chapter 1

Content Literacy and the Reading Process
Content Literacy and the Reading Process

Assumptions Underlying Content Teaching

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The Reading Process

- A Cognitive View
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Essential Questions:

- What do active and independent readers do that makes them successful readers?
- Why should content area teachers be responsible for literacy in content areas?
- How do people learn and remember information?

Anticipation Guide

Directions: Read each of the following statements. Place a checkmark on the line in the “Before Reading” column if you agree with the statement; leave it blank if you disagree. Then predict what you think the chapter will be about, and jot down on a sticky note (or post online) any questions you have. Read the chapter; then return to the statements and respond to them as you think the authors of your text would. Place a checkmark on the line in the “Authors’ Stance” column if you believe the authors would agree with the statement. If you discuss these statements with other people online, in class, or at the family dinner table, return to the statements and check any items you agree with in the right-hand column, “After Discussion.” If your thinking changed, what caused that change?

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Victoria, one of the authors of this edition, remembers her first encounter with reading and science in the following vignette.

In 1974 I had six years of teaching experience in junior high and high schools under my belt. I considered myself a good science teacher. In the fall of that year, I was asked to attend a district-level meeting on content area reading. After all my efforts to evade the meeting failed, I grudgingly went, taking papers to grade so that I could at least accomplish something while I endured what I believed would be a useless meeting. I was, after all, a science teacher—not a reading teacher. What did I need to know about reading? My students seemed to be illiterate (they did not read their assignments and rarely did their homework). I believed I could teach science without reading—I taught a hands-on activities-based course.

During that meeting, Joy Monahan presented instructional ideas that she claimed would help students learn content. I was singularly uninterested until she challenged us to try “just a few of these strategies” for two or three weeks and report the results to her. At the time, I was teaching in a school that tracked students according to academic achievement. I taught both ends of the spectrum—students designated “basic” and those designated “gifted.” I decided to show this Ms. Monahan that she could teach me nothing about teaching science.

That particular year I had a student, Amy,* who had been a thorn in my side since the first day of school. She had learned to remove all the bolts securing the legs to the tops of the science tables in my room and did so with regularity. When the bolts were removed, the next student to enter the room and throw his or her books on the table had to move quickly to avoid the collapsing table. I never could catch her at this game. Amy was one of those students who by her very presence in the classroom was disruptive. I had a lot to teach Amy, and as it turned out, she had much more to teach me.

In the ensuing few weeks, I selected two of the instructional ideas presented by Ms. Monahan (they were the ideas that required the least amount of effort on my part) and tried them with my “basic” classes, teaching the “gifted” classes in my normal (and brilliant) way. I gave both groups the same test, designed for the “gifted” class. I reasoned that I could

*Pseudonym
allow the “basic” students to drop one test grade, and thus my little experiment would do them little harm.

When I graded the tests for both classes, I was astounded. The “basic” group’s average was higher than that of the “gifted” class. I was transformed from a cynic to a convert in the time it took to grade those papers. My “basic” students had learned material that I previously thought too difficult for them. In fact, I had also noticed that these students were doing their assigned reading and homework and actively participating in class. Most important to me, their behavior had changed from apathetic to cooperative. This little experiment was a turning point in my life.

Imagine teaching an athlete like Venus Williams to play tennis until third or fourth grade and, because she is the best young player in the world, concluding that she needs no more instruction. Now imagine that after three or four years with little to no instruction, Venus Williams is expected to play tennis, and play well, at Wimbledon—a different context from the one in which she originally learned to play the game. There is a large crowd, the court is grass, the stakes are very high.

Although this scenario seems unimaginable, think of children in elementary schools, learning to read using narrative text. After several years with little to no instruction in reading expository text, they are expected to read high school textbooks with comprehension. There are parallels in these two scenarios that are difficult to ignore. Think about these parallels as you consider the assumptions underlying content area teaching.

Assumptions Underlying Content Teaching

Most content area teachers assume it is their responsibility to cover their subject matter in a timely, accurate, and effective manner (Alvermann & Moore, 1991; Moore, 1996). They also assume, for the most part, that textbooks are necessary for teaching and learning content (Wade & Moje, 2000). Finally, content area teachers tend to assume that by the time students enter middle school and high school, they are strategic in their approach to reading and learning (Alvermann & Nealy, 2004). These assumptions influence teachers’ instructional decision making, their use of textbooks, and their perceptions of active and independent readers.

Subject Matter

The historical roots of content area reading instruction go back several decades. Prior to the twentieth century, the predominant mode of instruction in U.S. secondary schools was one of imitation and memorization. In the early part of the twentieth century, the work of humanist educators such as John Dewey and developmentalists interested in individual growth
Assumptions Underlying Content Teaching

Factors began to emphasize child-centered curricula over rote memorization. With the cognitive revolution in psychology in the early 1970s came the notion that reading and writing should be taught as thinking processes rather than in the mechanical manner advocated by the behaviorists, who had preceded the cognitivists. Although other writers at that time were beginning to publish books on reading at the secondary school level, Herber’s 1970 text Teaching Reading in the Content Areas is generally regarded as the first to demonstrate how teachers can simultaneously teach content and process (reading). It is also one of the first content area methods texts to emphasize the importance of teachers’ decision making.

As a content area teacher you take pride, and rightfully so, in knowing a lot about the subject matter you teach and how best to engage students in learning. You also recognize that you are responsible for monitoring students’ learning and pacing their instruction accordingly. If these were the only two factors you had to take into consideration when making instructional decisions, it would be a relatively simple task to decide what to teach, when, and at what pace. Unfortunately, instructional decision making is complicated by what Newmann (1988) refers to as the “addiction” to coverage:

We are addicted to coverage. This addiction seems endemic in high schools…but it affects all levels of the curriculum, from kindergarten through college. We expose students to broad surveys of the disciplines and to endless sets of skills and competencies…the press for broad coverage causes many teachers to feel inadequate about leaving out so much content and apologetically mindful of the fact that much of what they teach is not fully understood by their students. (p. 346)

Addiction to coverage is dangerous because it tends to produce a false dichotomy between content knowledge and process knowledge. When knowing what takes precedence over knowing how, as it typically does when preparing students for standardized tests, it pressures teachers to cover a wide variety of topics in an inadequate space of time. Students are deprived of the opportunity to learn how bits of knowledge fit together and generalize to other areas of the curriculum or to real life. Tovani (2000) views this mile-wide, inch-deep curricular approach as watering down the curriculum. In short, students are denied the kind of instruction that leads to active and independent learning.

Role of the Textbook

Textbooks and other learning materials provide a focus for several chapter sections in this book. For example, in Chapter 3, we explore how hypertext and other forms of electronic media have led to a new relationship between text and reader. In Chapter 4, we consider the decision making involved in choosing appropriate materials to use in planning content literacy lessons or longer units of instruction. Here, however, we focus on three assumptions underlying the use of textbooks.

One assumption is that textbooks will help to structure loosely coupled curricular goals and objectives. By most estimates, textbooks do indeed structure from 67 to 90 percent of all classroom instruction (Woodward & Elliott, 1990), but this varies according to the type of instructional approach—transmission or participatory—that teachers espouse (Wade & Moje, 2000).
A second assumption is that students will use their textbooks to learn course content. This assumption may or may not be borne out. It depends on whether students view their textbooks or their teachers as the ultimate source of knowledge. Some researchers (Hinchman & Zalewski, 1996; Smith & Feathers, 1983a, 1983b) have found that students perceive their teacher, not the textbook, as the primary source of knowledge. Students generally find their teacher easier to understand than the textbook, especially if they believe they will be tested on what the teacher says in class. Other researchers (e.g., Fournier & Graves, 2002) have found evidence that teachers put the responsibility for acquiring the information contained in the text squarely on their students’ shoulders. Still other researchers (Ratekin, Simpson, Alvermann, & Dishner, 1985) have reported that in some content area classrooms, it is the custom for teachers to use the textbook as a “safety net”—something to fall back on—rather than as a vital link and a basis for class discussions. When teachers use texts as safety nets, more often than not they substitute lecturing for discussions of assigned readings.

A third assumption is that textbooks will present the content in a coherent and unbiased fashion. We know from experience that this is not always so. If you have ever attempted to read a poorly organized text, one in which the author seems to jump from one topic to another, then you know what we mean when we say coherency cannot be taken for granted. Similarly, if you have ever discovered biases in a textbook’s content, then you know that textbook authors, like everyone else, have particular ways of viewing the world and reporting on it. However, given appropriate planning strategies, even the most biased of texts can lead to excellent classroom discussions in which students learn to look at both sides of an issue for sources of possible misunderstanding. We firmly believe that in today’s diverse classrooms, opportunities for students to respond to biased texts should be welcomed. Taking advantage of such opportunities can contribute toward building appreciation for individual differences.

Using textbooks wisely requires teachers who know both the content and the processes needed to understand that content. In the opening vignette, Victoria recounted how she discovered that her students could read their textbooks; it had been her teaching methods that had resulted in her students’ appearing uninterested and illiterate. As the year progressed and she implemented content area literacy strategies as a vehicle to teach science, students in her class became actively involved in their own learning.

**Active and Independent Readers**

Content area teachers love their subject matter. Why else would someone choose to spend five days a week immersed in science, history, music, mathematics, or literature? We want our students to love science or history or music or mathematics or literature as much as we do and to choose to read and learn about our subjects independently. What do active and independent readers look like?

**ACTIVE READERS** Readers who engage in an active search for meaning use multiple strategies, including self-questioning, monitoring their understanding, organizing, and interacting with peers. In each instance, researchers believe, it is the cognitive
processing that is induced in the strategic reader—not the strategy itself—that is responsible for promoting active reading (Dole, Duffy, Roehler, & Pearson, 1991; Pearson & Fielding, 1991).

Active readers generate questions before they read, as they read, and when they have finished reading. Before reading a chapter in a social studies book, for example, active readers ask themselves what the selection is likely to cover, whether they know anything about the topic or are interested in it, and what they intend to do with the information presented. As they read, they question the meanings of unfamiliar words or ask how a certain event is likely to trigger a reaction. After reading the chapter, active readers ask whether their prediction of what the chapter would cover was accurate, whether they learned anything new, and how they might apply what they learned to something they already know. In fact, a fairly robust finding by researchers is that teaching students to generate their own questions leads to active learning and improved comprehension of text (National Reading Panel, 2000; Wade & Moje, 2000).

Recent research on disciplinary literacy practices, discussed later in this chapter, suggests that self-questioning is qualitatively different in different content areas. When historians are presented with a primary source, they ask who wrote the document, under what circumstances, and what his or her biases are. They are also mindful of their own biases as they read (Shanahan & Shanahan, 2008). Scientists will question the procedures of a research report to be sure they understand each step of the experiment. Mathematicians will focus on every word of a proof or problem and pay attention to prepositions used as technical terms (for example, of).

Active readers monitor, or periodically check, their understanding of what they have read. Although monitoring can include self-questioning, it is used here to describe the two-part process that readers go through when they (1) become aware of a breakdown in comprehension and (2) apply fix-up strategies to regain understanding.

Active readers attempt to make sense of the large body of facts, interpretations, and principles presented in their various textbooks by organizing such information into meaningful units. They may do this in one of several ways: by graphically organizing the information so as to form a semantic map or structured overview, by writing summaries, by constructing outlines and taking notes, or by elaborating on the text by drawing from their background knowledge and past experiences whatever associations seem most helpful in bridging from the known (“in the head”) to the unknown (“on the page”).

Regardless of which organizing strategy they choose, active readers are skilled in separating important information from unimportant information. When students experience difficulty in organizing what they have read, it is quite often because they are insensitive to what is important. Sometimes this insensitivity is due to a reader’s inability to identify information that an author deems important; at other times it is due to a reader’s strong sense of personal relevancy. For instance, Winograd (1984) found that eighth graders who were having difficulty reading tended to identify importance on the basis of what held high personal interest for them (such as sentences containing rich visual detail), whereas good readers tended to identify important information on the basis of its superordinate or subordinate placement within the text structure. Young adolescents have difficulty organizing large bodies of information partially because they rely on personal relevance as a criterion for attributing importance.
Although we recognize that readers often reflect on what they have read and actively construct meaning from texts without the benefit of peer interaction, there is growing support for placing greater emphasis on socially constructed meaning (Gee, 1996; Davis, Sumara, & Luce-Kapler, 2000; Echevarria & Graves, 2010; Lankshear & Knobel, 2003). Engaged readers, whether in gifted, regular, or basic-level classes, enjoy opportunities for open-forum discussions, in which a free-flowing exchange of ideas enriches and refines their understandings of what was read and heightens their motivation to read further (Alvermann, 2000). Discussions of this type, unlike lectures and recitations, provide English learners (ELs) with excellent opportunities to practice English and learn content simultaneously (Echevarria & Graves, 2010). Interactions with peers also enable students from diverse cultural groups to learn from one another.

**INDEPENDENT READERS** Independent readers typically are independent learners, and vice versa. We agree with Herber and Nelson-Herber’s (1987) claims that the similarities between the two are numerous and that independence can be developed by capitalizing on the following five principles:

1. *Independence comes from practice.* Readers develop independence when they have sufficient opportunities across the curriculum to establish their own purposes for reading, to make connections between their own experiences and those they read about, to use valid criteria in making judgments about the quality and value of what they read, and to apply what they have learned in one content area to another.

2. *Independence develops by design, not chance.* As students grow in independence, they require less and less in the way of structured learning activities. In the beginning, however, they are dependent on teacher modeling and guidance to show them how to apply the reading and reasoning processes necessary for understanding important concepts. As time goes on, responsibility is gradually released, as students assume more and more of the responsibility for applying what they have learned to new areas of study and new materials (Pearson & Gallagher, 1983).

3. *Independence is a relative state.* This is true for all of us. As a science teacher, Victoria feels confident in reading texts related to biology and chemistry. However, even a simple mathematics text baffles her! How many of us can read an insurance document or a credit card agreement with ease? Teachers must keep in mind that in order to develop and nurture independence, the maturity level of the student must be matched with appropriate resources.

4. *Independence can be achieved in groups.* Herber and Nelson-Herber (1987) advocate small-group learning experiences to develop students’ independence in reading. We agree with their view “that students can be as much in charge of their reading and reasoning processes and their use of ideas when interacting in cooperative groups as when working individually” (p. 586). There is ample research to support this view on cooperative learning, which we discuss in Chapter 3.

5. *Independence means forever “becoming.”* No one is ever totally independent as a learner. Occasionally, we all rely on others to help us interpret, clarify, or elaborate on what we read. Helping students become independent readers and learners will require time, skill, and patience.
Fluent Readers

What does it mean to read fluently, and what assumptions do we often make about older readers’ fluency (or lack thereof)? First, a common definition of fluency in relation to reading in the content areas focuses on students’ ability to comprehend texts of various types with speed, accuracy, and appropriate expression (National Reading Panel, 2000). Another less common definition is one that focuses on students’ fluency with information technology (American Association of University Women Educational Foundation, 2000). We believe both are important in terms of their implications for content literacy teaching and learning.

An assumption that is often made about older students is that they have attained a satisfactory level of fluency in reading assigned content area materials. Unfortunately, this is not always the case. In fact, among readers who struggle to comprehend, difficulties with fluency are often the culprit. Why is this so? Theoretically, readers have only a limited amount of attention, and when that attention is diverted to decoding words and pausing in appropriate places, overall comprehension suffers (LaBerge & Samuels, 1974). Slow and laborious decoding at the word level also hampers students’ ability to monitor their reading. Klenk and Kibby (2000) venture that when text processing at the word level is not automatic, readers will not “know how it sounds and feels to read text fluently” (p. 673).

One aspect of reading in mathematics that is often overlooked is that of fluency with symbols (Rubenstein & Thompson, 2001). Fluency in reading mathematical expressions aloud indicates understanding. Rubenstein and Thompson have identified several challenges related to fluency in reading mathematical symbols, including symbols that require the reader to verbalize phrases (± is read “plus or minus”), expressions that may be read in a variety of ways (x - y may be read as “x minus y” or as “x take away y” or as “y less than x”), and differences in directionality; that is, symbols are not always read left to right, as is text (for example, fractions have a numerator and denominator, both of which must be read—they are often presented vertically). Reading in mathematics is further complicated by the fact that inappropriate translations of symbols can create confusion and misunderstanding, as happens when -y is read as “minus y” rather than “negative y.”

SPEED, ACCURACY, AND APPROPRIATE EXPRESSION The underlying assumption of fluency instruction, defined in terms of a reader’s speed, accuracy, and appropriate expression, is that teachers will view it as a means to comprehension and not as an end in itself. Because adequate comprehension is essential for effective studying to occur, it is clear that fluency plays a pivotal role overall. The National Reading Panel (2000), while acknowledging that fluency instruction is often neglected in day-to-day classroom instruction, found sufficient research evidence to suggest that guided oral-reading procedures have a positive impact on students’ fluency and comprehension across a range of grade levels and in a variety of regular and special education classrooms. Examples of these procedures are included in Chapter 7.

Fluency with Information Technology

One of several new terms to make its way into the field of reading education as a result of the information explosion associated with today’s computer age is information literacy.
It refers to what is generally defined as the ability to access, evaluate, organize, and use information culled from a variety of sources. Not to be confused with computer literacy, which reflects a technological know-how in manipulating software packages, information literacy requires, among other things, knowing how to formulate a search strategy for zeroing in on needed information. The topic of Internet search strategies will be discussed later. For now, it is sufficient to link information literacy to fluency with information technology.

In a report focused on how to educate students in the computer age so that they become tech-savvy and capable of participating fully in e-culture (American Association of University Women Educational Foundation, 2000), the argument is made that fluency with information technology is much more than static listings of how to become more proficient at word processing or e-mailing. Instead, the authors of the report note that “fluency goals must allow for change, enable adaptability, connect to personal goals, and promote lifelong learning” (p. xi).

These goals will require that all students become fluent in skills such as designing a home page, organizing a database, communicating with others whom they may never meet in person, and evaluating personal privacy concerns. A useful set of non-print media standards for helping students achieve fluency with information technology was developed at the National Research Center on English Learning and Achievement (CELA) by Karen Swan. The non-print media standards are divided into basic skills, critical literacies, and construction skills for each of three grade levels: elementary, middle, and high school (Swan, 2000). The importance of fluency with information technology is underscored by the addition of the Technology and Engineering Literacy Assessment to the National Assessment of Educational Progress in 2014, discussed in Chapter 5. Examples of strategies for promoting fluency with information technology are found in Chapter 3.

In summary, content area reading instruction involves much more than covering the subject matter in a particular specialty area. It includes dealing with assumptions about the role of the textbook, promoting active and independent reading, and developing readers’ fluency. Students who self-question, monitor their reading, organize information, and interact with their peers possess some of the strategies necessary for becoming fluent readers and independent learners. However, their overall sense of themselves as learners will depend to a large extent on how they see themselves as readers and what it means to be literate in a fast-changing world.

**TECHNOLOGY Tip**

**Media Standards**
Newly revised National Educational Technology Standards for Students (2007) focus on communication and collaboration, research and information fluency, as well as critical thinking, problem solving, and decision making. The standards are available at [http://www.iste.org/standards/nets-for-students.aspx](http://www.iste.org/standards/nets-for-students.aspx)
What It Means to Be Literate

As individuals, we tend to approach literacy with our own agendas: We are in pursuit of something. Depending on our ideological frameworks, our educational backgrounds, and our social, economic, and political status in life, we may hold quite different perceptions of why we are in pursuit and what it means to be literate. For many, literacy is something to value for its intrinsic worth; for others, it may be a symbol of achievement or a means for social change; and for still others, it is something to profit from. In each of these perceptions, there is the underlying assumption that being literate means having a special capacity of one kind or another.

However, as Knoblauch (1990) pointed out, this is not necessarily the case. In observing that “literacy is one of those mischievous concepts, like virtuousness and craftsmanship, that appear to denote capacities but that actually convey value judgments,” Knoblauch (p. 74) reminds us that individuals who have the motivation and status to enforce literacy as a social requirement are often the same ones whose value judgments count. Failure to take note of the power relations surrounding such judgments is tantamount to buying into the idea that literacy is a neutral or innocent concept. Recognizing the political nature of what it means to be literate is important to our work as educators. It may keep us from falling into the trap of equating a student’s innate worthiness with her or his competence in reading and writing. It may also prevent us from being blinded by ideological leanings that sometimes propel us to act as if our own literacy agendas were innocent or pure.

Literate Thinking

From Langer’s (1989) perspective, reading and writing are “tools that enable, but do not insure, literate thinking” (p. 2). She argues vigorously against the tendency to equate literate thinking with the ability to analyze or synthesize large chunks of print, a common but uninformed notion of what it means to be literate.

Activity

Langer (1989) provides an example to highlight the distinction she draws between print literacy and literate thinking:

When a group of American students read a social studies textbook and then discuss the contents and the implications, most people would say that the students are engaging in literate thinking (within the norms of this culture). But, what if the discussion had occurred after the students had seen a television news report about the same topic? I would still want to claim that the students had engaged in literate thinking even though they had neither read nor written. Now, (continued)
The 1980s and 1990s spawned a rash of reform movements, most of which had as their goal the erasing of illiteracy as a threat to the economic well-being and worldwide competitiveness of the United States. A characteristic of most of the reforms has been their emphasis on a print- or book-focused literacy. Schools in general are concerned with students' abilities to read and write—to demonstrate what is understood—regardless of grade level. The attention educators give to functional literacy, according to Greene (1991), leaves little time for asking some difficult but important questions about the difference literacy makes in various lives:

Does it overcome alienation or confirm it? Does it reduce feelings of powerlessness or intensify them? How much, after all, depends on literacy and how much on social arrangements? How much on trust? On love? On glimpses of the half-moon? On wonderful ideas? On feeling, as Dickinson did, “a clearing” in the mind? (p. 130)

Similar concerns have been raised by Heath (1986b), whose research has shown that in many families and communities, being a competent reader and writer is not viewed as being a ticket to equality, a good job, or social mobility. In short, being literate has different meanings for different cultural groups, or as Langer (1989) so aptly puts it, “There is no right or wrong literacy, just the one that is, more or less, responsive to the demands of a particular culture” (p. 1).

Content Literacy

Generally, content literacy is defined as “the ability to use reading and writing for the acquisition of new content in a given discipline” (McKenna & Robinson, 1990, p. 184). To that we add the importance of oral language (e.g., small- and large-group discussions) and computer-mediated communication technologies in affecting students’ ability to

imagine a group of students who do not know how to read or write in English or another language engaged in the very same conversation about the television news report. I would claim that they too would have engaged in literate thinking. In contrast, imagine that the students had read the same social studies text and then completed end-of-chapter questions by locating information in the text and copying the information the questions asked them to itemize. I would claim that the kinds of literacy in this activity do not reflect the kinds of school literacy that, based on the many reports and articles in both the professional and public press, are needed and valued by American society today. That activity does not involve culturally useful literate behavior, even if the students get the answers right. (p. 2)

Do you agree or disagree with Langer’s argument? Why?
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learn from reading and writing activities in their subject matter classes. Students’ prior knowledge of a particular subject and their interest in learning more about it also mediate their ability to use their content literacy skills.

CONTENT KNOWLEDGE Content literacy is not to be confused with content knowledge, although the two concepts do share some common ground. For example, as McKenna and Robinson (1990) pointed out, the more knowledge students have about the content they are assigned to read in their textbooks, the more knowledge facilitates their reading and writing—a situation that in turn sets up a cyclical pattern such that still more knowledge is acquired and applied to other tasks requiring content literacy skills.

This cyclical pattern should come as good news to content area teachers. In effect, what it says is that teachers who instruct students in a subject matter specialty are helping to improve students’ abilities to read and write in that subject area by simply providing some of the necessary background information. Providing background information, however, is only half of the task. The other half involves helping students acquire content literacy, or the ability to use reading and writing strategies to learn new content. Students who have the literacy skills necessary for supplementing their knowledge of the content by reading beyond what the teacher introduces through lectures, demonstrations, and so on are well on their way to becoming independent learners.
Disciplinary Literacy

In 1970, Hal Herber published the first content area reading text, signaling a movement to situate reading instruction in the content area classroom. Herber’s mantra was “content determines process,” and although forty years separate this writing from his initial textbook, we are just beginning to heed his words. It seems we have been searching for ways to improve content area literacy and learning and have returned to our roots to see the original ideas anew.

Research investigating secondary teachers’ resistance to content area reading has a long history (Ratekin, Simpson, Alvermann, & Dishner, 1985; Stewart & O’Brien, 1989). Over a decade ago, O’Brien, Stewart, and Moje (1995) lamented the absence of content area reading strategies from middle and secondary schools and offered three factors that work against implementation: (1) a curriculum that has been described as “a mile wide and inch deep,” (2) teacher-centered pedagogies that have been entrenched, and (3) a culture that resists change. Moje, Young, Readence, and Moore (2000) differentiated the various labels that have been used in the adolescent literacy field, including secondary reading, with its remedial connotation and reading specialists in a clinical lab setting; content area reading, with a widely publicized “every teacher is a teacher of reading” slogan and focus on in-school textbook reading; and adolescent literacy, which casts a wider net both in terms of literacy (it includes multiple literacies of adolescents) and location (it includes out-of-school as well as in-school literacy practices). The term adolescent literacy focuses attention on adolescents’ vast array of literacy practices rather than on texts, tasks, and domain knowledge, which are descriptors that more aptly define content area reading and disciplinary literacy.

In spite of the renewed focus on the literacy practices of older students, test scores remain nearly flat (NAEP, 2009). This lack of significant progress has prompted adolescent literacy researchers to reflect on their own practices (Conley, 2008a) and to explore differences in literacy practices across content areas (Draper, Broomhead, Jensen, Nokes, & Siebert, 2010; Harmon, Hedrick, & Wood, 2005; Moje, 2007; Shanahan & Shanahan, 2008). Termed disciplinary literacy, this line of research explores how the epistemology and linguistics of the various disciplines influence the comprehension of text in these disciplines. Each discipline differs from others in what counts as knowledge and in the way new knowledge is created. Epistemologically speaking, disciplinary literacy seeks to answer questions such as: What is knowledge in this discipline? How is new knowledge created in this discipline? What kinds of evidence are appropriate in this discipline?

Disciplines also differ in the way language is used, that is, in the linguistic structures disciplinary experts use to convey knowledge to each other in formal academic texts. Fang (2008) identified four linguistic aspects of expository text that challenge readers: technicality, or the use of technical terms as well as general terms used in specific technical ways; abstraction, which is achieved through the use of technical terms and nominalization (transforming grammatical constructions such as complex phrases and verbs into nouns) (Fang & Schleppegrell, 2010; Moje, 2007; Shanahan & Shanahan, 2008); information density; and authoritativeness, achieved through the use of technical vocabulary, declarative sentences, passive voice, and generalized or virtual participants. Nominalization figures prominently in several of these characteristics and warrants a closer look. In the following
example taken from *Modern Biology*, a well-known biology textbook (Postlethwait & Hopson, 2006), notice how the term *eukaryote* is defined in the first sentence, then used as an adjective in the second sentence, which uses nominalization to define organelles:

Organisms made up of one or more cells that have a nucleus and membrane-bound organelles are called *eukaryotes*. Eukaryotic cells also have a variety of subcellular structures called *organelles*, well-defined, intracellular bodies that perform specific functions for the cell. (p. 75)

Nominalization occurs in all content area textbooks, but is used for different purposes in different disciplines. Nominalization is one of several features of expository text that make reading such text difficult (Fang & Schleppegrell, 2010). Another feature is the multimodal nature of textbooks. That is, textbooks convey information in both text and graphics. There are diagrams, graphs, and photographs in science; maps, graphs, and photographs in social studies; and in math, the use of multiple semiotic systems complicate reading. Math text contains words, numbers, and symbols, all of which are interrelated and must be comprehended in a particular context.

Recently, Draper and her colleagues (Draper et al., 2010) explored disciplinary literacy by redefining the terms *text* and *literacy*. The revised definitions help us understand literate behavior in a variety of disciplines including the core subjects as well as music, theater, art, and technology. Text, for Draper and her colleagues, is “any representational resource or object that people intentionally imbue with meaning, in the way they either create or attend to the object, to achieve a particular purpose” (p. 28). Texts, defined in this way, may be read through any combination of the senses and may not be permanent. A solution changing colors during a chemical reaction, or a live music or dance performance, are texts that may be read through a variety of senses. Draper and colleagues also redefined literacy, redefining reading as *negotiating* meaning-making and writing as *creating* meaning-representations to ameliorate difficulties associated with print-based processes:

Literacy is the ability to negotiate (e.g., read, view, listen, taste, smell, critique) and create (e.g., write, produce, sing, act, speak) texts in discipline-appropriate ways or in ways that other members of a discipline (e.g., mathematicians, historians, artists) would recognize as “correct” or “viable.” (p. 30)

These new definitions broaden the concepts of text and literacy to include meaning-making in a wider set of disciplines and help literacy specialists and content area teachers focus on a mutual goal: that of helping all students learn.

In the sections that follow, we address salient differences in the literacy demands of the four core content areas in which students take required courses in middle and high school: English/language arts, mathematics, science, and social studies, as well as in fine arts, physical education, and technology (addressed alphabetically so as not to privilege any one content area).

**ENGLISH/LANGUAGE ARTS** Reading difficulties presented in English/language arts are found at the macro (discourse) level rather than the micro (word and phrase) level
Current English/language arts literature requirements span several different genres, including poetry, drama, fiction, and nonfiction, and many subgenres or forms, such as mysteries, short stories, novels, and biographies, to name a few. Each of these genres and forms has a characteristic structure and organization and uses a variety of literary conventions (voice, literary devices, figurative language). Thus, a somewhat different approach is required for understanding each. Some selections, such as the plays of William Shakespeare, are simultaneously stories, plays, and poems; additionally, some are comedies, some tragedies, some histories. Not only are Shakespeare's plays multi-genred, but reading them might entail silently or orally reading the text from a book, hearing it read by someone else, seeing it performed live or as a recording, or actually performing it as a readers' theater or as memorized lines, complete with movements and costumes.

As students encounter the various selections drawn from both the traditional and contemporary canon of literature, they must shift attention to accommodate differences in genres and forms. Students who have spent two weeks or more immersed in poetry may have used comprehension strategies that emphasize analyzing rhyme, meter, symbolism, and metaphor. The comprehension strategies that might be required for the next genre would perhaps focus on the literary elements of setting, characters, plot, and conflict.

In other content areas, such as science and social studies, there are a variety of text structures but only four or five standard ones (description, sequence/time–order, compare–contrast, cause–effect), which are relatively consistent across texts and content areas. (These are discussed at length in Chapter 7.) Difficulties in these content areas, as we will discuss shortly, come at the micro (word and phrase) level.

In English, in contrast to science or mathematics, students can have a surface knowledge of vocabulary without losing comprehension. Particularly in mathematics, students must have a thorough and precise knowledge of vocabulary terms. English teachers must not only teach literature but are also charged with enhancing students’ vocabulary, writing, and knowledge of grammar.

In addition to the wide variety of genres and forms students must address, there is the issue of intertextuality. In more complex literature, comprehension often depends on knowing the works of literature referenced in the novel or short story being read. For example, Victoria often reads aloud to her content area literacy students; one passage she enjoys reading to them describes a teacher as “a Polonius-like figure” (Wigginton, 1985, p. 242). English pre-service teachers understand. They have read Hamlet and know that Wigginton has described this teacher as a bit of a windbag. Science and math pre-service teachers usually miss this information completely.

FINE ARTS Fine arts disciplines include music, theater, and visual arts. In these disciplines, Draper and her colleagues (2010) pose two questions to help us situate literacy in content area classrooms: What are the texts students need to negotiate and create in order to gain meaning from interactions in the discipline? What do students need to know and be able to do in order to negotiate or create a particular text in fine arts? Texts in these disciplines are read, written, and performed and they are as likely to be non-traditional non-print text (such as music, the human body, or photographs) as they are to be traditional print text (such as a play, a text about types of art, or camera instructions). The ways in which students interact with these texts are the literacies students need to develop in the fine arts.
National music standards (http://www.menc.org/resources/view/national-standards-for-music-education) describe four kinds of interactions that are important in a music class: performing (singing, playing, reading music), listening (analyzing and evaluating music), contemplating (understanding music in relation to culture and to other arts and disciplines outside the fine arts), and creating (composing and improvising music). These interactions illustrate a broad view of what counts as text and as literacy. Literacies in music involve making connections between verbal, visual, and audio information and perceiving complex relationships among them.

Theater students also encounter a variety of texts, print and non-print. Like music, theater is a performance-based discipline. Students need to see the world of the theater through a variety of roles: playwright, actor, set and/or costume designer, and director, so multiple lenses are important in the theater classroom. In theater, texts include traditional print-based plays and non-traditional non-print texts including scenery, costumes, props, lights, sounds, bodies, movements, and the interactions of all of these texts. Theater students need to be able to analyze, critique, and construct meanings from a variety of these texts, through multiple lenses (Draper et al., 2010). Far from a simple matter of reading a script, learning in a theater class involves multiple literacies and multiple lenses through which to view these literacies.

Visual arts teachers are charged with helping students negotiate and create symbols, images, and visual expressions in a variety of modes of artistic expression, including, but not limited to, metalwork, pottery, textiles, water colors, pen and ink, photography, and oil paints. Text in the visual arts can be non-traditional print texts (symbols, images, charts, graphs) or non-print (sculptures). Students are required to think, communicate, reason, and investigate art and must be able to make meaningful inferences about or create meaning from art objects based on the knowledge, ideas, and concepts acquired in the visual arts class (Draper et al., 2010).

Disciplines in fine arts are participatory in nature and based on experiential learning. They rely on non-traditional non-print text more than other disciplines in the curriculum. Negotiating and creating texts common to the fine arts disciplines are core capabilities for fine arts students. Based on this brief discussion of literacy in fine arts, it is easy to see that literacy in the broad sense is inextricably linked to quality instruction in the fine arts.

**MATHEMATICS** The language of mathematics is complex and abstract (Harmon et al., 2005), is not read in conventional directions (i.e., left to right, top to bottom) (Reehm & Long, 1996), and is the most conceptually dense of all the content area texts (Barton, Heidema, & Jordan, 2002; Harmon et al., 2005). When reading most texts, students are taught to look for a topic sentence near the beginning of each paragraph. However, the key information in a word problem is often found at the end of the problem in the form of a question. This requires students to reread the word problem to differentiate information that is relevant to the solution (Kenney, HANCEWICZ, HEUER, METSISTO, & TUTTLE, 2005). In mathematics texts, key information is often expressed in words and then with examples that include symbols. Students sometimes skip over the examples, if, indeed, they read the math text at all. Vocabulary in mathematics includes Latin and Greek roots as well as symbols, which may be concepts ($\Pi$, $\infty$) or abbreviations (oz., kg), involve numbers (8, 28, 838), or indicate math operations (+, −) or relationships (>$,$ = , $\leq$). Mathematical symbols may have different meanings depending on the context.
The language of mathematics is precise, and verbalizing symbols is difficult, particularly for novices. Students cannot sound out symbols. They are the equivalent of sight words, and the meaning of each symbol must be precisely known. Having students read mathematical expressions and problems aloud is one way to identify misconceptions (Rubenstein & Thompson, 2001). In addition to symbols and numbers, general vocabulary terms take on specialized meanings in the language of mathematics. For instance, the word of is a way to relate numbers or expressions via an operation in mathematics, rather than a relationship between two words.

Mathematicians involved in research conducted by Shanahan and Shanahan (2008) used two primary reading strategies: close reading and rereading. Because math text is so conceptually dense, must be read in several directions (sometimes left to right, sometimes top to bottom, sometimes diagonally), and has symbols and technical vocabulary terms that have multiple meanings and depend on context for that meaning, students must attend to math texts closely. Mathematics texts depend on accuracy and precision both in writing and reading processes (Moje, 2007). One cannot skim mathematics text. In math, the devil is in the details.

PHYSICAL EDUCATION As in fine arts, physical education involves performance, and the questions Draper et al. (2010) pose for the fine arts are also useful for physical education: What are the texts students need to negotiate and create in order to gain meaning from the interactions with text? What do students need to know and be able to do in order to negotiate or create a particular text in physical education? In physical education, texts are more likely to be non-traditional, non-print based. In a sport such as tennis or basketball, players need to be able to read the body language of an opponent in order to gain an advantage and successfully negotiate the field of play to score. According to the National Association for Sport and Physical Education (NASPE) National Standards for Physical Education (http://www.aahperd.org/naspe/standards/nationalStandards/PEstandards.cfm), students should develop appropriate motor skills and movement concepts, exhibit responsible behavior toward self and others in physical activity settings, value physical activity (becoming physically active adults), and maintain a healthy level of fitness. In some districts and schools, physical education educators are responsible for general and reproductive health content, which might involve traditional print-based text, including articles drawn from popular periodicals and textbooks. Helping students negotiate this wide spectrum of traditional and non-traditional texts requires specific literacies to create meaning from student-text interactions. Physical education teachers use the same pedagogical strategies as other teachers, including activating prior knowledge to help students make connections between what is being learned and their own experiences in performances or games they have observed; visualizing skilled execution of movements in a new game; asking questions of coaches and other players in an attempt to learn how to play a game or execute a movement; and analyzing movements and strategies during a game. These cognitive processes are used across the curriculum, no less in physical education than in math or English. For a video that illustrates the use of math in physical education, see http://www.youtube.com/watch?v=pZ1IWQMaS1Q

SCIENCE In science texts, nominalization is used to generalize a specific instance of a phenomenon to a more abstract or general case. Nominalization is most often used to
create technical vocabulary, resulting in a telescoping effect in which students must re-
member an increasing information load as they read a textbook (Fang & Schleppegrell,
2010; Shanahan & Shanahan, 2008; Unsworth, 1999). For example, in the following sen-
tence, the first seven words are nominalized to the technical term viruses:

These pathogens that infected plants or animals came to be known as viruses.

In subsequent paragraphs, when the word virus is used, the reader must remember the
information that viruses are pathogens that infect plants or animals, thus telescoping in-
formation into one technical term. Science texts are the most semantically dense content
area texts; that is, they have the most technical terms per sentence. Technical terms are
often used to explain new concepts, which puts a burden on prior knowledge (Harmon
et al., 2005). Science vocabulary includes many Latin and Greek roots and affixes as well
as symbols. The vocabulary in science is daunting enough, but in addition to technical
vocabulary, readers must pay close attention to general phrases that indicate relation-
ships among concepts (similar to, considered, different from, characteristics of, the result
of) and nontechnical terms that occur frequently in science texts (component, consist,
exclude) (Harmon et al.).

The linguistic challenges and rhetorical style also make science texts difficult to
comprehend. Science is generally written in the third-person, passive voice. When
Victoria began graduate work in literacy after having worked and studied in the science
education field for 20 years, it was difficult for her to break the habit of writing in pas-
slave voice. Science involves prediction, observation, analysis, summarization, and pres-
entation (Moje, 2007); these cognitive processes are also used in reading and writing
science. Chemists involved in research conducted by Shanahan and Shanahan (2008)
used a recursive reading process involving the interactive use of multiple representa-
tions of concepts, including text, charts, diagrams, graphs, and pictures, as well as visu-
alization, as they sought to comprehend scientific texts.

SOCIAL STUDIES In contrast to math and science, the language of social studies is
not technical but is drawn from a wide range of related disciplines, including political
science, geography, economics, sociology, and history (Harmon et al., 2005; Martin,
1993). Nominalization in social studies texts occurs with general vocabulary terms and
serves to make cause–effect relationships implicit, a process Martin (1993) termed
“buried reasoning.” An example of this can be seen in the following sentence (Martin,
1993, p. 224):

The enlargement of Australia’s steel-making capacity, and of chemicals, rubber, metal
goods and motor vehicles all owed something to the demands of war.

In this sentence, nominalization serves to bundle several events (enlargement of steel-
making capacity, chemicals, rubber, etc.) and causally connect them to “the demands of
war.” Nominalization increases the abstract character of content area texts and serves to
distance the reader from the content, making reading motivation more difficult.

In history, vocabulary words often name people, events, and places (Harmon et al.,
2005). Teachers who use primary sources encounter a further difficulty when the documents
are rife with archaic vocabulary and unfamiliar syntax. In addition to considerations of vocabulary, teachers must be aware of how history is read. Historians do not read a text as truth but are mindful of the author’s biases as well as their own (Shanahan & Shanahan, 2008). As historians read, they look for evidence of assertions and are attentive to how the author makes connections between and among events. Nominalization in history textbooks sometimes disguises deductions as facts (Martin, 1993; Unsworth, 1999) and creates abstractions (Fang & Schleppegrell, 2010).

Historians participating in research conducted by Shanahan and Shanahan (2008) used sourcing as a pre-reading strategy when reading primary documents, asking who wrote the document and in what context. As the historians read, they focused on subtexts and intertextual connections. They monitored their comprehension by revisiting the author’s perspective and the context in which the document was written. Historians have decried the lack of voice in history textbooks because it leads to a lack of critical reading by students (Moje, 2007). For social studies students, the textbook may represent the greatest obstruction to understanding history and historical thinking. Students should have access to multiple texts, written from various stances, on the issues under study. Only then can they develop the critical-thinking skills so necessary in today’s world (Moje, 2007).

Disciplinary literacy researchers, cited in the previous sections, have focused on uncovering characteristics of discipline-specific texts and the processes that experts in these various fields use as they negotiate texts in their disciplines. Draper and her colleagues (2010) have redefined text and literacy to encompass a wider range of texts, including non-print and non-traditional print texts, that reframe literacy as negotiating (reading and viewing) and creating (writing and performing). Shanahan and Shanahan (2008) have had some success in developing strategies for reading and writing discipline-specific text that mirror the cognitive processes of disciplinary experts. These strategies will be discussed in later chapters.

**Literacy Coaches Corner**

**Content Specialization**

One of the things that literacy coaches must keep in mind is that content area teachers want and need to be content specialists. Content area teachers have to see that literacy strategies, carefully chosen and adapted to their disciplines, can increase students’ learning. Honoring the expertise of content teachers is a key step in making contact with them and developing mutual respect.

Literacy coaches can stay informed about content area trends by reading publications from professional organizations such as NSTA, NCTM, NCSS, NCTE, and IRA. You will find URLs for these professional organizations’ standards and others (including information literacy, music, and foreign language) in Appendix E of this textbook.
The New Literacy Studies

In the 1980s and 1990s, an interdisciplinary group of scholars (Bloome & Green, 1992; Cazden, 1988; Cook-Gumperz, 1986; Gee, 1996; Heath, 1983; Luke, 1988; Street, 1995) began to ask questions such as “What is literacy?” “Who benefits from being literate?” and “What specific cultural meanings and practices are involved in becoming literate?” The impetus for asking these questions, all of which deal in one way or another with the differing contexts in which people read and write, was a growing mistrust in the more conventional or dominant view of literacy as a neutral or technical skill. No longer willing to think of reading as primarily a psychological phenomenon—one in which individuals who can decode and have the requisite background knowledge for drawing inferences are able to arrive at the right interpretation of a text—this interdisciplinary group of scholars began to document how the so-called right interpretation of a text rarely holds for different individuals reading in different contexts. Their work and that of others who are similarly focused on students’ multiple literacies has become known as the New Literacy Studies (NLS) (Willinsky, 1990). The NLS are distinguished from the dominant view on literacy because they focus on “what literacy events and practices mean to users in different cultural and social contexts” (Street, 2003, p. 10).

Shortly after Street’s (1995) critique of the autonomous model of literacy—a model that ignores numerous social and cultural factors affecting what we comprehend—and within a decade of Gee’s (1990) seminal publication, Social Linguistics and Literacies: Ideology in Discourse, the New London Group (1996) published its paper on multiliteracies. This work drew attention to our need to use multiple modes (e.g., language, still and moving images, speech, sound, gesture, and movement) when attempting to communicate with others in a culturally and linguistically diverse world, especially one in which we are more dependent than ever on the Internet and Web-based services. Although multiliteracies need not involve digital technologies (Lankshear & Knobel, 2006), typically, the term multiliteracies denotes reading and writing processes necessary for communicating in the world of 21st century texts.

In addition, related work in the areas of social cognition (Lave & Wenger, 1991; Tharp & Gallimore, 1988) and cultural studies (Lewis, 1998) has contributed to the growing sense that reading and writing are shaped by (and in turn help to shape) multiple sociocultural practices associated with becoming literate. Describing these practices as “deeply political,” Gee (1999) has gone on to show how they also “fully integrate language, both oral and written, with nonlanguage ‘stuff,’ that is, with ways of acting, interacting, feeling, valuing, thinking, and believing, as well as with various sorts of nonverbal symbols, sites, tools, objects, and technologies” (p. 356). This view of literacy echoes the “re-visioning” of text and literacy proposed by Draper et al. (2010). The NLS encompass ways of behaving, knowing, thinking, and valuing that give meaning to the uses of reading and writing that go far beyond simply mining a textbook for its literal or inferential meaning. For an example of how students are using new literacies in engaging ways, see the following YouTube video: http://youtu.be/hmkqcp11pHM

Becoming knowledgeable about the social function of written language within various linguistic and cultural communities can foster expressive abilities for English language learners (ELLs), or English learners (ELs) as they are referred to in some
regions of the United States. Such knowledge is vitally important for teachers whose linguistic and sociocultural backgrounds differ from those of their students. It is all part of rethinking one’s teaching practices in light of the New Literacy Studies. To learn how the new literacies are affecting what counts as writing in content area classrooms, visit http://www.readingonline.org/electronic/JAAL/4-01_column/

RETHINKING CONTENT LITERACY PRACTICES  The New Literacy Studies, which provide a different way of looking at literacy, are beginning to affect the ways in which teacher educators and classroom teachers think about content reading and writing instruction and how students learn from such instruction. This is especially the case among educators who subscribe to the so-called natural approaches to literacy instruction. Labeled typically as process writing and reader response, these approaches are being examined closely by individuals interested in critical literacy and critical language awareness—an awareness, that is, of why writers or speakers choose to write about certain topics, what content they include and leave out, whose interests they serve, and who is empowered (or disempowered) by the language they choose.

Some teacher educators (Kamler, 1999; Kamler & Comber, 1996), for instance, are beginning to reflect on how personal written response and other expressivist pedagogies such as reader response are teaching students to think about themselves and others in particularly naive ways—ways that rarely move them to social action and a critique of what they read or hear. Others (Lewis, 2000; Lewis, Ketter, & Fabos, 2001) are learning how to work around certain reader response approaches that emphasize personal identification at the expense of critiquing texts to look for an author’s assumptions about people’s identities, goals, ways of being in the world, and so on. Although there is much to admire in these natural approaches to literacy instruction, they have come under criticism of late for what they leave out.

For instance, critics (Moje, Willes, & Fassio, 2001; Patterson, Mellor, & O’Neill, 1994) say that these approaches have major flaws, but they are flaws that can be corrected so as to enable important gains realized through student-centered instruction to move forward. One of the identified flaws is that educators who teach from a reader response perspective put too much emphasis on personal experience and individual interpretation. This leads, critics say, to a naive view of the reading process, one in which it would appear that texts can somehow be neutrally produced and read. What they propose is a drawing in of the view from “without” (Green, 1991; Lemke, 1995). For example, Annette Patterson and colleagues (1994) believe it is their responsibility as literacy educators to teach students to take up a range of reading positions—some that may lead to resistant readings of what have become dominant or mainstream texts.

Helping students develop a facility and an interest in reading resistantly is an idea that has taken on increasing significance since its introduction in the late 1970s (Fetterly, 1978; Scott, 1990). Although some literacy educators might argue that resistant reading is just another name for critical reading, we disagree. A characteristic of resistant reading that we find absent in conventional descriptions of critical reading is the notion of reading subtexts as “a way of distancing ourselves and gaining some control over the reading experience” (Commeyras & Alvermann, 1996, p. 45).

The importance of reading the subtext is highlighted in Sam Wineburg’s (1991) study, in which he compared how historians read historical texts and how high school
students read the same texts. Wineburg found that the students were quite good at identifying the main ideas and answering the comprehension questions that went with the readings, but they failed to see how the authors of the texts had constructed them as social instruments “masterfully crafted to achieve a social end” (p. 502). The historians, on the other hand, read two types of subtexts. They read the texts as rhetorical artifacts, which involved reconstructing the “authors’ purposes, intentions, and goals” (p. 498). They also read the texts as human artifacts, which involved identifying “elements that work at cross-purposes with the authors’ intentions, bringing to the surface convictions the authors may have been unaware of or may have wished to conceal” (p. 499).

Some thought questions . . .
1. Think back to a time when you taught students to read using a so-called natural language learning approach. Or perhaps you were taught to read by someone who favored one or more of those approaches. Do you agree with the criticism leveled against such approaches? Why? Why not?
2. Are you a resistant reader? When and under what conditions?
3. If you do not read resistantly yourself, do you see any reason for teaching others to read in that fashion? Why? Why not?

The Reading Process

In recent years, developments in cognitive psychology, sociolinguistics, and cultural anthropology have drawn attention to the need for explanations of the reading process that take into account a broad view of the everyday world of students and their families, teachers, schools, and communities. This section focuses on three aspects of the reading process: a cognitive view, a social constructionist perspective, and the role of motivation in the reading process.

A Cognitive View

A cognitive or psycholinguistic view of the reading process assumes “an active reader who constructs meaning through the integration of existing and new knowledge and the flexible use of strategies to foster, monitor, regulate, and maintain comprehension” (Dole et al., 1991, p. 242). Students who take a personal, adaptive view of reading understand that knowledge is constructed by them and that the experiences they bring to texts shape in large part what they will comprehend (Brown, Collins, & Duguid, 1989).

Cooper and Petrosky (1976) have made the point that “in reading, the brain supplies more information than it receives from the eye about the text” (p. 191). As you read the next section on prior knowledge, think about this quote. If you find yourself agreeing with this assertion, then you will probably feel right at home when you read about the top-down model of text processing discussed later in this chapter. If you have doubts about this claim, you may feel more comfortable with the interactive model of reading, also discussed later in the chapter.
PRIOR KNOWLEDGE AND SCHEMA THEORY  Prior knowledge can cover a wide range of ideas, skills, and attitudes. When we use the term, we are focusing particularly on a reader’s previous or existing knowledge of the subject matter of the text. What a person already knows about a topic is probably the single most influential factor with respect to what he or she will learn.

Cognitive psychologists use the word *schema* to describe how people organize the raw data of everyday experiences into meaningful patterns. A schema is a collection of organized and interrelated ideas or concepts. Schemata (the plural form) are fluid; they overlap and intertwine, and they are constantly modified to assimilate or accommodate new information. Schemata enable people to draw generalizations, form opinions, and understand new experiences (Anderson, 1984).

Schemata are frequently explained using the example of restaurants, probably because everyone has had some experience in going out to eat. Your schema for going to a restaurant might include the following: Someone will ask you what you would like to eat; that person or another will bring food, usually the food you asked for; you will pay for this food; you will not have to wash the dishes. Depending on actual experiences with dining out, individual restaurant schemata will vary. If your culinary adventures are mostly at fast-food outlets in your hometown on the East Coast, you will know just what to do at a Burger King in Cody, Wyoming, but you might not be sure which fork to use or which wine to order in a fancy restaurant. If your experiences were more varied, however, you would probably know about such things as making reservations, tipping, à la carte menus, and the specialties at different kinds of ethnic restaurants. You would not expect to order chicken wings at the Russian Tea Room in New York City, even if you had never been there before.

Schemata operate similarly in reading. They act as a kind of mental filing system from which the individual can retrieve relevant existing knowledge and into which new information can be filed. As you read, your schema for a topic helps you to anticipate, to infer, to decide what is or is not important, to build relationships between ideas, and to decide what information merits close attention. After reading, you use your schema as a topic to help you recall what you have read and put it into your own words.

Schemata, which are sometimes referred to as prior knowledge structures, play a large role in the reading process. They determine which of several interpretations of a text is the most probable. For example, this famous sentence, taken from the work of Bransford and McCarrell (1974), illustrates how one’s culture can influence the meaning that is made of print:

> The notes were sour because the seam split.

Although they may be familiar with all of the words and the syntax or ordering of those words, readers in the United States typically have difficulty constructing meaning for this sentence until they are provided with clues such as bagpipe or Scottish musical instrument.

MAKING CONNECTIONS BETWEEN THEORY AND PRACTICE  Victoria likes to remind students in her content literacy classes of the importance of applying in their own classrooms what they know about prior knowledge and schema theory. She uses a series of three short passages to make her point. We include those passages here, along with several self-reflection questions aimed at helping you make connections between theory and practice.
The first passage illustrates the fact that prior knowledge must be activated to be of use. Note that no title is provided in order to demonstrate the difficulty in comprehending material for which prior knowledge, although available, has not been activated.

**Passage 1**

The procedure is actually quite simple. First you arrange items into different groups. Of course one group may be sufficient depending on how much there is to do. If you have to go somewhere else due to lack of facilities, that is the next step; otherwise, you are pretty well set. It is important not to overdo things. That is, it is better to do too few things at once than too many. In the short run this may not seem important but complications can easily arise. A mistake can be expensive as well. The manipulation of the appropriate mechanisms should be self-explanatory, and we need not dwell on it here. At first, the whole procedure will seem complicated. Soon, however, it will become just another facet of life. It is difficult to foresee any end to the necessity for this task in the immediate future, but then, one never can tell. After the procedure is completed, one arranges the materials into different groups again. Then they can be put into their appropriate places. Eventually they will be used once more and the whole cycle will then have to be repeated. However, that is part of life. (Bransford, 1979, pp. 134–135)

> **Self-reflection questions . . .**

1. If we had provided a title, such as “Washing Clothes,” would the passage have made more sense immediately?

2. Would simply providing a title be adequate for activating your students’ background knowledge about topics you regularly assign them to read? What else might you want to do to activate their knowledge more fully?

The second passage illustrates the importance of activating appropriate prior knowledge. Failure to do so can lead to confusion and misinterpretation of the text. For example, read the following passage twice: first, from the perspective of a prisoner, and then from a wrestler’s perspective. After each of the readings, choose the best answer from the four possible ones that follow the question, “How had Rocky been punished for his aggressiveness?”

**Passage 2**

Rocky slowly got up from the mat, planning his escape. He hesitated a moment and thought. Things were not going well. What bothered him most was being held, especially since the charge against him had been weak. He considered his present situation. The lock that held him was strong but he thought he could break it. He knew, however, that his timing would have to be perfect. Rocky was aware that it was because of his early roughness that he had been penalized so severely—much too severely from his point of view. The situation was becoming frustrating; the pressure had been grinding on him for too long. He was being ridden unmercifully. Rocky was getting angry now. He felt he was
ready to make his move. He knew that his success or failure would depend on what he did in the next few seconds. (Anderson, Reynolds, Schallert, & Goetz, 1977, p. 372)

**Comprehension question: How was Rocky punished for his aggressiveness?**

a. He was demoted to the “B” team.
b. His opponent was given points.
c. He lost his privileges for the weekend.
d. He was arrested and imprisoned.

**Self-reflection questions . . .**

1. Have you ever read something only to find out later that you had activated inappropriate background knowledge? How did it affect your comprehension? How did it make you feel?

2. As a teacher or prospective teacher, what might you do instructionally to ensure that students activate appropriate background knowledge for reading the materials required in your content area?

The third passage demonstrates why prior knowledge must be sufficient to be of use in comprehending text. For example, you may have had experience playing baseball—even bowling—but the batsmen and bowlers in “Today’s Cricket” do not play by the rules you might expect. In short, if you grew up in the United States, it is likely you are as lost as we are when it comes to comprehending a sport played mainly in England and other parts of the Commonwealth.

**Passage 3**

**Today’s Cricket**

The batsmen were merciless against the bowlers. The bowlers placed their men in slips and covers. But to no avail. The batsmen hit one four after another along with an occasional six. Not once did a ball look like it would hit their stumps or be caught. (“Wood’s 100 Helps,” 1978)

**Self-reflection questions . . .**

1. Would knowing that bowl (as used in cricket) means “to put a batsman out by bowling the balls off the wicket” (Webster’s New World Dictionary, 1991, p. 166) improve your understanding of the game? Why? Why not? What prior knowledge do you still lack?

2. If you were teaching a class in which your students were expected to read a story about cricket, how would you provide them with sufficient background knowledge?
In summary, as illustrated previously, it is one thing to develop a theoretical understanding of prior knowledge; it is quite another to apply that understanding in an actual classroom situation. However, we contend (and believe you would agree) that looking for ways to bridge theory and practice is well worth the effort.

THREE MODELS OF THE READING PROCESS

The bottom-up, top-down, and interactive models of the reading process are all concerned with a reader’s schemata but to varying degrees. The bottom-up model, sometimes referred to as the automaticity model (LaBerge & Samuels, 1974), is based on the idea that one can focus attention selectively on only one thing at a time. By this line of reasoning, until readers can decode the words of a text automatically, they will be unable to devote a sufficient amount of attention to comprehending the text and fluency will suffer, as noted earlier. As its name implies, the bottom-up model of the reading process assumes that meaning resides primarily in the text and that pieces of information are chunked incrementally to produce comprehension. Letters and their associated sounds are chunked to make words, words are chunked to make sentences, and so on.

According to the top-down model of the reading process, what the reader already knows is thought to determine in large part what he or she will be able to comprehend. For example, even if triskaidekaphobia is pronounced accurately, the reader may not be able to comprehend its meaning in text:

Claudia’s bout with triskaidekaphobia prevented her from ever staying on the thirteenth floor of a hotel.

For comprehension to occur, the reader would have to associate the meaning of the word triskaidekaphobia (fear of the number 13) with some previous experience or knowledge that linked the number 13 with being unlucky. Proponents of the top-down model of reading argue that meaning resides largely in one’s head and that it is the reader’s schemata more than the print on the page that account for what is comprehended and what is not. As its name implies, the top-down model assumes that comprehending begins when a reader accesses appropriate background experiences and knowledge to make sense of print. In other words, unlike the bottom-up model, in which the reader incrementally chunks bigger and bigger pieces of information, the top-down model proposes that the reader makes educated guesses to predict the meaning of the print.

The interactive model of the reading process incorporates features of both the bottom-up and top-down models. Proponents of this model argue that the degree to which a reader uses print or prior knowledge will depend largely on the familiarity of the topic being read, how interested the reader is in the topic, and the purpose for which he or she is reading. For example, if you have read about different models of reading in the past and have an interest in learning more about them or reviewing what you know, you may be reading this section of the chapter using a top-down process approach.

Alternatively, you may be reading along at a pretty good clip, making predictions about what you will find on the printed page, and slowing to examine more closely words such as automaticity and triskaidekaphobia. Perhaps you decoded a large word or looked for a familiar word part (such as automatic) in it. If you processed the information in this fashion, you were reading interactively. That is, you were using alternately
what you knew from prior knowledge and what you were able to infer from your knowledge of the English language and the conventions of print.

Along with a majority of other literacy educators, we believe the interactive model of the reading process is a good descriptor of how students typically read their content area texts. They connect what they know about language, decoding, and vocabulary to their background experiences and prior knowledge. They also take into account the demands of the reading task or the reasons for which they are reading.

**METACOGNITION** Metacognition, simply put, means knowing about knowing. It is a term used to describe students’ awareness of what they know, their understanding of how to be strategic readers, and their knowledge of when (i.e., under what conditions) to evaluate the adequacy of their comprehension (Paris, Lipson, & Wixson, 1983). Metacognition is an awareness of what resources (materials, skills, and knowledge) one can call up to meet the demands of a particular task (Baker & Brown, 1980).

For example, before reading a textbook chapter on the Holocaust, students might take a mental inventory of the information about the topic they have gleaned previously from books, films, and magazine accounts. They might also assess their interest in pursuing the topic further, their ability to read strategically, and/or their understanding of the purpose for the assignment. Developing such an awareness, however, does not ensure that they will succeed in comprehending the portion of text on the Holocaust. They will also need to monitor their reading.

Monitoring involves evaluating the trustworthiness of certain assumptions or inferences one makes while reading. It also involves applying any of a number of fix-up strategies when comprehension falters or breaks down completely. Moving backward and forward in text searches, concentrating on only the important information, making mental images, and contrasting new ideas with previous experiences are some of the most common fix-up strategies (Brown & Campione, 1994). As you might imagine, there is an important difference between knowing something is not making sense and doing something about it. Knowledge that is treated as separate and distinct from the situations in which it is learned and put to use is less helpful than knowledge that is contextually situated.

**A LIFESPAN DEVELOPMENTAL PERSPECTIVE ON READING** Reading development has traditionally been considered synonymous with early reading development. Recently, Alexander (2005–2006) proposed a lifespan developmental perspective that attempts to explain how reading develops across the lifespan, “from womb to tomb” (p. 5). This view of reading holds promise for those of us engaged in educating adolescents because it helps us consider the development of literacy as students move beyond the early grades. Three stages are described in the lifespan developmental model: (a) acclimation, (b) competence, and (c) proficiency/expertise.

Alexander identifies three main factors that influence lifespan development of reading expertise across these three stages. The first factor, knowledge of language and of content topics, includes domain knowledge related to language and reading as well as knowledge about specific topics referenced in the text. The more you read, the more you learn about language and reading, and since you must read about something, you also
acquire increased topic knowledge as you read. Across the lifespan, knowledge about language and topic knowledge increase.

The second factor described by Alexander is interest. Interest can be situational (temporary interest induced by the context) or individual (representing a long-term involvement in a particular topic or field). Over time, the relative importance of these two kinds of interest shifts. In the acclimation stage, situational interest is important, whereas individual interest becomes more and more important as a reader passes through competence to proficiency.

The third factor is a reader’s strategic processing, which changes as reading competence develops. In the acclimation stage, surface-processing strategies such as rereading, altering reading rate, and skipping unfamiliar words are important. Over time, deep-processing strategies that involve personalization and transformation of text develop and are more important.

As those of us who have taught in middle and high schools know, readers in the acclimation stage can be found at all grade levels. Likewise, readers can be at different developmental levels in different content areas. A student may be a competent reader in history but struggle to read in mathematics or science. If we want to help adolescents to grow to be competent readers on their way to proficiency, we must help them increase their knowledge of language in general and specific topics about which they read; offer them

### Helping Struggling Readers

**Interactive-Compensatory Model**

It is helpful to keep in mind Stanovich’s (1980) interactive-compensatory model when working with readers who struggle to decode texts. According to this model, they will tend to rely more than good readers on context for word recognition and hence have less freed-up capacity for comprehension than good readers. The instructional implications of the interactive-compensatory model for content area teachers include the following:

- Provide readers who struggle to decode their assigned texts with opportunities to hear those texts read aloud, perhaps through tape-assisted instruction, and to write down what they want to remember.

- Give readers for whom word recognition is a problem supplemental materials that include visual clues to word meaning. Also consider the use of manipulatives in science and math areas.

- Allot extra time for readers who struggle to complete their assignments. Consider assigning fewer pages, perhaps concentrating on the key ideas in a passage or chapter.

- Encourage struggling readers to use the Internet. Sometimes the symbols and icons that are bothersome to good readers are the very means through which struggling readers make meaning. Writing e-mails to classmates about where to find information for a report can also be an important literacy tool for readers who struggle with content area assignments.
Content Literacy and the Reading Process

interesting books, magazines, and media so they will have the desire to read; and model deep-processing strategies so that they can develop their own strategic reading skills.

A Social Constructionist Perspective

Earlier in this chapter, we discussed schema theory at length and involved you in activities that helped you see the connection between theory and practice. According to schema theory, prior knowledge is the most important factor in learning. However, this is not a universally agreed on tenet of learning (see Krasny, Sadoski, & Paivio, 2007). A number of questions have been raised related to schema theory. Perhaps the one most important to teachers is: If everything is based on prior knowledge, how in the world do you get any in the first place? This is not a trivial question for a teacher planning instruction on a concept that is new to students.

McVee, Dunsmore, and Gavelek (2005) revisited schema theory in an attempt to address questions that are emerging from research about the creation of schemata and the influence of culture on learning. McVee et al. explained that knowledge, organized into schemata, grows out of transactions in which the learner is engaged in an activity or problem-solving task using tools of language, speech, and thought—all of which occur in a cultural context. This explanation seems to answer the questions about schema theory, at least for us for now. Thus, schemata can be thought of as emerging from transactions between learners and the world, and the transactions are “mediated by culturally and socially enacted practices” (McVee et al., 2005, p. 556).

The notion that learning occurs from transactions between learners and the world underlies the social constructionist view of learning. You will likely be able to understand this view if you have ever been in a situation in which you realized that the presence of others whom you judged to be more competent than you made you a better thinker, reader, or writer.

The term social constructionism is frequently used synonymously with social constructivism, although there are many good reasons for not conflating the two concepts (Hruby, 2001). For purposes of this chapter, we concentrate on social constructionism.
Both concepts are theories of learning; they are not theories of teaching per se. To understand the differences between social constructionism and social constructivism, it is useful to first define constructivist learning theory.

CONSTRUCTIVIST LEARNING THEORY Constructivism has become a catchall term for a collection of theoretical approaches to learning that rely for their explanation on the cognitive processes individuals use in making sense of their lived experiences. Literacy educators generally limit their attention to four versions of constructivism: Piagetian constructivism, radical constructivism, sociohistorical constructivism, and social constructivism (Eisenhart, Finkel, & Marion, 1996; Phillips, 2000).

Piagetian constructivism holds that conceptual development results from an individual’s ability to assimilate and accommodate new information into existing knowledge structures. To count as learning, however, this newly assimilated (or accommodated) information must correspond with an authoritative body of knowledge external to the individual. Motivation for such learning rests in the individual and in the materials (content) to be learned.

Radical constructivism also situates motivation for learning in the person and the content to be learned. However, unlike Piagetian constructivism, radical constructivism assumes that evidence of new learning rests on an individual’s ability to make personal sense of her or his own experiences; that is, radical constructivists have no need to apply some sort of external litmus test to determine the correctness of a student’s personally constructed knowledge. Teachers who adhere to either Piagetian or radical constructivism view students as “autonomous actors who learn by building up their own understandings of their worlds in their heads” (Eisenhart, Finkel, & Marion, 1996, p. 278).

To better understand constructivism and experience what is involved in reading a passage that illustrates a constructivist perspective on learning, see “What is Really True? A Lesson in Understanding Constructivism.” This lesson was developed by Lloyd Rieber, one of Donna’s colleagues at the University of Georgia and can be accessed at http://it.coe.uga.edu/~lrieber/constructlesson.html

In contrast to these two perspectives are sociohistorical constructivism and social constructivism. Sociohistorical constructivism embraces Vygotsky’s (1978) activity theory, whereas social constructivism is more closely associated with Bruner (1986), at least among literacy educators. Both sociohistorical and social constructivism are concerned with how factors outside the head, such as the culture of a classroom, influence what students do in the name of learning.

SOCIAL CONSTRUCTIONIST LEARNING THEORY The view that truth is made, not found, and the centrality of language in mediating what people come to understand about their lived experiences are features that most readily distinguish a social constructionist perspective from a constructivist perspective. Gavelek and Raphael (1996) describe how a teacher who subscribes to social constructionist learning theory would elicit students’ responses:

The teacher’s role would shift from asking questions to ensure that students arrive at the “right” meaning to creating prompts that encourage students’ exploratory talk....
Teachers would encourage talk that elicits a range of possible interpretations among individuals reading and responding at any given time. Teachers would also encourage talking about previously read texts because individuals construct different readings at different periods in life or within different contexts. Textual meaning is not “out there” to be acquired: It is something that is constructed by individuals through their interactions with each other and the world. In classrooms, these interactions take the form of discussions, and the teacher helps guide and participates in them. Underlying the processes of interpretations and justifications in discussions is language. (p. 183)

In an attempt to give you a sense of how meaning is socially constructed, we have included a two-sentence short story by Richard Brautigan (1971) and an accompanying small-group activity.

**Story:** “It’s very hard to live in a studio apartment in San Jose with a man who’s learning to play the violin.” That’s what she told the police when she handed them the empty revolver. (p. 197)

**Activity**

Gather a group of three or four individuals, and respond to the following prompts after someone in the group has read aloud Brautigan’s story:

- Explain what happened.
- Elaborate on why it happened.
- Defend why you know you’re right.

After completing the activity, reflect on the process. As you discussed your responses to the story, did you notice the role that language played in mediating your own and other people’s interpretations? How would you explain your choice of language in constructing your interpretation? Why is your interpretation as viable as other people’s interpretations? What previous experiences have you had that might possibly account for your interpretation of the story? Reflecting on questions such as these will help you understand how individuals go about socially constructing the meanings of all sorts of texts, not just short stories.

Reflections on this activity will also illustrate Brock and Gavelek’s (1998) point that although our cultural histories do not determine how we experience or respond to texts, they do channel or help to frame our responses. In fact, the very idea that reading is a socially constructed practice draws on some of the most basic assumptions from cultural anthropology and sociolinguistics (Cook-Gumperz, 1986; Gee, 1988; Heath, 1983).

One such assumption is that “students of different races, different social classes, and different genders may produce readings which challenge dominant or authoritative meanings because they have available to them different sets of values and beliefs” (Patterson, Mellor, & O’Neill, 1994, p. 66). However, it should come as no surprise that
students who share cultural backgrounds and who are contemporaries may still respond to and interpret the same text very differently. This is to be expected given that each student will have had unique life experiences and different ways of using language to interpret those experiences.

Of course, nothing is as simple as it might first seem. Social constructionist learning theory will only buy us so much. Learning and teaching in a complex world involves much more than language, and it is this fact that drives home the following point:

The suggestion that all knowledge is language-based—and, hence, formulated and explicit—would imply that agents must be aware (or capable of being aware) of their knowledge. As such, statements like “My dog knows how to dig holes” or “My heart knows how to beat” are nonsensical. In other words, underpinning the claim that all knowledge is socially constructed is a presumption that “the human” is separable from the non- and sub-human. The same sort of separation is implicit in debates of nature versus nurture. (Davis, Sumara, & Luce-Kapler, 2000, p. 17)

Suffice it to say that for the purposes of this book, we will leave the discussion on socially constructed learning where we started. That is, it is a helpful construct for thinking about how the cognitive processes of reading are always “embedded in, enabled by, and constrained by the social phenomenon of language” (Davis et al., 2000, p. 67). Some researchers look at learning theories and see an evolutionary progression—one theory replacing another as we go marching on in time. We prefer to see theories more as a quilt, in which each theory is a piece that adds to the knowledge of human learning.

**The Role of Motivation**

Listening to the voices of students is key to understanding what motivates them to learn. Based on her review of research on student motivation, Barbara McCombs (1995) of the Mid-Continent Regional Educational Laboratory writes:

The support is overwhelmingly on the side of learner-centered practices that honor individual learner perspectives and needs for competence, control, and belonging. The voices of the students themselves provide even more support for this perspective…. When students are asked what makes school a place where they want to learn, they report that they want (a) rigor and joy in their schoolwork, (b) a balance of complexity and clarity, (c) opportunities to discuss personal meanings and values, (d) learning activities that are relevant and fun, and (e) learning experiences that offer choice and require action. (p. 10)

Middle-grade students’ motivations for reading, as measured by the Motivations for Reading Questionnaire, extend and complement this view of the importance of intrinsically appealing learner-centered instruction. Approximately 600 students in a large mid-Atlantic city school system (55 percent African American, 43 percent Caucasian, and 2 percent Asian and Hispanic) said they do not avoid difficult reading activities. Motivational dimensions related to enjoyment, curiosity, and a sense of efficacy were the best predictors of the frequency with which they read (Wigfield, Wilde, Baker, Fernandez-Fein, & Scher, 1996).
CHAPTER 1  Content Literacy and the Reading Process

When students are positively motivated, they view themselves as competent readers who are in control of their comprehension processes; they are said to be strategic in their approach to reading. Sometimes, however, students adopt tactics that result in an avoidance of reading or of spending time on assignments. When this occurs, they are said to be using strategies in a self-serving, or negative, fashion. Both positive and negative types of motivation for reading are present among students, regardless of ability level, socioeconomic status, or racial and ethnic background. Knowledge of how both types of motivation manifest themselves in subject matter classrooms is vital to understanding the reading process and to planning for instruction.

**POSITIVE STRATEGIES**  Strategic readers take pride in what they are able to learn independently from text. They view reading as a means of gaining control of their academic environment. They also develop feelings of self-worth and confidence in their ability to achieve desired goals (Weiner, 1986). This sense of control can lead to increased achievement in their subject matter classes; it can also lead to better peer relations.

For example, Charley comes to mind here. Charley was 13 years old and in the eighth grade when Donna first met him. She was observing his math teacher, Ms. Wilthey, model for the class how to sort through and discard extraneous information in a word problem. The object was to choose only relevant numbers on which to perform certain mathematical operations. Charley initially showed little interest in the teacher’s lesson. However, when Ms. Wilthey challenged the class to come up with different ways of solving a set of math problems for homework that night, Charley consulted “The Library of Math Forum Problems” (http://mathforum.org/library/problems/sets/funpow_all.html) and brought in numerous examples to share with the class.

As young adolescents move from the middle grades into secondary school, their perceptions of their control become stronger. According to Paris, Wasik, and Turner (1991), “[Greater] perceived control leads to greater effort in the use of particular learning strategies. Successful students persist in the face of failure and choose appropriate tactics for challenging tasks more often than students who do not understand what controls learning outcomes” (p. 626).

For students to experience a sense of control in becoming competent readers, they must believe four things. First, they must believe that they are capable of assuming responsibility for their own learning and have the ability to complete their assignments. Second, they must believe that they have a voice in setting their own objectives for reading and in determining suitable standards of excellence. Third, they must be convinced of the usefulness of certain strategies for accomplishing specific objectives. Finally, they must believe that their successes as readers are contingent on the effort and skill they invest in becoming strategic readers (Paris, Wasik et al., 1991).

**AVOIDANCE STRATEGIES**  Giving up on or withdrawing from situations that involve learning from text is a tactic students may use when the material they are assigned to read seems too difficult or uninteresting. This tactic may even be used by students for whom the material is neither too difficult nor uninteresting. Why? To the best of our knowledge, disengaged readers for one reason or another devalue reading; they tend to invest their time in other endeavors. Their attention is focused elsewhere, perhaps on a subject requiring less reading, a part-time job, or extracurricular activities.
David O’Brien (1998) captured this kind of student in his description of Denise, an underachieving junior at Jefferson High. When David taught her in the Jeff Literacy Lab, Denise was working 20 hours a week at a local pizza shop. He described her thusly: “Denise has been in the Literacy Lab for 3 years. She views her reading ability as a weak link in a relatively strong chain of other accomplishments…. She noted: ‘I don’t read unless I have to.’ She likes the computer activities, but she does not seem to connect computers with reading and writing” (p. 38).

Another avoidance strategy students use involves shifting the blame for reading difficulties from themselves to someone or something else. For example, students may complain that their teachers dislike them, that they are distracted easily, or that other teachers load them up with homework. The least desirable avoidance strategy is the one used by students who free themselves of the responsibility for reading text to learn by copying assignments, cheating on tests, or repeatedly seeking the assistance of a friend or family member (Paris et al., 1991).

Each of these avoidance strategies shares certain attributes with the others. First, they all help to preserve students’ positive self-perceptions because “passing the buck” leads to short-term success at preserving self-esteem. Second, they eventually lead to the passive failure syndrome (Johnston & Winograd, 1985), in which students over time fail to learn the necessary content and skills that make regular advancement in school an attainable goal. Third, students’ sense of “beating the system” may lead to a false idea of what it takes to succeed in any endeavor, whether reading or something else.

SELF-MOTIVATION The idea that teachers can cultivate within students the will, or self-motivation, to use their reading and writing skills in all areas of the curriculum is a central theme of this book. In fact, the underlying goal of most disciplinary literacy instruction in middle and secondary schools is to enable students to use reading and writing as tools for learning the content of their coursework. However, teachers know that all too often adolescents do not make the effort that is necessary for this learning to take place (Bishop, 1989). Why this apathy?

Here are some answers to that question from the students’ perspectives:

- Henri (a newly arrived student from outside the United States) talks about his apathy in physics class: “I know that I should work hard, do my homework, listen in class, but well, see, it’s just that I don’t want to stand out as being a hard worker. I know I can do the work, but I just don’t want to stand out.”
- Patricia (a third-year Latin student) explains how she plays down her abilities in order to strike a “just-right” balance: “See, I don’t want to be called the class brain or something…. I do just enough to get by. That way no one knows.”
- Dan (a tenth grader) never tries in history class and thus never risks the stigma of having tried and failed: “I don’t know… Studying for a quiz in history isn’t worth the effort, I guess. Look at it this way: if I tried and didn’t make it then I’d say to myself, ‘Dumb… You should have just slacked off.’ ”

Other answers to the apathy question come from teachers. For example, Janis Gabay, the 1990 National Teacher of the Year, argued that adolescents (especially minorities) are
often labeled as “unmotivated” when actually it is a matter of their having no sense of
ownership and no incentive to participate in classroom activities. To Gabay’s (1991) way
of thinking:

Teachers can help their students become self-motivated in a number of ways: by tapping
students’ prior knowledge; setting forth clear expectations and goals so students know
what they are aspiring to in a specific lesson, unit, or semester; conveying to students the
difficulty of the challenge but emphasizing the supports the teacher will provide to ensure
their success; giving lots of genuine praise for the incremental, tentative steps students
take; holding students accountable in a way that includes self-evaluation of their progress;
acknowledging each student through a significant nod, a smile, or an encouraging
comment (not always in front of the whole class)—especially for that student at risk of
“disconnecting”; and by modeling the enthusiasm that teaching and learning engender so
students can see a tangible example of self-motivation, commitment, and effort. (p. 7)

Perhaps one of the most useful things to bear in mind as we work to increase our
students’ self-motivation is a statement attributed to John F. Kennedy. Speaking on the
importance of developing each child’s potential to its fullest, Kennedy (cited in Inos &
Quigley, 1995) said, “Not every child has an equal talent or an equal ability or equal mo-
tivation, but children have the equal right to develop their talent, their ability, and their
motivation” (p. 1). We think this statement and its implications for classroom practice
capture our sentiments exactly.

Summary

A pervasive and legitimate concern of middle and high school content area teachers is how to help
students learn from texts. In the English language arts curriculum, that concern is broadened to in-
clude an emphasis on how to help readers evaluate the connotations and associations evoked by the
experience of transacting with texts. In all areas of the curriculum, the goal is to support adolescents’
literacy growth by providing them with access to materials they can and want to read (Moore, Bean,
Birdyshaw, & Rycik, 1999). Ensuring that all students, including those who struggle with fluency in
reading and who are English learners, become active and independent learners is a primary goal of
content area educators. Teachers’ pedagogical subject matter knowledge and their understanding of
the role that textbooks and the Internet (through its various websites) play in classroom instruction
are vital links to reaching that goal.

Traditional definitions of text, literacy, and what it means to be literate have given way to a
broadened view of literacy—one that includes informational, computer, media, scientific, techno-
logical, and disciplinary literacies. Text has been redefined as any representational resource or ob-
ject that people imbue with meaning. Literacy has been redefined as negotiating and creating mean-
ing from these representations and objects. These new views of text and literacies require skills that
extend far beyond the conventional reading and writing competencies associated with print liter-
acy. They also require that teachers attend to more than a cognitive view of the reading process.
Constructivist and social constructionist perspec-
tives on that process, as well as students’ moti-
vations for becoming literate, must be taken into
account as important mediators of students’ abil-
ity to learn in various content areas.
Suggested Readings


MyEducationLab™

Go to the Topic “Motivation” in the MyEducationLab (www.myeducationlab.com) for your course, where you can:

- Find learning outcomes for “Motivation” along with the national standards that connect to these outcomes.
- Complete Assignments and Activities that can help you more deeply understand the chapter content.
- Apply and practice your understanding of the core teaching skills identified in the chapter with the Building Teaching Skills and Dispositions learning units.
- Examine challenging situations and cases presented in the IRIS Center Resources.
- Access video clips of CCSSO National Teachers of the Year award winners responding to the question, “Why Do I Teach?” in the Teacher Talk section. (optional)

- Check your comprehension on the content covered in the chapter by going to the Study Plan in the Book Resources for your text. Here you will be able to take a chapter quiz, receive feedback on your answers, and then access Review, Practice, and Enrichment activities to enhance your understanding of chapter content. (optional)

Visit A+RISE. A+RISE® Standards2Strategy™ is an innovative and interactive online resource that offers new teachers in grades K–12 just in time, research-based instructional strategies that meet the linguistic needs of ELs as they learn content, differentiate instruction for all grades and abilities, and are aligned to Common Core Elementary Language Arts standards (for the literacy strategies) and to English language proficiency standards in WIDA, Texas, California, and Florida.
Language, Diversity, and Culture

Language as a Vehicle for Teaching and Learning Content
- Seeing Language as a Social Practice
- Dealing with Gendered Language in the Classroom and the Text

Diversity in Language and Learning
- Second-Language Acquisition and Learning
- Dialect Differences
- Struggling or Reluctant Readers
- Gifted and Talented Learners

Teaching and Learning in Culturally Diverse Classrooms
- Today’s Globalizing Influences
- Supporting Literacy among Adolescent English Learners
- Integrating Language, Culture, and Content

Culturally Responsive Professional Growth
- Appreciating Diversity
- Involving Parents and Community
- Linking School and Home

Essential Questions:
- Why do you need to be aware of students’ language use when teaching your discipline?
- What does research say about second-language acquisition?
- How does one become a culturally responsive teacher?

Anticipation Guide

Directions: Read each of the following statements. Place a checkmark on the line in the “Before Reading” column if you agree with the statement; leave it blank if you disagree. Then predict what you think the chapter will be about, and jot down on a sticky note (or post online) any questions you have. Read the chapter; then return to the statements and respond to them as you think the authors of your text would. Place a checkmark on the line in the “Author’s Stance” column if you believe the authors would agree with the statement. If you discuss these statements with other people online, in class, or at the family dinner table, return to the statements and check any items you agree with in the right-hand column, “After Discussion.” If your thinking changed, what caused that change?

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<th>Before Reading</th>
<th>Authors’ Stance</th>
<th>Statement</th>
<th>After Discussion</th>
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<td>1. Everyone in the United States speaks a dialect.</td>
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<td>2. Language is not neutral; it positions us in particular ways.</td>
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<td>3. ELs and struggling adolescent readers have the same instructional needs.</td>
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We open this chapter with a thumbnail sketch of Katya, one of several students who participated in a year-long study of adolescents’ perceptions of classroom talk about their assigned reading materials. The sketch, compiled by Steve Phelps, a researcher in the study (Alvermann et al., 1996), evokes images of why we believe teaching and learning in today’s culturally diverse classrooms must entail more than simply attending to the assigned literacy tasks. Important as those tasks are, they cannot be isolated from the influences affecting students’ everyday lives.

As you read Steve’s description of Katya, which he assembled from observing her in class and interviewing her in private, think of questions that you would like to ask her or her social studies teacher, Mr. Williams. (Pseudonyms are used throughout.)

Katya had come to the United States with her mother and three siblings from the Ukraine two years before the time of the study. They were members of the local Ukrainian Pentecostal Christian community. Katya said she attended church daily. Because her English was limited, both in vocabulary and in syntax, Katya had enrolled in two classes of English as a second language (ESL) as well as an after-school English program. She said she spoke Ukrainian at home. In her high school, Katya was referred to as “one of the Russian students,” seemingly because the faculty and staff did not differentiate between the Ukraine and Russia.

Katya was very reserved and shy in class. To help overcome her difficulties with the language, Mr. Williams paired her with Ahmed, an Arabian student she had known the previous year in a biology class. Although Katya rarely uttered a word in class discussions, she (along with Ahmed) was one of the more diligent and attentive students in class when it came to reading, note-taking, and following the teacher’s lectures. The only instances in which Katya attempted to enter into public discourse were occasional and nearly inaudible one-word responses when the class was going over the answers to a worksheet.

Although it would be easy to attribute Katya’s lack of participation to her shyness or difficulty with the English language, there were brief flashes of evidence that suggested she was willing to share interesting information. For example, when she spoke with Steve about her life in the Ukraine and when she and Ahmed paged through a magazine prior to the start of class, Katya was animated and insightful. Katya’s grades were in the low 90s, and on the final state Regent’s Exam, which was part multiple choice and part essay, Katya
got a 76. Although she did relatively well in her other subjects as well, she was unable to graduate at the end of the year because she did not have enough physical education credits. (Phelps & Weaver, 1999)

What questions came to mind as you read this sketch? For us, one nagging question was “What might Mr. Williams have done to create spaces for Katya’s private voice in the public discourse of the classroom?” However, as we ask it, we think back to other studies of student voice in which researchers have found that attempts to empower others is not something one can do to or for another person (Alvermann, 1995–1996; Orner, 1992; Perry & Delpit, 1998). In fact, some educators have begun to ask themselves “Whose interests are served when students speak?” The answers, as you might expect, are layered and complex. It is this complexity that we invite you to explore in the following pages.

The chapter is divided into four major sections, which reflect its four purposes. The purpose of the first section is to explore issues concerning language as a vehicle for teaching and learning in culturally diverse classrooms. The purpose of the second section is to describe issues regarding the various needs of English language learners (ELLs), or English learners (ELs) as they are referred to in some regions of the United States. The purpose of the third section is to examine the need for integrating language, culture, and content given today’s globalizing influences. The purpose of the fourth section is to suggest ways of synchronizing professional growth opportunities so they focus on culturally responsive teaching.

Language as a Vehicle for Teaching and Learning Content

A major influence on how we currently view the teaching and learning of content literacy is the work of Lev Vygotsky, a Russian psychologist. Although Vygotsky’s theory of learning took shape in the early years of the twentieth century, educators in North America did not learn of it until edited translations of his work appeared in English in the 1960s and 1970s. In a nutshell, Vygotsky believed that “mental functioning in the individual originates in social, communicative processes” (Wertsch, 1991, p. 13), which are embedded in an array of cultural, historical, and institutional contexts. In other words, a Vygotskian perspective on learning does not assume that students will learn independently but rather that they will benefit from engaging socially in groups where others more knowledgeable than them can guide their learning (Vygotsky, 1978).
This emphasis on the social, communicative processes of language as a mediator of even the most private forms of thinking has had a profound influence on how we view the reading process, as described in Chapter 1. Its influence is highlighted again here: first, in our look at language as social practice, and next, in our discussion of ways to deal with the gendered nature of classroom language and text. We conceive of social as having to do with the cultural and historical influences at work when one uses language as a vehicle for teaching and learning content. Like many others working from a cultural studies perspective (e.g., Frow & Morris, 2000), we view the social as involving relations of power.

**Seeing Language as a Social Practice**

What a person says (or does) and what other people hear (or see) will vary greatly depending on the social and cultural contexts in which such communication takes place. Even though the people involved may be speaking the same language, there is room for misinterpretation.

Consider, for example, the following story told by James Gee (1996), a sociolinguist whose work informs much of what we believe about language as a mediating force in what gets said and understood in content area classrooms. In this story, Gee illustrates how language in the social context of a biker bar (or pub) reveals much more about the narrator (himself) than his proficiency in using English:

Imagine I park my motorcycle, enter my neighborhood “biker bar,” and say to my leather-jacketed and tattooed drinking buddy, as I sit down: “May I have a match for my cigarette, please?” What I have said is perfectly grammatical English, but it is “wrong” nonetheless, unless I have used a heavily ironic tone of voice. It is not just what you say, but how you say it. And in this bar, I haven’t said it in the “right way.” I should have said something like “Gotta match?” or “Give me a light, wouldya?”

But now imagine I say the “right” thing (“Gotta match?” or “Give me a light, wouldya?”), but while saying it, I carefully wipe off the bar stool with a napkin to avoid getting my newly pressed designer jeans dirty. In this case, I’ve still got it all wrong. In this bar they just don’t do that sort of thing: I have *said* the right thing, but my “saying–doing” combination is nonetheless wrong. It’s not just what you say or even just how you say it, it’s also who you are and what you’re doing while you say it. It is not enough just to say the right “lines.” (p. viii)

What you have just read is an example of a Discourse with a capital D. Briefly defined, Discourses are ways of speaking, thinking, and behaving in the world. Whether in biker bars or in classrooms, Discourses operate as ways of sorting individuals and groups. When this sorting leads to different expectations for students, we need to be concerned. As Gee (1996) reminds us:

Each Discourse incorporates a usually taken for granted and tacit “theory” of what counts as a “normal” person and the “right” ways to think, feel, and behave. These theories crucially involve viewpoints on the distribution of social goods like status, worth, and material goods in society (who should and who should not have them). The biker bar “says” that “tough
guys” are “real men”; the school “says” that certain children—often minority children and those from lower socioeconomic groups—are not suited for higher education and professional careers. (p. ix)

Some questions to get you thinking . . .

1. What are some Discourses in which you claim membership (e.g., as a student, teacher, administrator, citizen, sister, mother)?
2. How would others recognize you as a member of these Discourses?
3. Do you change your ways of speaking, thinking, and behaving when you move from one Discourse to another? Why?
4. What connections can you make between the example of the Discourse of the biker bar and the Discourses you are likely to find in various school settings?

Developing an awareness of how different Discourses construct the social realities of the classrooms in which we teach is an important first step in dealing with some of these realities. Just as learning subject matter can be described as learning a kind of Discourse, so also can learning how to do school literacy. In the following section, you will learn how reading—and “doing”—gendered literacy is part of school literacy.

Dealing with Gendered Language in the Classroom and the Text

A great deal of emphasis is currently placed on participatory student-centered literacy learning in small groups, such as literature circles, science labs, and school-related service learning projects. However, little attention has been paid to how students’ use of gendered language in those groups can lead to harmful stereotyping, especially when the language of their texts reinforces certain stereotypes. In the two sections that follow on the language of classroom and text, we provide anecdotal evidence of how gendered language inevitably narrows students’ thinking and creates a potentially unproductive learning environment.

LANGUAGE OF THE CLASSROOM

I think the girls, we’re like, we dominate, we rule the class.

—Jamaica

Since we’ve been talking about sexism [in books], the girls got their own point of view and the boys got their own . . . [and] we’re always against each other.

—David

Spoken passionately and with conviction, these statements reflected attitudes that existed in David Hinson’s seventh-grade language arts class following a class reading of a play about a girls’ soccer team that defeats a boys’ soccer team (Alvermann et al., 1996). The discussion
of this play eventually led a student to ask, “Should boys be allowed to join an all-girls’ softball team?” Although a few students said yes, most of them flatly rejected the idea.

The proverbial battle lines between the sexes were drawn when Cherie announced, “An all-girls’ team talks about ‘girl talk’ so boys would ruin everything.” The boys, sensing they were being cast as the outsiders, retorted with statements like “It just shows the stupidity of women.” As the name-calling escalated, the students seemed bent on excluding each other’s ideas along sexist lines rather than questioning the source of those ideas and why they might hold currency among their peers.

We believe that incidents such as this one can lead eventually to patterns of discourse that students internalize and act on in a variety of ways. When the language of the classroom centers on the meanings boys and girls attach to being male or female, as in the example just given, gender becomes something students do—a way of being in the world. Over time, as stereotypes form and become more firmly inscribed each time gender is socially constructed through classroom talk, students shape their identities to fit the language they hear.

**LANGUAGE OF THE TEXT**

Reading texts in which an author’s language socially constructs gender can also inscribe stereotypes. However, gender is but one of several filters through which readers experience texts. Social class, race, ethnicity, and culture are others. Consider, for instance, the overlapping filters that are operating in the following examples from Sally Randall’s eighth-grade language arts classroom:

- **Example 1:**

  Rather than assign the questions at the end of an excerpt from *The Pearl* (Steinbeck, 1989) in the class anthology, Ms. Randall asked the students to consider a series of quotations from the selection. One quotation helped students consider how an author’s gendered way of writing can influence the language they use in discussing the text:

  Kino had wondered often at the iron in his patient, fragile wife. She, who was obedient and respectful and cheerful and patient, she could arch her back in child pain with hardly a cry. She could stand fatigue and hunger almost better than Kino himself. In the canoe she was like a strong man. (p. 677)

  After students had read this quotation aloud, Ms. Randall asked them to consider why Steinbeck wrote the description of Kino’s wife in this way. The first student to respond said Juana (Kino’s wife) had the physical characteristics of a man but still gave Kino the honor and respect he deserved because he was a man. Ms. Randall then underlined the word *almost* and the phrase *like a strong man*. She asked the class to think about what those words implied. A student spoke up to say that Juana may have had qualities like a man, but they were also women’s qualities. Exchanges such as these allow students to explore multiple perspectives.

- **Example 2:**

  *The Pearl* became the focus of another discussion in Ms. Randall’s class. This time the students were asked to consider who was the more dominant character—Kino or
Juana. Most of them concluded it had to be Kino, because he was the man and he made all the decisions for his family. Ms. Randall asked, “Do you think this is pretty common in literature for the man to be the dominant one?” Heads nodded in agreement, with Paula explaining it this way: “Well, it kind of just started in the beginning. Adam was made first, and that was kind of like the man was the head of the family. And so it was just kind of in all the stories. That's just like in real life. That's just the way.”

With this example, it is easy to see how the language of the classroom and the language of the text conspire to socially construct what it means to be male and, by implication, what it means to be female. Here, the weight of religion, literary history, and culture combine to leave little doubt in Paula’s mind that this is just the way life is, has always been, and will always be.

**INTERRUPTING THE STATUS QUO** Strategies that support students as they begin to question the source of the ideas or the values expressed in the texts they read and hear discussed in class are most effective when they call into question inequities associated with gender bias. For example, Wayne Williams, a physics teacher who collaborated in a two-year action research project with Barbara Guzzetti, a literacy teacher educator (Guzzetti & Williams, 1996), employed a simple but effective strategy for intervening in a gendered interactional style that favored boys’ voices over girls’ voices in his classroom. Briefly, Mr. Williams had been unaware during the first year of the study that the boys in his class generally believed that the girls’ questioning style indicated an inability on their part to learn difficult concepts. In the second year of the study, Mr. Williams presented his subject matter in a way that demonstrated scientific inquiry involves an active questioning and exploring of ideas, regardless of who is voicing those ideas and the manner in which they are questioning them.

**Diversity in Language and Learning**

We begin this section on second-language learning, dialect differences, struggling readers, and gifted learners with a cautionary note. It is easy to fall into the trap of generalizing about an individual based on one aspect of that person’s group membership. How many times, for example, have you heard or taken part in conversations that narrowly define someone on the basis of his or her race, gender, age, ability, religion, and so on? Generalizing group characteristics to an individual is misleading in other ways as well. A case in point is Katya. If you were her teacher, why would it be important to identify her in more than one way?

Although Katya’s nationality is Ukrainian, this is only one of her multiple group memberships. Katya, the individual, is simultaneously a woman and a member of the Pentecostal Christian community. Although she did not disclose information related to her social class or racial makeup, we do know she has at least one exceptionality—Katya is multilingual. She speaks Ukrainian, Russian, and English. Thus, if you were Katya’s teacher, you would want to consider her multiple group memberships when planning for instruction, facilitating group discussions, devising assessments, and making any
number of other instructional decisions. Without knowledge of the different norms, values, myths, traditions, and symbols that have meaning for different cultural groups, you will find it difficult to access or build on your students’ rich and diverse backgrounds when introducing new concepts and strategies for learning from texts.

Although developing an awareness of your students’ cultural backgrounds is important, it is not enough. Too often we think of other people as having a diverse set of beliefs and values and yet remain blind to our own. It is as if we simply do not see what looks and feels so normal to us. Try the following activity to gain insight into your own cultural norms.

**Activity**

Fold a sheet of notebook paper in half the long way or draw a two-column table on your laptop. On the left side, state the values and beliefs you hold most dear. On the right side, briefly state how you practice or live out each of them. For instance, give examples of how you practice them. Then review both sides, noting as you go any statements that seem particularly narrow or finite. Inspect your more absolute ways of believing and valuing to see if you have a blind spot that may interfere in teaching a culturally diverse group of students. Think of how you might compensate for that blind spot.

**Second-Language Acquisition and Learning**

The distinction between second-language acquisition and second-language learning is not simply a dichotomous one; it is more like a continuum, with the two terms serving as the imaginary poles. However, the distinction is useful in drawing attention to Krashen’s (1989) controversial claim that second-language development is more a matter of acquisition than of learning through formal methods.

Drawing on the work of Stephen Pinker (1994), a leading expert on language and the mind, Gee (1996) argued that “acquisition is a process of acquiring something (usually subconsciously) by exposure to models, a process of trial and error, and practice within social groups, without formal teaching” (p. 138). For example, first-language development for native English speakers is primarily a matter of acquisition, though as most of us remember from classes in English grammar, some formal schooling was also involved. In a later edition of *Social Linguistics and Literacies*, Gee (2008) cautions:

Acquisition must (at least, partially) precede learning; apprenticeship must precede overt teaching. Classrooms that do not properly balance acquisition and learning, and realize which is which, simply privilege those students who have already begun the acquisition process outside the school.

Two types of language proficiency have been identified that are of particular importance to adolescent literacy educators: conversational and academic literacy proficiency (Cummins, 2003). Conversational English is acquired fairly quickly, but the language
and complex concepts that form the very core of subject-matter learning require a longer time. Cummins recommends providing scaffolded support when introducing cognitively challenging texts—a recommendation that aligns perfectly with the Learning Cycle, discussed in depth in Chapter 4.

While academic language proficiency is our focus in this text, we by no means discount the value of conversational English. In fact, we believe proficiency in all types of language should be celebrated and affirmed. As teachers, we need to help students appreciate that having two or more languages or dialects at their command gives them the prerogative to choose from among them as circumstances dictate. To literacy educator David Bloome’s (1992) way of thinking,

We need to replace the LEP (limited English proficiency) mentality with the LTEP (limited to English proficiency) mentality. Bilingualism and multilingualism need to be viewed as normal, healthy, and prevalent states of life (both for individuals and for communities). Monolingualism needs to be viewed as the aberration. (p. 7)

Though not a critique of monolingualism per se, Words Were All We Had: Becoming Biliterate Against the Odds (de la Luz Reyes, 2011) provides numerous first-hand accounts of why celebrating an individual’s ability to speak additional languages makes more sense than viewing a second language as a detriment to learning.

To appreciate the implications of de la Luz Reyes’ book for content teaching and learning, it helps to familiarize yourself with current approaches to educating second-language learners. Because sheltered English instruction is increasingly the approach of choice in many school districts throughout the United States (Echevarria, Vogt, & Short, 2000), we devote attention to it here. However, we also attend to bilingual programs because of their viability and the research that supports them (Garcia, 2000; Ovado, 2003).

SHELTERED ENGLISH INSTRUCTION  We are living in a time when adolescents’ language backgrounds are becoming increasingly diverse but those of their teachers are not. In 2009, some 21 percent of children ages 5–17 (or 11.2 million) spoke a language other than English at home, and 5 percent (or 2.7 million) spoke English with difficulty. Seventy-three percent of those who spoke English with difficulty spoke Spanish (Aud et al., The Condition of Education 2011, p. 30). Nearly half of the children who speak a language other than English at home were born in the United States. What happens to students who come to school without the proficiency in English to keep up with their peers in the various subject matter areas? How are such students expected to meet the Common Core State Standards? More and more frequently, schools are turning to sheltered English instruction as an approach that prepares ELs to comprehend the content of their subject matter classes at the same time that they receive instruction in reading, writing, speaking, and listening in English.

Through various adaptations in their instruction, English-speaking teachers who use the sheltered English approach are able to adjust the language demands put on students who are not yet fluent in English but who, with supportive teaching techniques, can understand grade-level content standards and concepts (Echevarria & Short, 2011; Echevarria, Vogt, & Short, 2000). These adjustments may include scaffolding their
instruction (e.g., modeling teacher thinking, providing analogies, and elaborating on student responses), providing necessary background information and experiences, and organizing their lessons in ways that simplify syntactic structures (e.g., using more active than passive verbs). Teachers in sheltered classrooms may also employ strategies that emphasize visual cues and other concrete means for helping students apply what they know in their primary language to learning content in English. Students are expected to gain proficiency enough to enter mainstream classes in one year (Mora, Wink, & Wink, 2001).

The downside of sheltered English instruction is that “many EL learners receive much of their instruction from content area teachers or aides who have not had appropriate professional development to address their second-language development needs” (Echevarria, Vogt, & Short, 2000, p. 4). The demand for teachers knowledgeable in the implementation of sheltered English instruction simply exceeds the supply. Although the sheltered English approach includes many of the same instructional methods and strategies that a school district’s curriculum calls for, teachers who are unfamiliar with the research on second-language learning are at a distinct disadvantage.

In schools that have initiated systemwide sheltered English instruction taught by appropriately educated staff, it is likely that students whose first language is other than English will acquire academic literacy through instruction that shows them how to pool their emerging knowledge of English with what they know about the content and the tasks necessary for comprehending that content. The Sheltered Instruction Observational Protocol (SIOP) (Echevarria, Vogt, & Short, 2000) is one example of a researched model for planning and implementing sheltered English instruction in subject matter classrooms. Originally designed as an observation instrument, the SIOP is also used as a source of concrete examples of the features of sheltered instruction that make it possible for English learners to acquire a second language and academic content simultaneously. Specific suggestions and strategies that take into account sheltered English instruction can be found in Chapters 6–10. An archived webinar on sheltered English instruction is freely available at http://www.schoolsmovingup.net/cs/smu/view/e/4686

**Bilingual Programs** Although uncommon in the United States, bilingual programs are known to contribute positively to language-minority students’ long-term academic achievement. Whether proficiency in one’s native language (L1) promotes English acquisition (L2) and overall academic achievement is a hotly contested theory. Bernhardt (2003) claims that literacy researchers have for too long overgeneralized the sameness in first- and second-language (L1 and L2) reading processes. The tendency to do this, she argues, ignores the fact that “the mere existence of a first-language…renders the second-language reading process considerably different from the first-language reading process because of the nature of information stored in memory” (p. 112). However, based on a study that followed 899 limited-English-proficient (LEP) eighth-graders for a period of 12 years, it appears that at least for Hispanic LEP students, the theory held. Maintaining and encouraging the development of native language skill (as is done in bilingual programs) facilitated the acquisition of English reading ability. This was not the case, however, for the Asian students in the study, possibly due to “cross-language transfer difficulties when L1 and L2 lack a shared alphabetic structure” (Guglielmi, 2008, p. 322).

A *National Study of School Effectiveness for Language Minority Students’ Long-Term Academic Achievement*, published by the Center for Research on Education, Diversity
Supporting Classroom Teachers

Drawing from a brief distributed by the Literacy Coach Clearinghouse, Escamilla (2007) outlined five issues that literacy coaches often encounter when attempting to support classroom teachers who are responsible for adapting their instruction to meet the needs of English learners. We agree with Escamilla’s thinking and would extend it a bit by adding that these are issues that teachers would benefit from exploring with literacy coaches in their school.

- **Issue 1: The sameness platitude, or “Good teaching is just good teaching”** (p. 1). This idea wrongly assumes that how native English speakers learn to decode and comprehend will transfer seamlessly to speakers of other languages.

- **Issue 2: Oral language before literacy? No.** Escamilla points out that “current thinking encourages teachers to teach EL learners to learn to comprehend, speak, read, and write English simultaneously, and that it is not necessary to delay literacy instruction in English while children are learning to understand and speak English” (p. 2).

- **Issue 3: The native language: A scaffold or a barrier?** Citing research that shows English learners comprehend a selection written in English better if they are allowed to discuss it in their native language, Escamilla concludes that by “allowing time and opportunities to process what [students] are learning in their first language [scaffolding] serves two purposes—that of enhancing learning and the validation that [one’s] native language is welcome in a classroom” (p. 4).

- **Issue 4: Beginning English learners’ needs are different from those of more advanced English learners.** Escamilla concurs and states that “contrary to current practice ... oral ESL for advanced EL learners needs to be qualitatively and quantitatively different for advanced EL learners than for beginners. ESL can and should be integrated into literacy instruction for advanced learners” (p. 5).

- **Issue 5: Cultural schema.** According to Escamilla, cultural schema are often equated to students’ background knowledge. This is unfortunate, given that teachers are typically cultural insiders and therefore often do not “recognize the cultural messages inherent in many texts that may cause confusion for EL learners; [however] it is important that teachers learn to analyze the books and stories that students are reading for cultural schema as well as background knowledge” (p. 5).

Evidence-Based Research

and Excellence (2003a), found that bilingual programs that were sustained for five to six years assisted English learners in maintaining the greatest gains in both their native language and English in all content areas. Moreover, the fewest high school dropouts came from these programs. English learners who attended only English mainstream programs were the most likely students to drop out of school. When English learners who had been schooled in all-English-medium programs (e.g., ESL and sheltered English) first exited a language support program, they outperformed their peers in bilingual programs when tested in English. However, by the middle school years, English learners schooled in bilingual programs reached the same achievement levels as English learners schooled all
in English, and by high school they outperformed them. Thomas and Collier (2002), the researchers who conducted the study, note:

In order to close the average achievement gap between EL learners and native English speakers, language support programs must be well implemented, sustained for 5–6 years, and demonstrate achievement gains of more than the average yearly progress of the non-EL learners group each year until the gap is closed. Even the most effective language support programs can only close half of the achievement gap in 2–3 years. (pp. 3–4)

A controversy that continues is whether bilingual instruction or English-only instruction is more effective for second-language learners. A national literacy panel appointed by the U. S. Department of Education in 2002 found that

[S]ome amount of teaching of students in their home language was beneficial to English literacy learning (better than English immersion) . . . [and that] the focus of effective literacy instruction is much the same for native speakers and EL Learners . . . [but that] some adjustments to these common instructional routines seem necessary and appropriate” (August & Shanahan, 2010, pp. 342–344).

However, the critiques of the panel’s findings are informative and cast doubt on its findings. For example, Grant, Wong, and Osterling (2007) have called for further research “that investigates the ideological dimensions of second-language literacy and challenges English-only hegemony, monolingualism, native-English-speaker-norms, and other dimensions of privilege and power” (p. 607). Yet other large-scale studies (e.g., Kieffer, 2010) show that

[S]ubstantial proportions of both EL Learners and native English speakers from diverse socioeconomic backgrounds develop [reading] difficulties during the upper elementary and middle school grades. . . . EL Learners and non-EL Learners from similar socioeconomic backgrounds are at similar risk. (p. 484)

Clearly, there is room for more research on the relation of socioeconomic status, English proficiency, and late-emerging reading difficulties—those that occur around the fourth grade when subject matter texts begin to challenge even the “good” readers among both groups (English learners and non-English learners).

**Dialect Differences**

In the classroom communities in which we work, dialect is frequently the most salient feature of cultural diversity, and it is often a contentious issue. The dilemma is twofold: How does one teach the codes of power while at the same time respecting students’ culture and language? How does one disentangle form and meaning in language? Dialect can be a very powerful way of expressing meaning; at the same time, it can be a powerful barrier to communication. Bidialectical speakers—that is, individuals who are facile in using both dialect and standard forms of English—recognize this dilemma, but they also know how advantageous it is to own more than one language.
We think Gloria Ladson-Billings (1994) presents a useful way of thinking about dialect differences in her book *The Dreamkeepers*. Ladson-Billings describes the classroom practices of eight teachers who differ in personal style and methods but who share an ability to teach in a manner that affirms and reinforces African American students’ belief in themselves and their cultural identities. Patricia Hilliard, one of the eight teachers in Ladson-Billings’s study, is an African American teacher who has taught in both public and private schools in a large urban area. Like Lisa Delpit (1995), Hilliard is wary of instructional approaches that fail “to make students cognizant of the power of language and the language of power” (Ladson-Billings, 1994, p. 82). In Hilliard’s words (cited in Ladson-Billings, 1994),

I get so sick and tired of people trying to tell me that my children don’t need to use any language other than the one they come to school with. Then those same people turn right around and judge the children negatively because of the way they express themselves. My job is to make sure that they can use both languages, that they understand that their language is valid but that the demands placed upon them by others mean that they will constantly have to prove their worth. We spend a lot of time talking about language, what it means, how you can use it, and how it can be used against you. (p. 82)

One way that Patricia Hilliard affirms and reinforces her students’ cultural identities while she simultaneously teaches them the value of knowing both dialect and standard forms of English is through an activity that involves what she calls the “translation” process. Placing a transparency of the lyrics of students’ favorite rap on the overhead projector (double-spaced so she can write between the lines), Hilliard proceeds to engage them in a translation activity. In talking with students about the process, she compares it to what interpreters do when they translate from one language to another. Hilliard (cited in Ladson-Billings, 1994) explains her objective for doing the activity as follows:

I want the children to see that they have some valuable knowledge to contribute. I don’t want them to be ashamed of what they know but I also want them to know and be comfortable with what school and the rest of the society requires. When I put it in the context of “translation” they get excited. They see it is possible to go from one to the other. It’s not that they are not familiar with Standard English…. They hear Standard English all the time on TV. It’s certainly what I use in the classroom. But there is rarely any connection made between the way they speak and Standard English. I think that when they can see the connections and know that they can make the shifts, they become better at both. They’re bilingual! (p. 84)

The point that Patricia Hilliard is making is one that linguists also make; that is, we are all speakers of one dialect or another. Whose dialect counts is often a matter of politics, however. Addressing this issue, Wayne O’Neil (1998), head of the Department of Linguistics and Philosophy at the Massachusetts Institute of Technology, wrote the following in response to the public’s outrage over a school board’s resolution to teach Ebonics in Oakland, California, in 1996:

We assume…that there are standard versions of [all] languages, the pinnacles that each dialect speaker is supposed to aspire to, but that which normally—for reasons of class, or race, or geography—she or he is not able to reach. On this view, dialects are diminished
varieties of a standard ("legitimate") language, a value judgment that has no standing in linguistics. For, on the scientific point of view, all...languages are rule-governed systems of equal complexity and interest—instantiations of the capacity for language that each infant enters the world with. (p. 41)

Ebonics, commonly known among linguists as Black English or African American Vernacular English (AAVE), was the term used in the Oakland school board resolution. Although members of the board never intended for Ebonics to replace Standard English, the media’s distortion of the resolution led to this interpretation (Perry & Delpit, 1998). Amid much furor and heated debates through the press and TV talk shows, African Americans appeared divided on the issue. In addressing this divisiveness and the implications of Ebonics for teachers, the well-known African American educator Lisa Delpit (1998) stated,

I have been asked often enough recently, “What do you think about Ebonics? Are you for it or against it?” My answer must be neither....It exists. It is the language spoken by many of our African American children. It is the language they heard as their mothers nursed them and changed their diapers and played peek-a-boo with them. It is the language through which they first encountered love, nurturance, and joy. (p. 17)

Delpit went on to add, however, that she, like most teachers and parents, believes that children who are not taught the power code of Standard English will not have equal access to good jobs and leadership positions. Therefore, Delpit recommends the following: Help children who speak Ebonics learn Standard English so that through acquiring an additional form of linguistic expression, they will be able to code switch when necessary and still retain pride in the language with which they grew up.

Struggling or Reluctant Readers

We are all struggling or reluctant readers at times. Reflect for a moment on the type of text you struggle with or are reluctant to put much effort into understanding. Perhaps it is the owner’s manual for your new computer, the technical jargon in the latest consumer price index, or the symbolism in a much touted film that all of your friends are wild about. Whatever your struggle or reluctance, it typically consists of more than an ability to decode text, broadly defined. The same is true for adolescents who struggle with reading or are reluctant to approach a task that reminds them of past struggles and perhaps even failure.

Even with the best literacy instruction in the early grades, some adolescents will enter secondary school with numerous and debilitating reading difficulties. These difficulties may be associated with poor motivation, low self-esteem, inadequate cognitive processing strategies, underdeveloped technical vocabularies, boredom with a curriculum that seemingly has little relevance to their everyday lives, and so on. For the purposes of this book, we are less interested in the causes of reading difficulties than with the instructional strategies and activities that teachers can use in working with struggling readers.
Focusing in on what adolescents who struggle with reading bring to their coursework is an important instructional principle—one that is backed by years of research and practice (Moore, Alvermann, & Hinchman, 2000; Readence, Moore, & Rickelman, 2000). In fact, the most effective middle and high school teachers we know say they take their students’ prior knowledge into full consideration when planning instruction using the Learning Cycle (see Chapter 4).

We are personally less inclined to favor Response to Intervention (RTI), which is currently in vogue as an approach to teaching students who struggle with reading, mainly at the elementary and middle school levels. This approach, unlike the Learning Cycle, has its roots in special education and federal legislation for classifying students as learning disabled. The three major components of RTI (though these vary across states, districts, and schools) include “some form of universal screening, progress monitoring, and tiered interventions” (Brozo, 2011, p. 12). The latter (tiered interventions) is what is most problematic in our view, especially at the high school level. Directing subject-matter teachers to “respond to students’ learning needs with increasingly intense and targeted supports” (Brozo, 2011, p. 16) suggests to us that those who would advocate such a move are likely unfamiliar with the culture of high schools and the teachers and students who populate them. Also, as Brozo (2011) argues, the relative lack of research on implementing RTI at the secondary level is reason enough to remain cautious.

Moreover, like Ivey (1999), we believe that “whereas terminology or categories such as problem, average, superior, or low, middle, high may provide a general sense of how much students have developed as readers, they offer limited information about the complexities of individual experiences” (p. 188). Thus, planning instruction based on how a student has been labeled as a reader (e.g., struggling or disabled) is a practice that lacks pedagogical soundness.

**Gifted and Talented Learners**

Although there is no universally accepted definition of the term *gifted and talented learners*, many states base their programs for these students on criteria set forth by the federal government. Under Title IX of the Elementary and Secondary Education Act (2001), commonly referred to as No Child Left Behind, the definition of gifted and talented refers to children or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services or activities not ordinarily provided by the school in order to fully develop those capabilities.

The nation’s response to educating the gifted and talented has historical underpinnings that are perhaps best captured in Richard Hofstadter’s (1970) *Anti-Intellectualism in American Life*. Extending Alexis de Tocqueville’s (1833/1983) characterization of American democracy in antebellum times, Hofstadter wrote,

> Again and again...it has been noticed that intellect in America is resented as a kind of excellence, as a claim to distinction, as a challenge to egalitarianism, as a quality which almost certainly deprives a man or woman of the common touch. (p. 51)
In short, intellect has been viewed as “foreign to a society built on practicality and consensual understandings” (Resnick & Goodman, 1994, p. 110). In such a culture, gifted young people tend to stand out as special. By 2011, however, bipartisan legislation to end the neglect of high-potential students in the United States was introduced in the form of a bill known as the TALENT Act (2001). If passed, the TALENT Act will require states and local districts to include gifted and talented and high potential students in their plans for using federal funding, require states to report on the performance of gifted students on their annual state report cards, and help better prepare teachers to work with this special-needs population.

Gifted and talented as a label of exceptionality has engendered a host of tensions tied to issues of social and economic inequality. Historically, placements in gifted and talented classes reflect an underrepresentation of minority and poor children (Mehan, 1991). They also reflect the misguided practice of automatically assigning English learners to basic or general-level classes, rather than gifted classes, because their proficiency in the dominant language (English) fuels the perception that they are incapable of handling a challenging curriculum.

Regardless of how restrictive or flexible one’s personal definition of gifted and talented is, it is important to bear in mind that adolescents who are highly creative and insightful will benefit from literacy instruction that offers opportunities for independent inquiry, innovative problem solving, and expressive writing—activities that should be a part of all classrooms but especially those in which gifted and talented students live and work. Also, it is important to remember that students with exceptionally high potential come from different cultures, from different linguistic backgrounds, and from families dealing with issues brought on by extreme poverty. Backgrounds, alone, do not determine who among us will be gifted and talented.

### Teaching and Learning in Culturally Diverse Classrooms

Although we weave suggestions for teaching culturally diverse students throughout this book, we focus here on the major challenges to improving literacy in adolescent English learners and of integrating language, culture, and content in teaching culturally diverse students. However, first we invite you to consider the range of cultural diversity present among today’s youth and the implications of this for you as a classroom teacher. Such consideration will no doubt heighten your awareness of the need to gear up to teach content reading and literacy in ways that are culturally relevant for all students, not just those who are most like you.

### Today’s Globalizing Influences

Each moment that teachers spend interacting with adolescents in content area classrooms is embedded in what social anthropologists Vered Amit-Talai and Helena Wulff (1995) refer to as “a range of cultural possibilities” (p. 231). They use this term to express the view that youth culture cannot be localized (and taught) as if the classroom were a separate
world of its own. Youth culture is produced at home, in school, on the streets, with friends, in malls, among siblings, through TV, music, and the Internet, and so on. To ignore this fact is to teach as if “teachers and students relate to one another undistracted by the classism, racism, and sexism that rage outside the classroom” (Brodkey, 1989, p. 139).

Although we discussed diversity issues that dealt with language, gender, reading achievement, and such, in the previous section, we barely touched the surface of the diversity present in today’s youth culture. Consider, for example, the differences in working-class youth’s discourse and school discourse. Patrick Finn (1999), an educator born into a working-class Irish Catholic family on the south side of Chicago, has devoted a lifetime to exploring these differences and what they mean for literacy teaching and learning. According to Finn, there are two kinds of education in the United States:

First, there is empowering education, which leads to powerful literacy, the kind of literacy that leads to positions of power and authority. Second, there is domesticating education, which leads to functional literacy, or literacy that makes a person productive and dependable, but not troublesome. (pp. ix–x)

Arguing against the second kind, which is based in conspiracy theory, Finn places the responsibility on schools for educating all youth in ways that are empowering, not simply domesticating.

Differences also abound in how adolescents view themselves in terms of ethnic identity. For example, among Hispanics (a label given to diverse groups of people by the federal government 30 years ago), popular youth culture has proclaimed a “Latino/Latina Revolution” led by Ricky Martin, Jennifer Lopez, and Christina Aguilera (Trujillo, 2000). According to Trujillo, a poll taken by the vice president of quepasa.com revealed that of 5,000 people responding, 37 percent chose to be identified as Latino, 31 percent as Hispanic, and the remaining 32 percent as Mexican, Cuban, Puerto Rican, or whatever their national origin. Among Native Americans, as well as among Asian and Asian American youth, there is also the problem of being grouped together as if there were no differences among tribal groups or countries of national origin. Teachers who take the time to understand the differences between the Hopis and the Apaches or between Vietnamese and Chinese youth, for example, are on the road to achieving a more equitable and culturally responsive pedagogy (Henze & Hauser, 1999).

Finally, in matters of sexual orientation, differences also exist among heterosexual, gay, lesbian, bisexual, and transgender communities of people. Although sexual orientation is not typically a category to which authors of content area reading texts devote space, we include it here because of its place in the wider spectrum of multicultural education and because of the increasing number of publications dealing with homosexuality (Allan, 1999; Young, 2000) in professional journals focused on literacy teaching and learning. Whether coming from homes with gay or lesbian parents or embracing their own issues of sexual orientation, young people today need teachers who are as accepting of them and their literacy needs (e.g., appropriate reading materials and informational texts) as they are of students from various racial, ethnic, socioeconomic, linguistic, and religious backgrounds. In fact, current articles appearing in the top journals of professional organizations for literacy educators frequently suggest the need to move beyond the inclusion of LGBT-themed literature in English language arts classrooms in order to
interrogate norms of heteronormativity and intersectionality. In Blackburn and Smith’s (2010) view, focusing on the sexual identities of LGBTQ people, as so often LGBT-themed texts do, typically comes at the expense of attending to intersecting identities. Sexual identities [they argue] cannot be effectively separated from the race, class, gender, and other identities embodied by people since no one is solely sexual. (p. 633)

Supporting Literacy among Adolescent English Learners

In recognition of the rising number of newcomers to the United States, other demographic trends, and changing demands brought on by a quickly globalizing economy, the Carnegie Corporation of New York commissioned a report from the Alliance for Excellent Education titled *Double the Work: Challenges and Solutions to Acquiring Language and Academic Literacy for Adolescent English Language Learners* (Short & Fitzsimmons, 2007). The authors of this report concluded the following:

Although many strategies for supporting literacy in native English speakers are applicable to adolescent EL learners, there are significant differences in the way that successful literacy interventions for the latter group should be designed and implemented. These differences have serious implications for teachers, instructional leaders, curriculum designers, administrators, and policymakers at all levels of government. Moreover, because adolescent EL learners are a diverse group of learners in terms of their educational backgrounds, native language literacy, socioeconomic status, and more, some strategies will work for certain EL learners but not for others. (p. 1)

Several factors contributed to this conclusion, among them, the following six challenges to supporting literacy among adolescent EL learners. After each challenge, we provide a brief summary of potential solutions, as described in *Double the Work*:

1. **Lack of common criteria for identifying English learners and tracking their academic performance.** Individual states vary widely in their interpretation of the U.S. Department of Education’s definition of limited English proficiency students (LEPs), which is the federal government’s term for English learners. According to that definition, EL learners are students between the ages of 3 and 21 who are “enrolled in elementary or secondary education, often born outside the United States or speaking a language other than English in their homes, and not having sufficient mastery of English to meet state standards and excel in an English-language classroom” (Short & Fitzsimmons, 2007, p. 14). Possible solutions to this challenge include the development of standards, or benchmarks, for determining correct identification and placements of these students.

2. **Lack of appropriate assessments.** Although this challenge is addressed more fully in Chapter 5 of your text, briefly, it stems from the fact that “standardized tests that aim to measure academic knowledge (e.g., math, science, literacy) are not sensitive to second language literacy development” (Short & Fitzsimmons, 2007, p. 18). Likely solutions to this challenge are the use of diagnostic assessments in the student’s
native language and in English, multiple measures of a student’s language proficiency, and testing accommodations for English learners.

3. **Inadequate educator capacity for improving literacy in English learners.** Very few teachers have had initial training or professional development in teaching adolescents whose first language is something other than English. Only three states (Arizona, California, and Florida) have enacted policies that ensure that schools of teacher education will provide coursework and/or experiences that will help teacher candidates to work successfully with English learners. Solutions to the challenge posed by inadequate educator capacity include professional development in teaching English learners and the hiring of literacy coaches to assist teachers in adding appropriate accommodations for English learners in daily lesson plans.

4. **Lack of appropriate and flexible program options.** Because most English learners will require four to seven years of instruction in academic English to reach the average academic performance of a native English speaker, extra time must be allotted (when needed) for finishing high school. As Short and Fitzsimmons (2007) emphasize, “Finding an appropriate program that will accelerate [English learners’] English language development and let them make progress in content-area coursework is the ultimate goal” (p. 27).

5. **Inadequate use of research-based instructional practices.** Although the research on effective literacy instruction for English learners is relatively limited, there is sufficient evidence to show that “the instructional methods that secondary school teachers have typically used do not [emphasis in original] facilitate learning or literacy instruction for EL learners” (Short & Fitzsimmons, 2007, p. 33). Specifically, lectures and worksheets are insufficient, as are the cluttered pages of textbooks. Possible solutions include integrating reading, writing, listening, and speaking across the curriculum; explicitly teaching comprehension strategies as aids to understanding assigned texts; building background knowledge; focusing on vocabulary development; and using technology and choice as motivators. All of these practices are dealt with at length in the chapters that follow.

6. **Lack of a strong and coherent research agenda about adolescent English learners’ literacy.** Currently, there is a paucity of evaluation research on programs that were designed to serve English learners. Specific needs exist in the following areas: studies of English learners’ out-of-school literacy practices to determine if such practices might be used to better engage students in classroom academic learning; longitudinal studies of English learners’ literacy development within different program models; and studies that focus on English learners’ assessment practices and graduation rates.

**Integrating Language, Culture, and Content**

Being able to adjust one’s lesson in the midst of teaching is part of a teacher’s repertoire of instructional decision-making skills. Fred Genesee (1994), who researches second-language immersion programs in the United States and Canada, cites studies showing that teachers make as many as 1,300 instructional decisions each day. These decisions are most effective when teachers integrate their subject matter expertise with what they have learned about their students’ language and culture.
WHAT’S TO BE GAINED FROM THIS TYPE OF INSTRUCTION

Sheltered English classrooms are considered by some educators as being the only viable means for reaching large numbers of second-language learners. They provide academic support in the second language (English), which is akin to Russian psychologist Lev Vygotsky’s (1978) notion of the zone of proximal development (ZPD). Envisioning EL instruction as scaffolding—a temporary prop that helps move students from what they know (their native language) to what they need to know (English)—is a form of ZPD. Stated in more technical terms, the ZPD is the distance between a speaker’s ability to handle English without guidance and his or her level of potential development under the guidance of more English-fluent adults or peers. The ZPD takes on added significance when one considers that English learners often experience “a pattern of insecurity or ambivalence about the value of their own cultural identity as a result of their interactions with the dominant group” (Cummins, 1994b, p. 45). Teachers who plan instruction with the ZPD in mind increase their chances of helping students learn to use elements of their own culture to understand those of the dominant culture.

Teachers who take into account students’ cultural backgrounds, while being sensitive to the fact that not all young people from the same culture group-think or respond in the same way, create favorable learning conditions in which students view themselves as capable and engaged learners. For example, in a news release that appeared soon after his ground-breaking book Teaching Reading to Black Adolescent Males: Closing the Achievement Gap (2005) was published, Alfred Tatum, who grew up in a poverty-stricken neighborhood in Chicago, offered the following advice to teachers:

- Establish a broader definition of literacy instruction that guides the selection of text. It must focus on skill and strategy knowledge, content knowledge, and identity development. “It is imperative that these young men have the requisite skills to read text independently. It is also imperative that they become ‘smarter’ as a result of their reading,” he says.
- Identify a core of “must-read” texts for African American adolescent males. These include James Baldwin’s The Fire Next Time and Ralph Ellison’s Invisible Man.
- Discuss texts in culturally responsive ways. “Students benefit when they can extend the ideas contained in texts into their own lives,” Tatum says.

In this video, Dr. Tatum describes why it is the school’s responsibility to engage students in texts that are meaningful to their lives. Several students briefly discuss what makes a text meaningful to them.
Examine your disposition toward using texts with African American adolescent males. Many teachers back down when they encounter resistance from their students to read beyond the required material, Tatum says. “However, no research currently shows that having students read less advances their academic and other literacy needs” (Northern Illinois University’s Office of Public Affairs, 2005, n.p.).

Culturally Responsive Professional Growth

Appreciating Diversity

Allan Neilsen (1991) made the interesting observation that “while we often talk about differentiated curriculum and instruction for younger learners, we tend to act as though teachers, as learners, are ‘all grown up’ and all the same” (p. 67). That such is not the case is clearly the message Irvine (1990) hoped to get across when she wrote the following:

Teacher education appears to be suspended in a serious time warp, training future educators in the pedagogy of decades past and pretending that...graduates will teach...highly motivated, achievement-oriented,...middle-class students from two-parent families. (p. 18)

Synchronizing professional growth opportunities so that they take into account the ever-widening gap between the number of minority students enrolled in school and the number of minority teachers available to instruct them in content literacy is a complex task. It involves educating all teachers—minority and nonminority—in a manner that helps them to understand the central role of culture in their lives and the lives of all their students. Architects of such professional growth opportunities, Ladson-Billings (1994) argues, must ensure that teachers come away with more than a “foods-and-festivals” approach to understanding culture. Ladson-Billings also maintains that it is foolhardy for any group to believe that “culture is what other people have; what we have is just truth.”

Creating safe environments that foster classroom appreciation of diversity does not mean engaging in neutral discussions in which feelings of conflict or issues of power are submerged in teachers’ and students’ making-nice talk. On the contrary, according to Henze and Hauser (1999), such issues can (and should) be raised. They offer the following strategies for engaging in this kind of talk:

In order to foster discussion about issues such as conflict or power, along with less emotionally charged topics relating to cultural values and practices, teachers need to establish an environment in which students feel comfortable expressing their views. Several strategies can be employed. For example, teachers can validate the knowledge of students at the outset through an activity where they create shared understandings of topics to be addressed, such as culture or ethnicity. Teachers can use self-disclosure as a way to humanize themselves and model the process of honest reflection. Another way in which many teachers establish safe conditions for dialogue is by setting up ground rules at the outset. For example, the class might agree that no individuals should dominate the conversation, that students have a right to pass if they do not want to share certain things about themselves, and that the opinions of others should be respected even if they disagree. (p. 3)
Involving Parents and Community

A parent is a child’s first teacher. Thus, it makes sense that a focus on culturally responsive teaching strategies should include developing parent and community partnerships in content literacy learning. In the past, a deficit model of home-school relations assumed inappropriately that schools needed to exert a good deal of influence on certain low-income parents’ literate interactions with their children in order to make up for perceived inadequacies in the home. This manner of thinking has largely given way to one of mutual understanding in which each party (parents and teachers) develops an awareness of the other’s specific cultural practices. As Cairney (2000) noted, “In this way schooling can be adjusted to meet the needs of families. Parents, in turn, can also be given the opportunity to observe and understand the definitions of literacy that schools support” (p. 59).

With this change in focus has come an increased appreciation of intergenerational literacy programs (Gadsden, 2000), which are rich with implications for culturally responsive teaching if we pay attention to what we can learn from them as teachers. There is also room in this new reciprocal way of thinking about home-school partnerships for students to see their cultures reflected in a positive light through both the school curriculum and culturally responsive teaching. In short, it is no longer necessary for students to endure what Rosalinda Barrera refers to as the “culturalectomies” that children of her generation experienced growing up under the deficit model of home-school relations (Jimenez et al., 1999, p. 217).

However, communicating with parents who are from a culture different from one’s own can present challenges at times. For example, we are reminded of a research study that Lee Gunderson (2000) conducted, in which he interviewed teenagers from various immigrant groups (refugees, landed immigrants, and entrepreneurs). What he learned about these youth, their parents, and himself in the process of doing this study is worth repeating here because it illustrates what all of us—firmly established citizens and newly landed immigrants alike—need to know if we are to be culturally responsive educators. In Gunderson’s words,

I am an immigrant, a Norwegian-American-Canadian. Like millions of native English-speaking individuals in Australia, Canada, New Zealand, and the United States, my parents’ first culture and language, in my case Norwegian, has withered away....First- and second-generation immigrants remember their struggles learning a new language and a new culture. Most often, however, they are convinced that their losses were a consequence of their heroic or pioneer-like efforts to forge new lives for themselves and their families. They view their losses as part of the price they have paid to become members of a new society. Their willingness to sacrifice signifies in their minds their dedication to family and to the democratic ideals of their new country. They are members of the most recognizable diasporas....The individuals of the third, fourth, and fifth generations are the lost ones whose first cultures like unsettled spirits haunt their angst-filled reveries. Becoming an American, an Australian, or a Canadian means the surrender of first languages and first cultures. Children and grandchildren have little sense of what has been lost.

Perhaps in recognizing this loss in our own lives, we will be one step further along the path to becoming culturally responsive educators. At the very least, we will have stopped a moment to consider what it might be like to walk in the shoes of the adolescents who
come to our classes each day speaking a different language, holding on to cultural practices that still make sense to them, and wishing for a teacher or two who will understand all of this. (p. 693)

**Linking School and Home**

In their report of a study that focused on using math literacy to link home and school, Civil, Andrade, and Gonzalez (2002) emphasize the importance of teaching in ways that respect students’ construction of meaning and the connections they make outside school, in the home. This approach, the researchers argue, is important for all students but in particular for those who come from economically underprivileged homes in which English is not the first language.

Viewing parents as intellectual resources, Civil, Andrade, and Gonzalez (2002) developed a series of mathematics workshops for a core group of mothers who were Mexican immigrants and for their children’s teachers. The workshops, which had as their premise “we are all learners,” were jointly negotiated by the mothers and the teachers, and the information gained from them became curriculum building blocks for teaching and learning math literacy in school.

English teachers, like the mathematics teachers in the preceding example, can also support second-language learners by providing prompt and helpful feedback on their written language. When editing the writing of English learners, Carroll et al. (1996) recommend that teachers focus on the students’ rich and colorful language, rather than simply correcting their grammatical errors. This attention to the positive aspects of second-language learners’ written work will demonstrate “acknowledgment and respect for immigrant/EL students, their families, their experiences and the language they use at home and in their communities” (Rubenstein-Avila, 2003, p. 133).

**Summary**

Envisioning language as social practice opens the door to new ways of thinking about content literacy teaching and learning in culturally diverse classrooms. With this envisioning comes an awareness of students’ different ways of dialoging with the world. Listening to students’ views, and especially to the views of those who come from linguistic and ethnic minority backgrounds, can provide important clues about what is valued or devalued in the curriculum and why (Nieto, 1994).

Just as the sorting practices of the school present their own special set of challenges, so too do the demographic changes in the U.S. student population. English learners represent one of the fastest-growing groups of students in U.S. secondary schools.

At the same time, there are far too few teachers who have expertise teaching second-language students. Because some English learners may have unique needs that are not shared by struggling readers who are native English speakers (Harper & de Jong, 2004), it is imperative that teachers add appropriate accommodations for English learners in their daily lesson plans. It is also crucial that parents and teachers find ways of linking home and school environments that support literacy learning among a generation of youth who represent diversity in language, culture, and socioeconomic outlook.
Suggested Readings


MyEducationLab™

Go to the Topic “Diversity, Culture, and Literacy” in the MyEducationLab (www.myeducationlab.com) for your course, where you can:

- Find learning outcomes for “Diversity, Culture, and Literacy” along with the national standards that connect to these outcomes.
- Complete Assignments and Activities that can help you more deeply understand the chapter content.
- Apply and practice your understanding of the core teaching skills identified in the chapter with the Building Teaching Skills and Dispositions learning units.
- Examine challenging situations and cases presented in the IRIS Center Resources.
- Access video clips of CCSSO National Teachers of the Year award winners responding to the question, “Why Do I Teach?” in the Teacher Talk section. (optional)

- Check your comprehension on the content covered in the chapter by going to the Study Plan in the Book Resources for your text. Here you will be able to take a chapter quiz, receive feedback on your answers, and then access Review, Practice, and Enrichment activities to enhance your understanding of chapter content. (optional)

- Visit A+RISE. A+RISE® Standards2Strategy™ is an innovative and interactive online resource that offers new teachers in grades K–12 just in time, research-based instructional strategies that meet the linguistic needs of ELs as they learn content, differentiate instruction for all grades and abilities, and are aligned to Common Core Elementary Language Arts standards (for the literacy strategies) and to English language proficiency standards in WIDA, Texas, California, and Florida.