate that students do little textbook reading, either in class or as homework (Wade & Moje, 2000). In an effort to make these often poorly organized and user-unfriendly texts accessible (Anderson, Armbruster, & Kantor, 1980; Chambliss, 1994) teachers often

read aloud to students rather than show them how to read the material themselves (Armbruster et al., 1991).

Besides limited exposure to exposition, students apparently get little instruction in how to comprehend informational text. Not much has changed since Durkin's (1978) classic study indicating that teachers spent only 2% of classroom time on teaching comprehension. In a study involving over 100 hours of observations in primary literacy classrooms, Fisher and Hiebert (1990) found no instances of teachers modeling strategies for reading expository text. Taylor, Pearson, Clark, and Walpole (2000) found that even in 14 high-performing urban schools, comprehension instruction was seldom observed in grades 1 through 3. In fact, only 16% of teachers in the sample emphasized comprehension of any kind. The situation at the upper elementary level is equally dismal. In observations of 192 fourth-grade science and social studies lessons, for example, Armbruster et al. (1991) found no examples of explicit instruction in how to read and learn with text. As Littlefair (1993) noted,

Despite all the debate about the initial teaching and learning of reading, little attention seems to be paid to how children are to be assisted to become competent independent readers of a variety of texts. We seem to assume that as children progress through the primary school and middle school, they transfer their ability to read narrative into competent reading of non-narrative, upon which much of their further education and capacity to deal with adult life will depend. (p. 127)

## **Making the case for content area literacy**

Why should teachers give more attention to instruction involving expository text? What is the value of focusing on such instruction in the elementary grades? This section will identify three critical reasons that elementary-grade content area literacy instruction is crucial to students' later success in school.

### **1. Early exposure**

Early exposure to exposition can lay the foundation for student understanding of the expository text that dominates in later grades (Duke & Bennett-Armistead, 2003). By sixth grade, more

than 75% of students' reading demands in school are with nonnarrative text. Venezky (1982) lamented the favoring of fictional narratives in schools because "the literacy needs of the adult center primarily on obtaining information from non-fictional texts" (p. 114).

Results of the 1995 *NAEP* (Campbell, 1995) suggested the potential value of "expanding the canon" of narrative to include more expository texts. Fourth graders who reported experiences with magazines and information books in their classrooms had higher average reading proficiencies than students who had never read these types of materials. These findings suggest that emphasis on exposition may benefit young readers as well.

For many years, educators assumed that young children were incapable of understanding information-type text. Pappas's (1993) seminal study comparing 20 kindergartners' ability to retell a children's information trade book with their ability to retell a fictional one was the first study to call that assumption into question. She found that the children she studied were just as capable of retelling informational text as narrative. Kamil and Lane (1997), for example, studied a first-grade classroom wherein 50% of first-grade reading instruction involved expository text. They found that students at a range of ability levels could learn about and use such texts in reading and writing, and they "did at least as well as they should have in the more traditional story based program" (p. 7). Early exposure to exposition may also contribute to improved writing abilities. Duke, Martineau, Frank, and Bennett-Armistead (2003) found that first graders involved in reading and writing informational texts were better informational writers than children in a control group.

## **2. Informational texts motivate children**

Alexander (1997) argued that knowledge seeking through expository text may be just as motivating as the "lived through" story experience. This increased interest in and engagement with text can significantly influence learning and development (Renninger, Hidi, & Krapp, 1992). By giving students greater access to this body of literature, teachers may provide students with new ways into literacy and greater motivation for reading.

Kletzien (1998), for example, found that elementary school children chose to read informational texts almost half the time. This was particularly true for boys and for children in first, second, and third grade. Older students also expressed preferences for informational texts (Ivey & Broaddus, 2001; Worthy, Turner, & Moorman, 1999) and reported that having the opportunity to select non-fiction trade books improved their motivation for reading (Moss & Hendershot, 2002).

## **3. Informational texts increase new knowledge domains**

The ability to gain knowledge from text is a critical one in this information age. Students need to develop the ability to understand the languages of disciplines like mathematics, history, and science. Furthermore, they need to develop the critical reading abilities associated with thinking like a mathematician, historian, or scientist. The need to not only understand information but also evaluate it is a necessity in today's world.

Domain knowledge, or deep knowledge about a particular topic, requires long-term immersion in an area of study. This critical form of prior knowledge about a content area enhances vocabulary understanding as well as comprehension. As Hirsch (2003) noted, "If we don't know the domain, we can't construct a meaningful model of what's being said" (p. 17). By developing children's domain knowledge at the elementary level, we help to ensure later success with the increasingly demanding texts found in content areas at the upper grade levels. Furthermore, reading instruction that provides an in-depth, long-term focus on a specific knowledge domain not only improves general vocabulary but also improves reading fluency and motivation (Guthrie, Anderson, Alao, & Rinehart, 1999).

According to Susan B. Neuman (2001), former U.S. Assistant Secretary of Education, "To write, think or solve problems, young learners must have something to write about, something to think about, or some problems to solve. In short, important learning processes require content knowledge" (p. 473). This content knowledge in a variety of subjects can contribute to schema development that can be invaluable to children as they progress through school.

## Making a place for content area literacy instruction

According to Duke, (1999) “Our failure to develop adequate informational reading and writing skills in many students has long been recognized” (p. 252). If today’s students are to meet the literacy demands of the future, they need authentic experiences with expository texts from the beginning of their school careers. The following suggestions demonstrate the place that content area literacy might assume in the elementary curriculum. They are intended to suggest meaningful ways to naturally combine literacy and content learning to help elementary-grade students develop the informational literacy skills they will need for success at school as well as in the workplace.

### ***Integrate literacy instruction with content area study***

Integrating reading and content instruction throughout the elementary grades can help children learn to read at the same time they read to learn. At the primary level, instruction in reading to learn can parallel instruction in learning to read. Such interactions can prevent the decline in achievement that often occurs when students encounter the demands of reading to learn in the intermediate grades.

Richard Vacca (as cited in Moss, 2002), former president of the International Reading Association and a nationally respected expert in content area literacy, stated,

I think content area literacy begins the moment a child uses reading to learn or to enjoy or to inquire. As soon as kids are learning to read they are reading to learn; they are reading to enjoy, to inquire. I don’t separate learning to read and reading to learn. That is kind of a false dichotomy. What motivates kids to want to learn to read is that they are learning from what they read or they are enjoying what they read. The emphasis is on the uses of reading which begin very early in one’s development, using reading for lots of purposes—that’s where content literacy begins. (p. 57)

While research studies related to this area are few, accounts by teachers like Duthie (1996) suggest that it is possible to combine instruction in learning to read with expository text comprehension instruction. Teaching young children about

the internal and external features of informational text, for example, can pave the way for helping them increase their understanding of this genre at the upper elementary level. Furthermore, a proliferation of recent materials provides even the youngest children with the opportunity to sharpen decoding skills and fluency skills at the same time they learn about the world. Easy-to-read informational titles from Newbridge, the National Geographic Society, Heinemann, and many other publishers can help children learn about content and process simultaneously.

As the RAND Reading Study Group (2002) stated, “The priority of instructing for reading comprehension must be balanced with the priority of teaching the content area itself” (p. 30). At the upper elementary level, all too often, teaching students the process of reading informational text takes a back seat to teaching content. Many experts feel that the standards movement has exacerbated this situation through its emphasis on content coverage and testing. Despite its challenges, such teaching can actually streamline instruction by allowing teachers to address literacy standards along with specific content area standards within particular lessons, thereby enhancing literacy along with content learning.

Activities like learning logs, for example, can engage elementary students in using writing as a reflective task designed to facilitate information retrieval. Learning logs are simply notebooks in which students record information; this can include questions about content, reflections on what students have learned, webs, charts, or diagrams of processes or events. These informal writing activities allow students to write for meaningful purposes about content learning in any subject, be it art, music, mathematics, or science. Furthermore, they provide teachers with information about the degree of student understanding of a particular concept. DiPillo (1994), for example, asked fifth and sixth graders to respond to the question “What is a fraction?” in their learning logs. Here are some of their responses:

A fraction is part of a hole. For example, if there are 10 sticks on the ground, and someone picks up 6, you could say they picked up  $\frac{6}{10}$ . (p. 133)

A fraction is a number with a numerator, and a denominator. It can be multiplied, divided, added, subtracted, and also made equivalent. (p. 134)

A fraction is a word we use for math. (p. 134)

Through this simple writing activity, students not only have the opportunity to reflect on their mathematical understanding but also to develop literacy skills. Through students' responses, the teacher could readily see the varying degrees of student understanding of the concept of fractions. In this way, she could provide additional help to those students whose understanding was lacking.

### **Provide access to a multiplicity of text types**

The recent emphasis on technological literacy has led to the realization that we are preparing elementary-level students for far more than the reading demands of their upper elementary-level textbooks. We are preparing them to read a multiplicity of texts, both print and electronic—newspapers, magazines, hypertexts, text messages, and much more (Swafford & Kallus, 2002).

For many teachers, textbooks are essential classroom tools. In this era of accountability, basal readers and content area texts help teachers provide standards-based instruction in reading, science, social studies, mathematics, and many other subjects. Exclusive use of textbooks, however, can stifle student interest and the development of critical thinking skills (Dunn, 2000). By complementing content area textbooks with other sources, teachers can provide motivation for reading and may improve content area learning. If children are to be prepared for the literacy demands of the future, they need access to information trade books, magazines such as *Kids Discover* and *Time for Kids*, newspapers, Internet articles, and other electronic texts. At least half of the print materials in the primary-level classroom library should be informational; the percentage should increase in the upper elementary grades.

Information trade books can be a particularly rich classroom resource. The proliferation of excellent children's informational trade books available today can provide a perfect complement to content area textbooks (Moss, 1991). These books let children explore the real world through texts that are inviting, accurate, and accessible. Today's information books contain wonderful examples of well-written exposition and are ideal for exposing

children at all grade levels to content-related information in engaging, meaningful ways.

As noted earlier, children appear to spend very little time reading expository text in school. Setting aside time for reading content-related texts, including trade books, Internet sites, newspapers, and magazines, can provide students with opportunities to increase their domain knowledge about dozens of real-world topics. The more time students spend reading and learning about expository text, the greater their facility with this text type will be. Providing access to a range of text types during sustained silent reading time, for example, can increase motivation for the many students who prefer information-type text to stories. Involving students in silent reading and reading of library books are all ways to promote the type of engaged reading that has been shown to increase achievement (Guthrie, Schafer, & Huang, 2001).

### **Help students become strategic readers and writers of informational texts**

According to Ogle and Blachowicz (2002),

Proficient readers of informational texts are actively engaged and purposeful in their reading; attend to both the external physical organization of text and its internal structure; and employ a range of strategies designed to facilitate their understanding of this text type. (p. 30)

While the research base related to teaching young children how best to read informational text is limited, experimental studies have validated the efficacy of instructional approaches such as pre-reading discussions, Reciprocal Teaching (see Oczkus, 2003), Questioning the Author (see Beck, McKeown, Hamilton, & Kucan, 1997), and explicit teaching of comprehension strategies (see Snow, 2001).

Through read-alouds and shared, guided, and independent reading experiences with informational texts, including helping children read their content area textbooks, children develop literacy skills necessary for survival in the 21st century. At the primary level, at least one third of reading instruction time should be devoted to informational text. At the upper elementary level, the percentage of time devoted to instruction focused on reading informational texts should be increased to approximately

40% by fourth grade, 50% by fifth grade, and 60–65% percent by sixth grade.

By reading information trade books aloud, for example, teachers can expose children to the language and structure of exposition at the same time they engage them in learning content. Read-alouds also provide students with exposure to the language of a discipline, thereby increasing student domain knowledge. Through shared and guided reading experiences, teachers can help students develop awareness of the many ways that expository text differs from narrative and the importance of text features such as headings, tables of contents, indexes, maps, graphs, charts, and so on (Kristo & Bamford, 2004).

In addition, teaching common expository text structures, such as description, sequence, comparison and contrast, cause and effect, and problem and solution, facilitates reading and writing of exposition (Block, 1993; Goldman & Rakestraw, 2000; McGee & Richgels, 1985; Raphael, Kirschner, & Englert, 1988). Students who learn to use the organization and structure of informational texts are better able to comprehend and retain the information found in them (Goldman & Rakestraw; Pearson & Duke, 2002). Teachers can facilitate the learning of these structures by involving students in retellings, dramatic activities, and experiences that let them use these structures in their own writing.

Involving children in writing expository text can heighten children's awareness of how such texts are created (Littlefair, 1992) and their understanding of why and when to use them. Over time, children develop the ability to read such texts as writers and begin to search for ideas they can use in their own writing. In this way, they can broaden the forms of writing they use and become empowered to create their own texts based upon their understanding of these models (Green, 1992; Pappas, Kiefer, & Levstik, 1999). Writing activities need not be confined to reports; they can take a wide variety of forms, including fact books, almanacs, and content-related alphabet books.

### ***Provide immersion in content through inquiry-based experiences***

Units of inquiry give students the opportunity for sophisticated immersion in a range of content-related materials on topics of interest. Inquiry-

based learning experiences focus on students' own questions about a topic; in this way, student curiosity becomes a driving force for learning. Through such experiences, students locate information, organize it, and share that information with an audience through a variety of forms including writing, multimedia presentations, debates, or websites. WebQuests, for example, can engage students in inquiry-based learning experiences through the use of Internet sites. (See <http://webquest.sdsu.edu> for more information on WebQuests.)

Units of inquiry go well beyond the usual report-writing assignment by providing long-term collaborative immersion in the study of a topic, deeply engaging students in a range of informational texts and requiring students to think critically about those texts. Experts agree that if today's students are to acquire the literacy skills requisite for success in the 21st century, they need to be able to not just read informational texts but read them critically, evaluating their "truth value" and relevance. Furthermore, they need to be able to compare and contrast information across a variety of sources, see the relationships among the information they find, and synthesize those findings.

Idea circles (Guthrie & McCann, 1996) provide an excellent vehicle for creating these types of experiences. Idea circles involve students in small-group peer-led discussions of concepts based on reading experiences involving multiple informational texts. This conceptual learning involves three basic ingredients: facts, relationships between facts, and explanations. Idea circles provide a highly sophisticated integration of content learning with literacy learning. Through these experiences, students see that reading "is not merely a technical skill, but that literacy is an avenue for the pursuit of information and the discovery of ideas" (Guthrie & McCann, p. 98).

During a study of California's native peoples, I had students use idea circles. They formed four groups, each focusing on a different tribe of people. I focused student inquiry through questions like "What kinds of structures did the tribe live in and why, what kinds of foods did they eat, where did each tribe live, and does this tribe still exist in California?" Students engaged with a variety of sources, including textbooks, trade books, maps, and the Internet to answer the focus questions. Finally, groups were reconfigured so that each

contained a student expert on one of the three tribes. The final idea circle product involved having each group complete a data chart comparing and contrasting the different tribes.

### **Develop professional expertise**

Ongoing, sustained staff development is crucial if teachers are to help students develop the strategies necessary to read expository text. According to the RAND Reading Study Group (2002), “Lengthy, intensive teacher preparation is effective in helping teachers deliver successful strategy instruction that has improved student outcomes on reading comprehension tests” (p. 25).

Professional development experiences in teaching teachers to use expository text strategies with their students can produce results (Franklin, Roach, Clary, & Ley, 1992). Most elementary teachers, however, receive little instruction in the teaching of expository text. Much of their preservice and inservice teacher training focuses on narrative text rather than expository. A recent survey of California teachers in grades 3–5, for example, found that only 32.6% had taken a course specifically for content area reading (Gernon & Grisham, 2002). It is clear that the role of professional development in this area is an essential one.

More and more schools are focusing elementary teachers’ attention on content area literacy. A model for such staff development might incorporate professional readings, information presentation, classroom implementation, and follow-up coaching. For example, teachers might be provided with two hours of free time once a week for staff development and discussion of professional books and articles related to teaching information text. Teachers read and discuss professional readings one week, and the following week they attend a presentation that provides information about implementation of suggestions provided in the readings. Following this, teachers implement one strategy in their classroom. At the next meeting, they debrief about how well this implementation worked. Peer coaches might model lessons, provide teacher support, and recommend materials related to state standards in a variety of disciplines.

## **Final thoughts**

If today’s teachers are to help students meet the literacy demands of the 21st century, it is essential that the elementary curriculum reinvent itself in ways that give content area literacy a place of greater prominence. By using an array of text types to link content learning with literacy, teachers will achieve goals far greater than simply helping students read their content area textbooks. They will help students learn to “read the world” by providing them with literacy learning tools that will last a lifetime and by developing the abilities that will allow students to not only survive but also thrive in the technological age to come.

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### **References**

- Alexander, P.A. (1997, April). *A case for the motivational nature of exposition: Contrasting information-finding with knowledge-seeking*. Paper presented at the American Educational Research Association, Chicago, IL.
- Alvermann, D., Swafford, J., & Montero, M.K. (2004). *Content area literacy instruction for the elementary grades*. Boston: Allyn & Bacon.
- Anderson, T.H., Armbruster, B.B., & Kantor, R. (1980). *How clearly written are children's textbooks? Or of bladder-words and alfalfa* (Reading Education Report No. 15F). Champaign, IL: Center for the Study of Reading.
- Armbruster, B. (1992). Content reading in RT: The last 2 decades. *The Reading Teacher*, 46, 166-167.
- Armbruster, B., Anderson, T.H., Armstrong, J.O., Wise, M.A., Janisch, C., & Meyer, L.A. (1991). Reading and questioning in content area lessons. *Journal of Reading Behavior*, 23(1), 35-59.
- Baumann, J.F., Hoffman, J.V., Duffy-Hester, A.M., & Ro, J.M. (2000). *The First R* yesterday and today: U.S. elementary reading instruction practices reported by teachers and administrators. *Reading Research Quarterly*, 35, 338-377.
- Beck, I.L., McKeown, M.G., Hamilton, R.L., & Kucan, L. (1997). *Questioning the author: An approach for enhancing student engagement with text*. Newark, DE: International Reading Association.
- Block, C.C. (1993). Strategy instruction in a student-centered classroom. *Elementary School Journal*, 94, 137-153.
- Campbell, J.R. (1995). *Interviewing children about their literacy experiences: Data from NAEP's Integrated Reading Performance Record (IRPR) at Grade 4*. Washington, DC: U.S. Department of Education.

- Chall, J.S., & Jacobs, V.A. (1983). Writing and reading in the elementary grades: Developmental trends among low-SES children. *Language Arts*, 60, 617-626.
- Chambliss, M. (1994). Evaluating the quality of textbooks for diverse learners. *Remedial and Special Education*, 15, 348-362.
- de León, A.G. (2002). *Moving beyond storybooks: Teaching our children to read to learn*. Retrieved March 1, 2004, from <http://www.carnegie.org/reporter/05/learning/index4.html>
- DiPillo, M.L. (1994). *A quantitative/qualitative analysis of student journal writing in middle-grade mathematics classes*. Unpublished doctoral dissertation, University of Akron, Ohio.
- Duke, N.K. (1999). *Print environments and experiences offered to first-grade students in very low- and very high-SES school districts*. Unpublished doctoral dissertation, Harvard University, Cambridge, Massachusetts.
- Duke, N.K. (2000). 3.6 minutes per day: The scarcity of informational texts in first grade. *Reading Research Quarterly*, 35, 202-224.
- Duke, N.K., & Bennett-Armistead, V.S. (2003). *Reading and writing informational texts in the primary grades: Research-based practices*. New York: Scholastic.
- Duke, N.K., Martineau, J.P., Frank, K.A., & Bennett-Armistead, V.S. (2003). *3.6 minutes per day: What happens when we include more informational text in first grade classrooms?* Unpublished manuscript, Michigan State University, East Lansing.
- Dunn, M.A. (2000). Closing the book on social studies: Four classroom teachers go beyond the text. *Social Studies*, 91, 132-136.
- Durkin, D. (1978). What classroom observations reveal about reading comprehension instruction. *Reading Research Quarterly*, 14, 481-533.
- Duthie, C. (1996). *True stories: Nonfiction literacy in the primary classroom*. Portland, ME: Stenhouse.
- Fisher, C.W., & Hiebert, E.H. (1990, April). *Shifts in reading and writing tasks: Do they extend to social studies, science, and mathematics?* Paper presented at the American Educational Research Association, Boston, MA.
- Flood, J., & Lapp, D. (1986). Types of texts: The match between what students read in basals and what they encounter in tests. *Reading Research Quarterly*, 21, 284-297.
- Franklin, M.R., Roach, P.B., Clary, E., Jr., & Ley, T.C. (1992). Overcoming the reading comprehension barriers of expository texts. *Educational Research Quarterly*, 16(1), 5-14.
- Gernon, A., & Grisham, D. (2002). Expository texts in the intermediate grades: What teachers teach. *California Reader*, 35, 11-20.
- Goldman, S.R., & Rakestraw, J.A. (2000). Structural aspects of constructing meaning from text. In M. Kamil, P.B. Mosenthal, P.D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. 3, pp. 311-336). Mahwah, NJ: Erlbaum.
- Green, P. (1992). *A matter of fact: Using factual texts in the classroom*. Armadale, VIC, Australia: Eleanor Curtain Publishing.
- Grigg, W.S., Daane, M.C., Jin, Y., & Campbell, J.R. (2003). *National assessment of educational progress. The nation's report card: Reading 2002*. Washington, DC: U.S. Department of Education.
- Guthrie, J.T., Anderson, E., Alao, S., & Rinehart, J. (1999). Influences of concept-oriented reading instruction on strategy use and conceptual learning from text. *Elementary School Journal*, 99, 343-366.
- Guthrie, J.T., & McCann, A.D. (1996). Idea circles: Peer collaborations for conceptual learning. In L.B. Gambrell & J.F. Almasi (Eds.), *Lively discussions! Fostering engaged reading* (pp. 87-105). Newark, DE: International Reading Association.
- Guthrie, J.T., Schafer, W.D., & Huang, C. (2001). Benefits of opportunity to read and balanced instruction in the NAEP. *Journal of Educational Research*, 94, 145-162.
- Hirsch, E.D. (2003). Reading comprehension requires knowledge-of words and the world. *American Educator*, 27(1), 10-29, 44-45.
- Hoffman, J.V., McCarthey, S.J., Abbott, J., Christina, C., Corman, L., Curry, C., et al. (1994). So what's new in the new basals? A focus on first grade. *Journal of Literacy Behavior*, 26, 47-73.
- Ivey, G., & Broadus, K. (2001). "Just plain reading": A survey of what makes students want to read in middle school classrooms. *Reading Research Quarterly*, 36, 350-377.
- Kamil, M., & Lane, D. (1997, December). *Using information text for first grade reading instruction: Theory and practice*. Paper presented at the National Reading Conference, Scottsdale, AZ.
- Kletzien, S.B. (1998, December). *Information text or narrative text? Children's preferences revisited*. Paper presented at the National Reading Conference, Austin, TX.
- Kristo, J.V., & Bamford, R.A. (2004). *Nonfiction in focus*. New York: Scholastic.
- Littlefair, A. (1992). Reading and writing across the curriculum. In C. Harrison & M. Coles (Eds.), *Reading for real handbook* (pp. 83-104). London: Routledge.
- Littlefair, A. (1993). The "good book": Non-narrative aspects. In R. Beard (Ed.), *Teaching literacy, balancing perspectives* (pp. 126-139). London: Hodder and Stoughton.
- McGee, L., & Richgels, D. (1985). Teaching expository text structure to elementary students. *The Reading Teacher*, 38, 739-748.
- McKenna, M.C., & Robinson, R.D. (1990). Content literacy: A definition and implications. *Journal of Reading*, 34, 184-186.
- Moss, B. (1991). Children's nonfiction trade books: A complement to content area texts. *The Reading Teacher*, 45, 26-32.
- Moss, B. (2002). Close up: An interview with Dr. Richard Vacca. *California Reader*, 36, 54-59.

- Moss, B., & Hendershot, J. (2002). Exploring sixth graders' selection of nonfiction trade books. *The Reading Teacher, 56*, 6-17.
- Moss, B., & Newton, E. (2002). An examination of the informational text genre in basal readers. *Reading Psychology, 23*, 1-13.
- Neuman, S.B. (2001). The role of knowledge in early literacy. *Reading Research Quarterly, 36*, 468-475.
- No Child Left Behind Act of 2001, Pub. L. No. 107-110, 115 Stat. 1425 (2002).
- Oczkus, L. (2003). *Reciprocal teaching at work: Strategies for improving reading comprehension*. Newark, DE: International Reading Association.
- Ogle, D., & Blachowicz, C.L.Z. (2002). Beyond literature circles: Helping students comprehend informational texts. In C.C. Block & M. Pressley (Eds.), *Comprehension instruction: Research-based best practice* (pp. 259-274). New York: Guilford.
- Pappas, C.C. (1993). Is narrative "primary"? Some insights from kindergarteners' pretend readings of stories and information books. *Journal of Reading Behavior, 25*(1), 97-129.
- Pappas, C.C., Kiefer, B.Z., & Levstik, L.S. (1999). *An integrated language perspective in the elementary school: An action approach* (3rd ed.). White Plains, NY: Longman.
- Pearson, P.D., & Duke, N.K. (2002). Comprehension instruction in the primary grades. In C.C. Block & M. Pressley (Eds.), *Comprehension instruction: Research-based best practice* (pp. 247-258). New York: Guilford.
- RAND Reading Study Group. (2002). *Reading for understanding: Toward an R & D program in reading comprehension*. Santa Monica, CA: RAND Education.
- Raphael, T.E., Kirschner, B.W., & Englert, C.S. (1988). Expository writing programs: Making connections between reading and writing. *The Reading Teacher, 41*, 790-795.
- Renninger, K.A., Hidi, S., & Krapp, A. (1992). *The role of interest in learning and development*. Hillsdale, NJ: Erlbaum.
- Schmar-Dobler, E. (2003). Reading on the Internet: The link between literacy and technology. *Journal of Adolescent & Adult Literacy, 47*, 80-85.
- Snow, C.E. (2001). *Improving reading outcomes: Getting beyond third grade*. Washington, DC: The Aspen Institute.
- Snow, C.E., Burns, M.S., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington DC: National Academy Press.
- Swafford, J., & Kallus, M. (2002). Content literacy: A journey into the past, present, and future. *Journal of Content Area Reading, 1*, 7-14.
- Taylor, B.M., Pearson, P.D., Clark, K., & Walpole, S. (2000). Effective schools and accomplished teachers: Lessons about primary grade reading instruction in low-income schools. *Elementary School Journal, 101*, 121-166.
- Venezky, R.L. (1982). The origins of the present-day chasm between adult literacy needs and school literacy instruction. *Visible Language, 16*, 113-136.
- Wade, S.E., & Moje, E.B. (2000). The role of text in classroom learning. In M.L. Kamil, P.B. Mosenthal, P.D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. 3, pp. 609-629). Mahwah, NJ: Erlbaum.
- Wood, K.D. (2003). New dimensions in content area literacy—not just for secondary teachers. *California Reader, 36*, 12-17.
- Worthy, J., Turner, M., & Moorman, M. (1999). What Johnny likes to read is hard to find in school. *Reading Research Quarterly, 34*, 12-27.