As is evident from its title, Instructing Students Who Have Literacy Problems, 7th edition, is intended for use with teachers and prospective teachers who will work with students who have difficulties in learning to read. This textbook is concerned with students of all ages—elementary school, middle school, and high school students—and their assessment and instruction in special reading programs. The book is used most often with upper-level undergraduates and graduate students who are seeking reading specialist certification or a graduate degree in reading. In addition, it has been the textbook of choice for a number of learning disability (LD) reading classes, as increasing numbers of universities require such courses in their LD teacher training programs. Further, this text has excellent potential for in-service sessions that prepare teachers to participate in the Response to Intervention (RTI) initiative because it covers instruction for students at all RTI tier levels, including special attention to those most severe cases receiving instruction in Tier 3.

Instructing Students Who Have Literacy Problems has long been one of the top books in the field for addressing the needs of struggling readers. It is popular with university instructors because it provides research-based information. Currently, in the literacy field, there is a heavy emphasis on research-based (also called “evidence-based”) instruction. This book has a well-deserved reputation for satisfying that need.

At the same time, it is equally noted for providing teachers with practical ideas they can really use in their own teaching. The authors are known for being particularly successful in translating research into easy-to-follow methods for real-world classrooms. In their comments, university professors who have reviewed this book have stressed that a positive feature is its practical applications, especially the actual materials that teachers can and do use. They have pointed out that teachers are particularly appreciative of this aspect.

This text reflects the balanced view of literacy instruction held by most educators today. While acknowledging that the fundamental purpose of reading is to comprehend text, the current perspective also recognizes that accurate, automatic word recognition and knowledge of word identification strategies are necessary precursors for understanding printed material. This textbook treats both issues well—word learning and comprehension—for students who have difficulties in learning to read. The balanced conception of reading programs held by the authors of this book is further exhibited in the suggestions that are included for integrating reading, writing, and spelling when working with delayed readers.

Major topics in the book are:

1. Foundations of remedial and clinical reading instruction, covering basic concepts and definitions in reading in Chapter 1, as well as information on the incidence of reading delays (including the most recent demographic data and statistics available at the time the 7th edition was written), major literacy
initiatives (such as the Common Core State Standards and Response to Intervention), types of reading programs, roles of reading teachers, and other basic essentials of this educational area. In addition, a detailed, but readable Chapter 2 provides discussion of research related to the complex topic of causes of reading delays/disabilities.

2. Assessment—Four comprehensive chapters are devoted to this topic. These four chapters, Chapters 3, 4, 5, and 6, cover all issues surrounding formal and informal assessment, as well as all important assessment instruments and procedures used with reading-delayed students. In revising for the 7th edition, the authors completed an extensive updating of information about published tests because published tests undergo fairly frequent revision.

3. Instructional interventions—There are full chapters on the following topics, all emphasizing techniques for use with delayed/disabled readers: (a) principles of highly effective instruction (Chapter 7); (b) development of automatic word recognition and fluency (Chapter 8); (c) word identification strategies (Chapter 9); (d) fostering knowledge of word meanings (Chapter 10); (e) instruction to improve comprehension of narratives (Chapter 11); and (f) instruction to improve comprehension of informational material (Chapter 12).

4. Reading instruction for special populations—Chapter 13 provides in-depth information for instructing the most severe cases of reading delay, as well as individuals who are nonreaders. Few books have this specialized information, and that chapter has been of high interest to many potential adopters. Chapter 14 deals with reading instruction for new English-language learners, adults who are illiterate or functionally illiterate, and students in poverty environments—with all topics in the chapter updated in the 7th edition.

New to the 7th Edition

- The 7th edition is available in e-text format. Students have the option of purchasing an accompanying loose-leaf, binder-ready version for an additional amount. The paper version includes the same basic information as the e-book, but the electronic version includes both pop-ups and video links that provide additional helpful, interesting ideas and examples.
- An up-to-the-minute trend in the literacy field is the use of technology to teach reading. Some of the suggested procedures are exceptionally helpful for struggling readers, some less so, and some, not at all. In the 7th edition of this text, a new, extensive, current section on technology and reading is included, with the emphasis on less-able readers. This section has been comprehensively researched and a critical review provided. That is, not only are procedures described, but critiques also are offered for each. Especially for delayed readers, it is imperative not to waste instructional time on procedures that provide weak—or no—results. Thus, both descriptions and evaluations are included in this new, comprehensive section.
- Another omnipresent topic at the present concerns the guiding principles of the Common Core State Standards (CCSS), adopted by most U.S. states. In this 7th edition, attention is given to the CCSS in every chapter, particularly
treating their applicability to struggling readers. The information is presented in the following ways: (a) an overview in Chapter 1, (b) boxed material titled Focus on Standards found throughout chapters, and (c) a margin icon located in various sections of the text, signaling chapter content particularly relevant to the CCSS. Although the developers of the CCSS intend that the Standards apply to all students—even high-needs pupils—for these students the Standards must be looked at through a slightly different lens. These differences are addressed and specific suggestions are made for accommodating delayed/disabled readers.

• A feature new to this edition is “The Teacher’s Lesson Plan Book.” At several locations throughout the book there are representations of pages from a type of lesson plan book often used by teachers. With each there is a lesson plan that translates chapter information into a practical lesson that can be used in real-world classrooms. Research-based information characterizes the present text. It frequently is helpful for teachers when textbooks and instructors explicitly provide assistance for translating this research into practice. Each lesson plan book page presents a complete plan suitable for a 1-hour instructional or assessment session.

The figures displaying The Teacher’s Lesson Plan Book pages are found in Chapter 6 (two figures of two assessment-session lesson plans for two different students); Chapter 7 (two figures representing two successive days of instructional lessons for one student enrolled in a special reading program); Chapter 10 (one figure illustrating a 1-hour session on meaning vocabulary development for a small group of struggling readers); and Chapter 13 (three figures showing three successive days’ lessons for a nonreader enrolled in a reading clinic).

• Numerous new instructional procedures for use with delayed readers, not discussed in previous editions, are comprehensively described. For example: (a) the Directed Spelling Thinking Activity (DSTA), which moves word sorting exercises from a one-to-one activity to a group lesson, and includes assessment as well as instructional procedures; (b) Theme-Context-Roots-Reference-Review (TC3R), an active learning endeavor for meaning vocabulary development; and (c) Responsive Reading Instruction (RRI), a program suitable for use with severely disabled readers that has been given high marks by the organization that publishes evaluations of programs used in Response to Intervention initiatives.

Because of the individual differences of students who are struggling to achieve in reading, conscientious teachers want, and need, to learn about as many high-quality programs and procedures as possible.

• Several new assessment procedures also are described in the 7th edition. For example: (a) the Informal Word Recognition/Identification Inventory (IWR/II), a research-based and teacher-tested assessment procedure that examines sight word recognition; testing and scoring procedures for the IWR/II include traditional methods, as well as procedures for using technology to assist in administration of the assessment; (b) the Speed-Accuracy-Meaning Plus (SAM+) test, which was developed to observe and analyze the oral reading of struggling readers in reading clinics; the description provides procedures for recording, coding, summarizing, and interpreting errors; and (c) the Vocabulary Recognition Task, which is an informal measure of meaning vocabulary knowledge devised by vocabulary researchers Stahl and Bravo (2010).
Assessment helps teachers make decisions about instruction. Knowledge of an array of high-quality assessment methods is important for reading specialists.

- A new, extensive section on matching text to reader addresses the renewed interest in text readability/text complexity generated by the Common Core State Standards. This section discusses (a) current views, (b) readability formulas and leveling procedures, and (c) arguments for approaching the issue of text complexity differently for struggling readers than for average readers.

  Discussion of text complexity in relation to achievement presently is highly pervasive in the reading instruction literature. Although literacy educators recognize the existence of individual differences in students’ aptitudes and learning rates, in many of the writings on text complexity this diversity has been ignored . . . to the detriment of delayed/disabled readers. This section addresses that concern in a forthright manner.

- A new section concludes the four-chapter assessment unit. This section, titled “A Lesson Plan Format for Assessment Sessions,” provides guidelines for pacing assessment so that fatigue does not affect students’ results, suggests appropriate teacher actions, and, as well, offers ways to keep students motivated and interested on test-taking days. In addition, accompanying the running text for this section there is a lengthy table listing pleasurable reading-related activities to intersperse between tests during assessment sessions. Teachers need to learn to manage assessment sessions (which sometimes are onerous for students) so that results obtained can accurately guide instructional planning.

- The 7th edition contains 21 new figures and 7 new tables, seen for the first time in this edition. In addition, many figures and tables have been revised and/or updated. Visual materials such as these clarify information for students, provide examples, offer actual teaching and testing materials for use in teachers’ classrooms, and generate greater interest.

- Every chapter is now preceded by a list of expected “Learning Outcomes,” information the student should learn from studying the chapter. Furthermore, all chapters now conclude with “Summaries” tied to the Learning Outcomes statements. The Learning Outcomes serve as advance organizers. Research has shown that use of advance organizers often improves comprehension, as well as retention, of information.

- A short but important section has been included in Chapter 2, the causation chapter, regarding neuroscience research that has focused on brain functioning and learning to read. This section reports what responsible writers are saying in regard to that growing body of investigations. Some misinterpretations and over-interpretations have crept into the professional reading literature and special education literature regarding this research. It is important for reading specialists and special educators to have an understanding of what information is viable and what information is questionable.

- A new section has been added to the four-page table that reports the history of remedial and clinical reading instruction. This table, titled “Some Trends and Issues in Remedial and Clinical Reading Instruction,” is divided into 10-year time spans, beginning in a time period prior to the 1800s. For the 7th edition it was time to begin the section listed as “2010–the present.” In this new tier, important information is included for this most recent time period regarding (a) instructional approaches, (b) suggested causes of reading disability, (c) prevalent assessment techniques and tools, and (d) milestones. When one
does not know the history of one’s field, mistakes can be repeated. This has happened more than once in the reading and special education areas. Reading specialists and others working with students who have reading problems should be aware of the past history, trends, and issues of the literacy field.

- Other new inclusions to this edition are: numerous up-to-date recommendations for specific books and instructional materials, new boxed material that provides helpful information, new website addresses that offer useful ideas to teachers of reading, and updated information on published programs.

Popular Features That Have Been Retained

- Especially popular in this book are the case studies and vignettes included to provoke interest about important topics and to enhance learning. The case studies describe actual students the authors worked with in their roles as directors of the Reading Clinic at The Ohio State University. The case studies illustrate various facets of remediation and assessment, giving the teacher or prospective teacher who is reading this text a rich picture of how the achievement levels of delayed readers can successfully be improved with exemplary teaching.

  The vignettes, titled “Real Teachers in Action,” feature teachers, and each vignette demonstrates, step by step, how a teacher carried out an important technique described in this book, doing so in a real-world classroom.

  Prior to beginning the 7th edition, the editor selected five professors to review the previous edition for help in planning the upcoming edition. One reviewer indicated that she uses the case studies in her class by having students discuss the strategies and add ideas of their own. She stated that the case studies are what drew her to this text. Another reviewer found the vignettes to be a plus. She found that her students use them when they write their own lesson plans for a skill or strategy.

  Six case studies and five vignettes help to guide learning in this text. There are individual case studies of three students covering the four different phases of word learning. There is also one student case study for each of the following topics: (a) assessment, (b) student problems with reading comprehension, and (c) emotional stresses resulting from reading delay.

  The teachers in the vignettes demonstrate (a) how reflective observation can be a valid form of assessment, (b) how to combine teaching and testing, (c) how to conduct a word sorting lesson, (d) how to conduct a sheltered English lesson, and (e) how to tutor an adult nonreader in literacy lessons.

- Of significant interest in literacy education today is the Response to Intervention (RTI) initiative, a combined effort by reading specialists, special educators, and general educators to provide early intervention to struggling readers. Young students enrolled in RTI programs are instructed in a series of tiers depending on the seriousness of their problems. Because the sole purpose of this textbook is to help teachers learn to teach students who have reading difficulties—difficulties of all types and at all levels of severity, the entire text of Instructing Students Who Have Literacy Problems (7th ed.) is ideal for training teachers to work at all phases (or, “tiers”) of RTI. Furthermore, previously
included information on RTI has been expanded throughout the 7th edition of this book.

- Another important issue in literacy education at the present time concerns reading instruction for new English-language learners (ELLs). With the last two decades seeing the largest number of immigrants ever to enter this country, unprecedented numbers of classroom teachers and reading teachers in all parts of the nation are faced with the challenge of providing instruction that will effectively meet the unique needs of these pupils. Many teachers were not trained in their original university programs to work with students whose low-level English-language literacy skills are compounded by limited knowledge of oral English. In the two previous editions of this text, one-half of Chapter 14 was devoted to research-based instructional procedures for increasing the language and literacy levels of these students. This highly acclaimed section of the book remains in the 7th edition.

In addition, running throughout the book is a special feature called “Especially for ELLs.” This feature is comprised of boxed material, signaled by a margin icon, that presents facts and ideas particularly beneficial for educators who are working with the literacy needs of ELLs, doing so in relation to one or more of each chapter’s major topics. The 7th edition includes more of these special boxes than seen in the previous edition.

- Professors and students have decidedly positive reactions to the study aids called “Learning from Text” that are interspersed throughout chapter sections. Designed to assist those teachers who are reading this book to gain deep understanding of important material, these study aids also provide a model of excellent comprehension/study procedures teachers can use with their own classes.

- The sections titled Reflections found at the ends of all chapters are helpful to college and university professors because these sections suggest activities that can be used to engage students in their courses in thoughtful experiences about each chapter’s content.

- A detailed section in Chapter 7 presents suggestions for ways in which high-quality literature can feasibly be used instructively with delayed readers.

- Instructors and students rate the book as highly readable. A Pearson editorial assistant summarizing the comments of the five reviewers noted earlier said “Reviewers were extremely enthusiastic about the text’s readability and how user-friendly it is.” Some of the specific comments of reviewers when asked to specify strengths of the book were: “Format and ease of reading”; “Very well written and organized”; “Text is reader-friendly with charts and vignettes”; “Special features of charts and diagrams”; “Extra features that aid the reader with deeper understanding and classroom application”; “The students typically really like the text and ease of use.”

- A close review of the 7th edition will disclose many other topics and features that professors and students will find valuable.

Supplements for Instructors

The resources below are available from www.pearsonhighered.com/educator. Instructors can enter the author or title of this book in the catalog at the top, select this particular edition of the book, and click the Resources tab. Select a supplement and log in to download the material.
Instructor’s Manual and Test Bank
All sections of the online Instructor's Manual and Test Bank have been fine-tuned to conform to the new 7th edition textbook revisions. For each chapter, the Instructor's Manual features key terms, learning objectives, and numerous helpful teaching suggestions. The Test Bank includes multiple-choice, true/false, matching, short-answer, and essay questions. Suggested answers accompany each question to help professors evaluate student tests. The Instructor's Manual and Test Bank are available from the Instructor Resource Center at www.pearsonhighered.com/educator.

PowerPoint™ Presentation
Designed specifically for professors using this text, the PowerPoint™ Presentation consists of a series of slides for every chapter that can be shown as is, or, alternatively, can be used to make handouts or to produce overhead transparencies. The presentations highlight key concepts and major topics for each chapter. All parts of the presentations were developed to encourage active student participation in lectures and discussions. This useful supplement for the busy professor is available for download from the Instructor Resource Center at www.pearsonhighered.com/educator.

ACKNOWLEDGMENTS
We thank the university professors who reviewed the previous edition of this text and have valued greatly the suggestions they provided: Shawn Lee Coskey, East Stroudsburg University; Wendy Ellis, Harding University; Carolyn Horton, University of Wisconsin-Stout; Patricia L. Jones, Tennessee Wesleyan College; and Patricia J. Pollifrone, Gannon University. We also have appreciated feedback from those who have used earlier editions of the book in their university courses; we have incorporated many of their fine recommendations, as well as those from former students. Our thanks go to Aurora Martinez, who served as the editor who got us started on the venture of the 7th edition, as well as to our present editor, Kathryn Boice, who patiently and resourcefully saw us through to the end. Mary Beth Finch, our production editor, knew the answers to all of our questions, and editorial assistant Carolyn Schweitzer played detective for us more than once. We also are lucky to have extra resources in our spouses, both of whom are exemplary educational professionals; we say thank you to them with admiration and affection. With the excellent support we have had to guide and sustain us through this revision, we believe this textbook can be a valuable source of assistance to teachers and to delayed readers.

Sandra McCormick
Jerry Zutell
PART 1

Foundations of Remedial and Clinical Reading Instruction
Basic Concepts and Definitions in Reading

One current educational initiative, Response to Intervention (RTI), advocates early intervention when students show delays in learning to read.
Learning Outcomes

1.01 Educational Initiatives
Identify recent major initiatives related to literacy instruction and discuss important characteristics of each.

1.02 Types of Reading Programs
Distinguish among the several types of reading programs as they relate to students with different abilities and needs. Identify common instructional components across all of them.

1.03 Roles of Reading Specialists
Define the term reading specialist and describe some of the roles that reading specialists might perform.

1.04 Important Definitions
Discuss the use of various terms used to describe struggling readers. Explain the differences between categorical models and a dimensional approach.

1.05 The Incidence of Reading Delay
Explain why consistent estimates of students with serious reading delays are hard to obtain.

1.06 Milestones in the History of Remedial and Clinical Reading Instruction
Discuss why reading educators should have at least a basic knowledge of the history of remedial and clinical reading instruction.

1.07 Models of the Reading Process
Explain how different models of the reading process view that process from different perspectives. Discuss the practical implications of each model for reading instruction.

Teachers of reading are responsible not only for helping students learn how to read, but also how to learn from reading. Throughout this book we include aids called “Learning From Text” to help you study effectively. These aids also suggest ideas you can use with your students to help them comprehend text. The best study guides (a) assist in learning a lesson’s content and (b) teach general strategies for understanding and remembering. The study aids in this text are in shaded boxes and signaled by the icon shown here, labeled “Learning from Text.”

—The Authors

If you were asked to name the most important invention in history, what would you say? The Almanac of World History (Daniels & Hyslop, 2003) suggests this answer: the printing press. In the mid-1400s, after Johannes Gutenberg modified wine presses to accommodate movable type, thus developing a practical printing process, book printing multiplied amazingly from the single Bible that was Gutenberg’s first product to several million copies of several thousand works a mere 50 years later (Daniels & Hyslop, 2003). With the proliferation of books came the proliferation of literacy. The proliferation of literacy, in turn, led to a diffusion of ideas and hastened many of humankind’s other achievements.

Literacy became an increasingly respected accomplishment and eventually was seen as a necessary one. For example, in 17th-century Sweden, being literate to read religious books was considered so important that parents were fined if they failed to teach their children to read, and marriage was denied adults until they could
demonstrate literacy. In the 1800s, literacy was promoted in Western countries so citizens could participate effectively in politics and the military, and as a means of improving the nation’s economic condition as a result of a better-educated workforce.

Being able to read is even more critical in contemporary life (see Table 1–1). For individuals, reading provides access to employment, educational opportunities, social adjustment, and entertainment. In addition, a literate population is crucial for generating ideas that lead to social change; thus, many governments, including the U.S. government, mandate universal education, with literacy as a prime objective.

Fortunately, as a result of typical educational experiences, most students attain reading skill. In fact, data from many sources show that students in U.S. schools exhibit reading achievement surpassing that from any other period in American education (e.g., Klenk & Kibby, 2000; “SAT, ACT,” 2004; Snow, Burns, & Griffin, 1998). Furthermore, the Program for International Student Assessment (PISA) recently reported an international comparison of literacy levels in which U.S. students, while scoring lower than students in 9 countries, scored higher than students in 39 others (National Center for Education Statistics [NCES], 2011a). In addition, on a subscale used by PISA requiring students to reflect on and evaluate material they read, U.S. students scored higher, on average, than students in comparable, developed countries.

Unfortunately, these positive findings are not true for all. Because you are reading this text, likely you are a teacher who is concerned about those elementary and secondary students who show serious delays in literacy achievement.

**TABLE 1–1 Reading Levels of a Sampling of Items and Materials Encountered in Adult Life**

<table>
<thead>
<tr>
<th>Items and Materials Ability Needed</th>
<th>Approximate Grade Level of Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help-wanted ads in newspapers</td>
<td>6–7</td>
</tr>
<tr>
<td>Front-page stories in newspapers</td>
<td>9–11</td>
</tr>
<tr>
<td>Dosage and symptom information on aspirin bottle labels</td>
<td>10</td>
</tr>
<tr>
<td>Preparation directions on boxes of frozen dinners</td>
<td>8</td>
</tr>
<tr>
<td>Directions for filling out the 1040 income tax forms</td>
<td>9–10</td>
</tr>
<tr>
<td>Training materials for military cooks</td>
<td>7–8</td>
</tr>
<tr>
<td>Articles in: <em>Saturday Evening Post, Ladies’ Home Journal, Popular Mechanics, and Harper’s</em></td>
<td>12+</td>
</tr>
<tr>
<td>Articles in romance, TV, and movie magazines</td>
<td>8</td>
</tr>
<tr>
<td>Recent presidential inaugural addresses</td>
<td>9</td>
</tr>
<tr>
<td>Information on financial statements</td>
<td>11–16+</td>
</tr>
<tr>
<td>Life insurance policies</td>
<td>12</td>
</tr>
<tr>
<td>Apartment leases</td>
<td>College</td>
</tr>
<tr>
<td><em>Reader’s Digest</em></td>
<td>9</td>
</tr>
<tr>
<td>Online patient health education materials</td>
<td>10</td>
</tr>
<tr>
<td>Hospital forms to be read by patients</td>
<td>11–14</td>
</tr>
</tbody>
</table>

Sources: Compiled from Bargantz and Dulin (1970); Bittner and Shamo (1976); Bormuth (1973–74); Felton and Felton (1973); Hirshorn, Hunt, and Davis (1974); Hoskins (1973); Kilty (1976); Kwolek (1973); Pyrczak (1976); Razik (1969); Sabharwal, Badarudeen, & Kunju (2008); Sticht (1975); Wikipedia (2013); Willis, Miller, & Abdehou (1990); Worthington (1977).
The consequences of low literacy, for the individual and for society, are serious. Although such students are a relatively small segment of the population, your concern for them is shared by the public and by educational agencies.

Educational Initiatives

Local school districts, states, provinces, and national governments often propose reform measures to improve reading achievement.

The Common Core State Standards

One recent initiative widely affecting reading instruction in the United States is the development of the Common Core State Standards (CCSS) (National Governors Association Center for Best Practices and Council of Chief State School Officers, 2010). As of this writing, as the time for implementing the Standards and the related high-stakes testing grows near, there is widespread concern that states and school districts are not sufficiently prepared to make the transition to them (McLaughlin, Overturf & Shanahan, 2013). Still, these Standards have critical implications for both regular classroom teachers and teachers of delayed and disabled readers.1

Two groups, the Council of Chief State School Officers, along with the National Governors Association Center for Best Practices, have spearheaded the preparation of an extensive grade-by-grade list of expectations—that is, Standards—representing literacy and mathematics knowledge that students should have by the time of high school graduation. The Standards were created in response to a concern that some high school graduates are not sufficiently prepared in reading and in math to succeed in college or in careers. The intent of these Standards is that all states operate with the same rigorous set of expectations for achievement in grades kindergarten through 12, instead of the previous policy in which standards varied from state to state.

To prepare the new set of Standards, several factors were taken into account. First, and basically, the developers considered what students need to know and be able to do in reading and mathematics for success in college and in the workplace. They also asked what strengths were seen in standards from the various U.S. states that should be incorporated into this core set designed to be used in common by all states. In addition, they wanted to ensure that the CCSS would be based on research and not merely opinion, and that they not only contained rigorous content, but also led to skillful application of knowledge. Furthermore, the developers asked how literacy and mathematics education in other top-performing nations could inform these U.S. Standards.

There also was another factor given particular attention. The developers noted with interest a study that looked at student performance on the ACT college admissions test (ACT, Inc., 2006). The results indicated that the distinguishing characteristic between students who performed well on the ACT and those who did not was the ability of the former to read complex text. At the same time, there was evidence that texts read by students in the elementary, middle school, and high school grades had become increasingly less complex over the last 50 years. What is more,

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1 In addition, special reference to information specifically cited in the CCSS is signaled in the margins throughout the chapters of this book by this Standards icon: CCSS.
assessing text readability through use of a measure called Lexile scores showed that
(a) the complexity of university books had increased during the same time period,
and (b) workplace reading frequently is now substantially higher in complexity than
the 12th-grade level (Stenner, Koons, & Swartz, 2010). The Standards developers
were concerned that students were having limited experience with the sophisticated
types of texts they would be required to read—with little assistance—in university
programs and in career-related reading material. After reviewing other research con-
firming the importance of learning to comprehend increasingly complex texts, and doing
so while reading independently (e.g., see a review of this research by Adams, 2009),
that goal became one of the prime aims of the CCSS.

To reinforce the emphasis on text complexity, the Standards specify text
complexity grade bands. The so-called “bands” are simply grade levels grouped
so that texts considered to be appropriate for those levels can be expressly
recommended. Stipulation of text complexity grade bands begins at grade 2 after
students have, hopefully, mastered the basics of beginning reading. The bands are
grouped in this manner: Grades 2–3, 4–5, 6–8, 9–10, 11–College/Career level. To help
teachers move students through appropriately complex text, an Appendix to the Stan-
dards document includes long listings of specific literature and informational books
suitable for each of these text complexity grade bands.

Table 1–2 represents a sampling of the CCSS literacy Standards to be accom-
plished by the end of various grade levels and designed for different purposes.
Although this table presents a highly abbreviated list, it gives a brief glimpse of
typical goals that are included. For the complete CCSS, see the website indicated in
the adjacent margin.

**Applicability to Delayed Readers.** With the emphasis on challenging content and
complex text, teachers of delayed and disabled readers may be concerned about how
these Standards apply to their students. The CCSS developers have taken the position
that “Promoting a culture of high expectations for all students is a fundamental goal of
the Common Core State Standards” (National Governors Association Center for Best
Practices & Council of Chief State School Officers, 2010, p. i.). Thus, it is the intent
that the CCSS eventually be met by all struggling readers, including those delayed in
reading acquisition because they are new English-language learners (ELLs).²

To achieve that goal, the developers of the CCSS caution that there must
be instructional supports and accommodations for these students. Those can
include special reading programs (including learning disability classes that pro-
vide research-based reading instruction); specially trained teachers; individualized
instruction; pacing adjustments; multiple exposures to the same content; varied
experiences to achieve a single learning objective; and others. Likewise, tempo-
rary adaptations to assessment procedures often are necessary (for example, until
writing skill has sufficiently developed, one might assess a student’s comprehen-
sion of literature and informational text orally).

We must be aware that delayed readers have failed, to some degree, to benefit
from classroom instruction as typically presented; therefore, the manner in which
teachers help delayed readers move toward meeting these Standards is particularly
important. Although a Standard itself might not be changed, the path to achieving it

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²Throughout this text, you will find margin icons that look like this:  
As you will see, most information in this book is very useful for educators who are teaching new English-language learners (ELLs) to read. But, in addition, this icon signals facts and ideas that are of particular interest for these students.
### TABLE 1–2  A Sampling of Reading, Writing, and Language Standards from the Common Core State Standards

<table>
<thead>
<tr>
<th>Grade 1, Reading—Informational Text: Craft and Structure:</th>
<th>Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 2, Reading Foundational Skills: Phonics and Word Recognition:</td>
<td>Know and apply grade-level phonics and word analysis skills in decoding words, for example, distinguish long and short vowels when reading regularly spelled one-syllable words.</td>
</tr>
<tr>
<td>Grade 3, Writing: Text Types and Purposes:</td>
<td>Write opinion pieces on topics or texts, supporting a point of view with reasons.</td>
</tr>
<tr>
<td>Grade 4, Language: Conventions of Standard English:</td>
<td>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking; for example, produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.</td>
</tr>
<tr>
<td>Grade 5, Reading—Literature: Integration of Knowledge and Ideas:</td>
<td>Compare and contrast stories in the same genre (e.g., mysteries; adventure stories) on their approaches to similar themes and topics.</td>
</tr>
<tr>
<td>Grade 6, Reading—Informational Text: Range of Reading and Level of Text Complexity:</td>
<td>By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.</td>
</tr>
<tr>
<td>Grade 7, Writing: Production and Distribution of Writing:</td>
<td>Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</td>
</tr>
<tr>
<td>Grade 8, Language: Knowledge of Language:</td>
<td>Use knowledge of language and its conventions when writing, speaking, reading, or listening; for example, use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to the fact).</td>
</tr>
<tr>
<td>Grade 9, Range, Quality, and Complexity of Student Reading: Range of Text Types:</td>
<td><strong>Literature</strong> should include stories (encompassing the subgenres of adventure stories, historical fiction, mysteries, myths, science fiction, realistic fiction, allegories, parodies, satire, and graphic novels); drama (encompassing one-act and multi-act plays, both in written form and on film); poetry (encompassing the subgenres of narrative poems, lyrical poems, free-verse poems, sonnets, odes, ballads, and epics). <strong>Informational text</strong> should include literary nonfiction (encompassing the subgenres of exposition, argument, and functional text in the form of personal essays, speeches, opinion pieces, essays about art or literature, biographies, memoirs, journalism, and historical, scientific, technical, or economic accounts [including digital sources] written for a broad audience).</td>
</tr>
<tr>
<td>Grade 10, Reading Standards for Literacy in History/Social Studies: Key Ideas and Details:</td>
<td>Cite specific textural evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information.</td>
</tr>
<tr>
<td>Grade 11, Reading Standards for Literacy in Science and Technical Subjects: Craft and Structure:</td>
<td>Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in specific scientific or technical context relevant to grades 11–12 texts and topics.</td>
</tr>
<tr>
<td>Grade 12, Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects: Research to Build Present Knowledge:</td>
<td>Conduct short, as well as more sustained, research to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.</td>
</tr>
</tbody>
</table>

**Source:** Adapted from National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010). *Common Core State Standards for English language arts & literacy in history/social studies, science, and technical subjects, K–12* (pp. 1–66). Permission to reprint by public license from National Governors Association Center for Best Practices and Council of State School Officers.
may be different than that seen in the general curriculum. The whole of the present textbook is devoted to instruction and assessment that facilitates achievement for struggling readers.

**Response to Intervention (RTI)**

Another educational plan currently generating much interest is known as Response to Intervention (RTI). Resulting from the U.S. Individuals with Disabilities Education Improvement Act (IDEA, 2004), this initiative focuses on reading instruction in the early school years. Although RTI began as a special education initiative, professionals planning the legislation recognized that the involvement of reading teachers also was important to meeting its aims. Consequently, this reauthorization of IDEA endorsed reading teachers, as well as special education teachers, as providers of instruction, assessment, and leadership activities in relation to the procedures of RTI (Mesmer & Mesmer, 2009).³

RTI specifically targets students who, early on, already exhibit delays in learning to read—or show strong probabilities of delays. Concerned with the large numbers of these students referred to special education programs, educators are hoping that the phases of early intervention provided by RTI, described in the following paragraphs, will reduce this number (Kucan & Palinscar, 2011).

The core of the RTI effort is a “tier system” in which delayed readers may move through a succession of educational “tiers,” with the instructional intervention intensifying at each succeeding level, or “tier.” School districts’ policies vary regarding the number of tiers used, but a typical number is three. See Figure 1–1. A common example of how this works is described next.

First, students who may be at risk for reading failure are identified at the beginning of a school year. This is accomplished through examination of records from the

![FIGURE 1–1 The Tier System of Response to Intervention (RTI)](image)

| TIER 1 | Students who are at risk for reading failure are identified and then instructed in a regular classroom. |
| TIER 2* | Those at-risk students who are unresponsive to regular classroom instruction are moved to a more intensified program of reading instruction. |
| TIER 3 | Students unresponsive to the intensified program of reading instruction receive special education placement. |

*School district policy varies in regard to the number of tiers used. In some cases, there is more than one tier between the first tier (general instruction in a regular classroom setting) and the last tier (special education placement).

³The present textbook is written with the specialized purpose of helping teachers who are engaged in instructing students who have literacy problems. Thus, all content in this text can be helpful to teachers across the tiers of the RTI process. When the designation RTI is specifically mentioned, you will see this icon: RTI.
previous year, or through assessments and observations during the first month of the current year. If current-year observations and assessments are used, these typically are carried out by the classroom teacher, often with the aid of a school psychologist. Special educators, reading teachers, and literacy coaches also may be part of a team that confers to aid in identification. In some schools speech and language teachers as well as specialist teachers for new ELLs collaborate with the team (Ehren, 2013).

For a period of time considered to be the first tier of instruction, these students receive reading instruction in their regular classrooms. A basic premise of the RTI process is that the students must receive high-quality, research-based instruction in that classroom—that is, if students should fail to progress, one must be able to eliminate poor or mediocre instruction as the cause (Taylor, 2008). Throughout this instruction, the students’ progress is carefully monitored. Furthermore, at approximately the middle of the first semester, a formal evaluation is undertaken to further gauge the degree of responsiveness these students have shown to regular reading instruction.

In some cases, students demonstrate adequate growth as a result of this general instruction. Other students may be insufficiently responsive—that is, their progress in reading acquisition is atypically slow, outside even the wide range in normal achievement seen with beginning readers—and, thus, they are moved to a second tier of instruction that is more intensive than the first. At times, instruction comprising the second tier continues within a regular classroom setting, but often it does not—for example, to accomplish the second-tier goal of intensifying instruction, students may be assigned to small-group instruction with a reading specialist. There are, in fact, several ways in which “intensification” occurs. Fuchs and Fuchs (2006) documented the following approaches often seen in common practice:

1. using more teacher-centered, systematic, and explicit instruction;
2. conducting the instruction more frequently;
3. adding to its duration;
4. creating smaller and more homogeneous student groupings; or
5. relying on instructors with greater expertise. (p. 94)

Reading teachers often have major roles in all these modifications, as do learning disability (LD) teachers and classroom teachers. In fact, the RTI movement has had a positive effect in fostering cooperation among varied educational groups—for example, a partnership has been established between the International Reading Association and the National Center for Learning Disabilities in support of a program called the RTI Action Network (“RTI Action Network,” 2009). (See the adjacent margin note for information on how teachers can obtain help from this network.)

In the second tier of instruction, as in the first, assessment has an important role. Second-tier assessments are used in two ways: (a) to help teachers plan or modify instruction so that it expressly meets the requirements of individual students, and also (b) to evaluate the need for a student to move to a third tier, or not. In some school districts, “assessment” primarily means administering tests; in others, a professional’s observations of daily classroom performance provide the measures; and in some districts, both means are used. As a result of these assessments, a student may (a) be deemed remediated and begin once again receiving the same general instruction provided for others in a regular classroom setting; (b) continue in the second-tier, more intensified instruction; or (c) be referred to a third tier because the student is failing to respond even to the increased level of instruction in the second tier.
The third tier usually constitutes special education placement, although some school districts implement additional tiers before considering this option (Shanahan, 2008). Referral to a third tier usually begins with more assessment to confirm, or refute, the need for instruction in a special education class.

Pros and Cons. Many professionals have hopes for the early interventions of RTI, which contrast with some prominent older approaches to referral. Certain of these older approaches have been labeled as “wait-to-fail” models (e.g., McEneaney, Lose, & Schwartz, 2006) because they require a wait period during which students must build up and demonstrate large gaps in their learning before they are eligible for help. Although there is potential promise for RTI, there also are some problems that must be solved—for example, certain students appear to be remediated as a result of second-tier instruction and are returned to regular classroom instruction, only to fall behind again when they no longer have the benefit of the intensive second-tier support (Vaughn, Linan-Thompson, & Hickman, 2003). Some professionals also worry that (a) there is much testing involved, and this may occur at the expense of time spent on instruction; (b) time periods between assessments may be too short to accurately determine responsiveness or lack of responsiveness to the instruction; (c) the RTI plan requires complex management and many skilled professionals; and (d) as with many such efforts, the monetary requirements are high.

Because many school districts are now incorporating RTI into their programs, careful evaluations should be made, both of possible solutions to these problems and of academic outcomes. One such evaluation conducted by Gilbert et al. (2013) showed that struggling first graders who received small-group tutoring through Tier 2 interventions made significantly higher gains in word reading than struggling first graders who did not receive this supplemental tutoring.

The large-scale Gilbert et al. (2013) study also examined achievement of students who did not do well in Tier 2 interventions, comparing those who were, therefore, given additional Tier 2 instruction with those who were moved to a Tier 3 model that incorporated the same Tier 2 instruction but provided it more frequently and in a one-to-one setting. No differences were seen between the two groups, and by third grade many of the students still were not reading within an average range. The researchers suggested that standard Tier 2 instruction may not be sufficient for some students. The authors of the present text refer teachers of such students especially to Chapter 13 of this book.

Types of Reading Programs

Teachers wishing to participate in efforts to improve the reading skills of children, older youth, or adults may work in one of several programs. A developmental reading program is a regular classroom program designed for most school-age students. These programs should provide students with many opportunities to read narrative and informational texts as well as specific activities to develop reading strategies. In addition to the five essential components of reading instruction specified by the National Reading Panel (NICHHD, 2000)—phonemic awareness,
Five essential components of reading instruction recommended by the National Reading Panel are phonemic awareness, phonics, fluency, vocabulary, and comprehension.

Remedial programs are characterized by ongoing assessment and flexibility in adapting instruction to individual differences. Although developmental, corrective, remedial, and clinical reading programs differ in individualization and pace, they all deal with the same major components of reading.

Classroom teachers also engage in corrective reading programs when they assist students who have mild reading delays within the regular classroom.

In remedial reading programs, students with moderate to severe reading delays receive instruction from a specially trained reading teacher. Often instruction is conducted in groups of about five to eight students. More comprehensive assessment of students’ reading problems is undertaken in remedial programs than in most developmental or corrective programs to determine weaknesses, reasons for these, and strengths that may help alleviate problems. Because students are grouped according to common needs, some instruction may be carried out with all of the small-group members participating. Other times, students work one-to-one with the teacher. The teacher’s special training and the small class sizes make possible frequent ongoing assessment and flexibility in adapting instructional techniques to individual differences.

A clinical program is designed for students with severe reading delays; therefore, the clinician, with only rare exception, works with one student at a time. Assessment is more extensive, including formal testing and informal observation. Remediation is intensive and highly individualized. A case study report is often developed for the student; it includes assessment results and the student’s responses to instructional techniques. School systems, hospitals, and social agencies may sponsor reading clinics, but they are especially prevalent at universities because clinics furnish opportunities for reading teachers-in-training to have supervised practice in specialized literacy instruction. A recommended source of information on reading clinics is *Reconsidering the Role of the Reading Clinic in a New Age of Literacy* (Evensen & Mosenthal, 1999).

Although developmental, corrective, remedial, and clinical reading programs differ in individualization and pace, they are based on the same principles of learning, and all deal with the same major components of reading. Most techniques suggested in this text are equally useful in all programs.

Click on the link in the margin to view the video titled *Dimensions of Effective Literacy Instruction* and to hear practical suggestions regarding the teaching of the major components of reading.

What is said about (a) completeness, (b) explicitness, (c) planning, and (d) the interactive nature of effective instruction?
Roles of Reading Specialists

The term *reading teacher* can be defined as referring to anyone whose work includes reading instruction, but more often it refers to a teacher with special training to address the needs of students who have reading problems. The designation *reading specialist* is increasingly employed as a substitute for *reading teacher.* An often-cited report on preventing reading difficulties recommends that every school have a reading specialist (Snow et al., 1998). Another influential document, Standards for Reading Professionals (Professional Standards and Ethics Committee, 2004), advises that reading specialists have graduate-level education, including a clinical practicum, in order to perform their tasks related to (a) assessment, (b) instruction, and (c) leadership, as discussed in the following sections.

Assessment and Instructional Tasks

Reading specialists go about assessment and instructional tasks in a number of ways. Many work directly with students who leave the regular classroom for this special instruction in the reading specialist’s class. Such an arrangement is sometimes called a *pull-out program.*

In other cases, reading specialists work within regular classroom settings. That system often is referred to as an *inclusion, or push-in, program,* because students who might have left the regular classroom for special instruction, under this plan, remain—that is, are “included”—in the regular class for that instruction. In recent years, inclusion has been particularly popular as an instructional arrangement for special education programming. In 2009, for example, 63% of students with learning disabilities enrolled in U.S. schools spent only 20% or less of the school day outside the regular classroom (National Center for Education Statistics, 2012b); however, when they did spend time outside the regular classroom, most often it was to receive some form of reading instruction.

Currently, reading specialists and learning disability teachers use both pull-out programs and inclusion programs, and there is sometimes debate about which helps students to fare better academically. For many years, research tackling this issue has shown that the critical variable is quality of teaching—that is, excellent teaching in either program results in better achievement than mediocre teaching in the other (Dunn, 1973; Gottlieb, 1974; Payne, Polloway, Smith, & Payne, 1981). This is not too great a surprise and is echoed in more recent studies. For example, push-in programs have been beneficial when the in-class instruction is preplanned, systematic, intensive, and research based, and when additional time is provided for struggling learners (e.g., Cunningham, Hall, & Defee, 1998).

On the other hand, push-in programs have poorly served students with learning difficulties at other times. Researchers have documented inclusion programs where instruction is not matched to the levels and needs of delayed readers, who as a result make no advances in literacy development (e.g., Klingner, Vaughn, Schumm,
Hughes, & Elbaum, 1997; Zigmond et al., 1995). O’Sullivan, Ysseldyke, Christenson, and Thurlow (1990) found that students with learning difficulties even get short-changed in regular classrooms in terms of time allotted for reading instruction in comparison to that for average readers. This study showed pupils to be more actively engaged and responsive in pull-out programs rather than inclusion programs.

In addition to academic concerns, another argument made for instructing students with learning difficulties within regular classrooms is that students’ affective needs are better served. A research review by Gresham and MacMillan (1997) indicates this hoped-for circumstance has not necessarily proved to be the case. This review pointed out that higher-achieving students often are contemptuous of students with learning difficulties, and that this, along with challenges in learning, has unfortunate effects on peer relations and on self-concept for low-achieving students.

Drame (2002) reported a study of teacher preferences in which those using whole-class reading instruction preferred pull-out programs more than teachers who grouped students within their classrooms to teach reading; Spear-Swerling (2004) speculated that this probably was due to the complexity of assisting individuals with diverse needs in large groups.

A compromise to the pull-out/push-in issue is integration of content covered in regular classrooms with that covered in pull-out programs. At the least, teachers should communicate about programs of students they share, with the classroom teacher sharing knowledge about a student’s learning behaviors that comes from spending many in-school hours with a learner and the reading specialist sharing expertise about literacy instruction.

Leadership Tasks

Reading specialists who assume leadership responsibilities across many schools may be called reading consultants, reading coordinators, or reading supervisors. Presently, however, a predominant leadership role that occurs within single buildings is that of literacy coach.

Literacy Coaches. Customarily, reading specialists based in a single school have worked not only with students, but also for improvement of literacy education throughout their buildings. Recently, this role has been given a name, literacy coach (or reading coach). Not all reading specialists work as literacy coaches, but growing numbers do.

A literacy coach has multifaceted duties and may engage in any of the following:

1. Working with teachers, including making suggestions, answering questions, modeling techniques, linking teachers with resources, helping with assessments and their interpretation, working on collaborative lessons, and observing students to plan corrective instruction;
2. Coordinating school-wide literacy activities, including planning in-service programs, developing curriculum, selecting materials, informing administrators of current research, and guiding paraprofessionals;
3. Working with parents, including initiating outreach, getting families involved in family literacy programs, and planning meetings on home-based activities that can help children (e.g., monitoring homework).

Two essentials for being a literacy coach are (a) to be highly informed about literacy instruction and assessment, and (b) to have skill in working with adults.
If a teacher is going to coach another educator, that teacher must have excellent breadth and depth of knowledge about the subject coached. Regrettable stories exist about teachers with no experience in teaching reading who are sent to 1-day workshops and then deemed literacy coaches (“Coaches, Controversy, Consensus,” 2004). Dole (2004) reported on literacy coaches she studied in 12 schools over 7 years. Although many demonstrated expertise, she described some who did not:

- The reading coach in one school did not know enough about the content and curriculum of phonemic awareness to know what to do once students have mastered one stage. As a result, the students and teachers stagnated. (p. 468)
- The reading coach in the school did not know enough about comprehension instruction to assist teachers in the intermediate stage of professional knowledge. (p. 469)

A successful literacy coach must have much classroom teaching experience, experience as a reading teacher, and graduate-level coursework in literacy education.

Sensitivity in working with adults also is vital. Teachers are more receptive to collaboration than to directives. A willingness to roll up one's sleeves to work side by side with colleagues for problem solving leads to growth in professional skill. Offering compliments about strengths eases the discomfort of change in areas of weakness. Addressing first what teachers see as their own needs opens the way for extending learning to other objectives. In short, social perceptiveness must work in tandem with academic knowledge.

A useful resource for reading specialists who assume this role is Practice Literacy Coaching: A Collection of Tools to Support Your Work (Burkins, 2009). Also, see the adjacent margin note.

Should you be a literacy coach? Click here, on Pop-Up 1-1, titled Qualifications to Be a Literacy Coach, to consider questions related to such a decision.

Important Definitions

As a professional, you should know meanings of important terms associated with literacy.

Learning from Text

Preview. Terminology is used differently among different groups, sometimes leading to misunderstanding. Table 1–3 provides a preview of the upcoming section. Previewing helps you mentally organize potentially confusing material. Take a side trip to Table 1–3 to consider the information there.

Disabled Readers/Delayed Readers

The classification disabled readers traditionally has been used by reading educators to refer to individuals who have difficulty learning to read despite adequate intelligence and adequate instruction. More recently, some favor an alternate description, delayed readers, to depict the same students and to indicate that although these students are progressing more slowly than the norm, the capacity to achieve is present (e.g., Gaskins, 1998; McCormick, 2006). This is your present authors' preference.
TABLE 1–3 Terminology: Differences Sometimes Found Among Professionals Interested in Literacy

<table>
<thead>
<tr>
<th>Reading Educators Might Say:</th>
<th>LD Educators Might Say:</th>
<th>Educational Psychologists Might Say:</th>
<th>Medical Personnel Might Say:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disabled Reader/Reading Disability</td>
<td>Learning Disabled/Reading Disability</td>
<td>Disabled Reader/Reading Disability</td>
<td>Learning Disabled/Reading Disability</td>
</tr>
<tr>
<td>Basic terms used for literacy problems</td>
<td>Basic terms used for learning problems, including reading difficulties</td>
<td>Currently, for many, replacing the terms dyslexic/dyslexia</td>
<td>Terms often used</td>
</tr>
<tr>
<td>Delayed Reader</td>
<td>Disabled Reader/Reading Disability</td>
<td>Learning Disabled/Reading Disability</td>
<td>Dyslexic/Dyslexia</td>
</tr>
<tr>
<td>Increasingly replacing the term disabled reader</td>
<td>Sometimes equated with learning disabled/learning disability; sometimes used instead of dyslexic/dyslexia</td>
<td>Terms often used</td>
<td>Terms sometimes used</td>
</tr>
<tr>
<td>Struggling or Striving Reader</td>
<td>Dyslexic/Dyslexia</td>
<td>Dyslexic/Dyslexia</td>
<td>Terms often used</td>
</tr>
<tr>
<td>Current synonym for delayed/disabled reader</td>
<td>Sometimes, terms still used</td>
<td>Sometimes, terms still used</td>
<td>Terms often used</td>
</tr>
<tr>
<td>Learning Disabled/Reading Disability</td>
<td>Garden-Variety Poor Readers</td>
<td>Learning Disabled/Reading Disability</td>
<td>Learning Disabled/Reading Disability</td>
</tr>
<tr>
<td>Many now believe same as reading disabled/reading disability</td>
<td>Believed to have experientially-based literacy problems and to respond more readily to instruction than “disabled readers”</td>
<td>Terms often used</td>
<td></td>
</tr>
<tr>
<td>Dyslexic/Dyslexia</td>
<td></td>
<td>Dyslexic/Dyslexia</td>
<td>Terms often used</td>
</tr>
<tr>
<td>Use of these terms often avoided because of conflicting definitions</td>
<td></td>
<td>Garden-Variety Poor Readers</td>
<td>Terms sometimes used</td>
</tr>
</tbody>
</table>

(Also see Ehri & McCormick, 2013; Gaskins, 1998; McCormick, 2009; Morgan, WIlcox, & Eldredge, 2000; Ruddell, 2009; Zutell, 1998; note also Spear-Swerling’s [2013] designation “delayed” applied specifically to students whose reading difficulties lie with word recognition). Currently, the expressions struggling reader, striving reader, and high-needs reader are used synonymously with these terms.

There are two approaches for designating a student as a delayed (or disabled) reader. One is based on a discrepancy model; the other proposes a treatment-resistance model (Speece & Shekitka, 2002).

The Discrepancy Model. Those who subscribe to the discrepancy model define a disabled or delayed reader as anyone reading significantly below his or her own potential. A comparison is made between (a) present reading ability and (b) reading potential—that is, where an individual should be reading. (Note that the criterion is potential, not grade level.) The difference between a student’s present reading ability and his or her potential is referred to as a discrepancy. If the discrepancy is large, the student is said to warrant special reading instruction.

Obviously, to use this approach, one must know a person’s probable reading potential. Procedures sometimes used for determining this are explained in Chapter 3.

A Treatment-Resistance Model. Some literacy professionals have proposed a different way of defining reading disability. They advocate a treatment-resistance model in which the guiding point is whether a student is resistant to high-quality
interventions that are fruitful for others. “Resistant” in this case means the student has not shown noteworthy improvement over an extended time. The RTI initiative subscribes to a treatment-resistance model.

This approach is frequently suggested by those who distinguish between reading disability and what they call garden-variety poor readers (e.g., Spear-Swerling, 2004). In this view, reading disability is characterized as innate, severe, and existing in individuals of average or above-average intelligence. In contrast, “garden-variety poor readers” are thought to have experientially based problems (e.g., detrimental influences of poverty), to have more moderate delays, and thus to be easier to remediate. Differentiating severe, moderate, and mild delays can be useful in planning instruction, especially when a student’s learning phase is taken into account (see Chapter 8). (Note that “resistance” does not mean that the learning difficulty is without a solution. Informed literacy professionals believe that all literacy difficulties can be remediated. See Chapter 13).

Learning Disability

The term learning disability (LD) was adopted in 1963 as a generic description replacing many different labels applied to difficulties in listening, mathematics, reading, speaking, spelling, thinking, or writing. Although this description covers several academic areas, in reality, 80% to 90% of students in LD programs are enrolled because of reading difficulties (Fuchs & Fuchs, 2006; McCormick & Cooper, 1991; Snow et al., 1998; Spear-Swerling, 2004). In fact, recent research and thinking indicate strong conceptual and practical similarities between the designations reading disability and learning disability. Accordingly, for this 80% to 90% at least, many professionals today believe no distinction should be made between the two concepts (see Klenk & Kibby, 2000; McEneaney et al., 2006; Spear-Swerling, 2004).

These similarities exist in a number of ways. First, data show that whether students are labeled reading delayed, reading disabled, or learning disabled, there may be several different causes for their reading difficulties, and across these groups the causes tend to be the same (see Chapter 2). Second, criteria for judging students’ need for LD program placement are determined by examining discrepancies between achievement and potential or through the RTI tier system—and no longer through tests designed to identify alleged processing disorders or other outmoded means. Third, although the intent of the law mandating LD services was to provide interventions only for those with severe learning delays (approximately 3% of the population), in practice, LD teachers, like reading teachers, work with students having moderate as well as more serious reading problems. For all these reasons, the student communities found in reading programs and LD programs are quite comparable.

As a final point, another similarity is the instructional focus in contemporary LD programs and reading programs—there are few major differences. This was not true in the early days of the LD movement when old theories for working with individuals with brain injuries or mental retardation often found their way into LD classrooms. At that time, in place of reading activities, LD students might walk balance beams and perform other motor exercises, complete visual perception tasks, or carry out auditory perception drills, all believed to improve defective brain-processing functions. After a period, LD professionals became disillusioned.
Dyslexia

When asking someone to define dyslexia, the answer you get depends on whom you ask. Proposed in the late 1800s as an alternate name for the now-discounted notion of “congenital word-blindness,” the theory of dyslexia was characterized in numerous, contradictory ways over the next century. For example, some used the term to indicate only profound reading disabilities; others applied it to any reading delay of any kind. Some specified an unknown origin for dyslexia; others spelled out a catalog of causes, including faulty teaching and other environmental factors. Many other inconsistencies regarding symptoms and causes of dyslexia were found, especially in the lay press. Furthermore, professionals in different fields often defined dyslexia differently.

A Categorical Definition. In the last few years, however, several educational and medical researchers have examined the concept of dyslexia using new brain-scan technologies and other research methods (for discussions, see Gillet, Temple, & Crawford, 2004; Goswami, 2000; Johnson, 1995; Olson & Gayan, 2002; Rumsey et al., 1997; Shaywitz et al., 2000; Vaughn, Bos, & Schumm, 1997; Verrengia, 2004). The quality of this research has varied, but certain conclusions have been fairly consistent. As a result, some educators, medical personnel, and psychologists have now converged on definitions that are at least similar. If asked to define dyslexia, they likely would include the following manifestations and causes: (a) serious delay in acquiring reading skill, despite adequate intelligence, hearing, vision, and oral language; (b) a congenital (i.e., existing at birth), neurological cause (not environmental causes, like poverty, cultural customs, or poor teaching); (c) sometimes a hereditary factor, but sometimes not; (d) difficulty mastering other written language skills (i.e., spelling and writing); (e) problems with phonological processing (and, less frequently, with visual processing); and (f) treatment resistance, as demonstrated by the necessity for intensified instruction and extended time frames to achieve learning goals. This view of dyslexia is called a categorical model because it categorizes individuals evidencing these characteristics differently from other poor readers. Many educators consider a definition of dyslexia based on these criteria to be acceptable.

Nonprofessional Definitions. On the other hand, the media, and especially vendors of commercial products claiming to treat dyslexia, sometimes fall back on outdated beliefs clearly rejected by research long ago. Although there certainly...
Some experts question the concept of dyslexia and prefer to dispense with the term entirely. Exceptions, one should use caution in depending on the media or commercial vendors for a definition and description of dyslexia. Misinformation abounds in these sources, ranging from commonly held myths (e.g., letter reversals are signs of dyslexia) to preposterous assertions (e.g., drinking whole milk causes word recognition difficulties). Too often, erroneous statements are accompanied by claims for controversial treatments unsupported by valid evidence.

A Dimensional Approach. There is a final, important perspective to consider when attempting to define dyslexia. For several reasons, a small, but growing group of experts prefers to dispense with the concept entirely. For example, the influential report Preventing Reading Difficulties in Young Children (Snow et al., 1998) describes data indicating more similarities than differences between those deemed dyslexic and other poor readers. To confirm this, reexamine factors (a) through (f) presented previously in this section. Clearly, most factors apply to any struggling reader. More important, designating an individual as dyslexic, or not, does nothing to inform instruction. The same skills must be learned by all readers—and odd, unusual methods are neither needed nor successful with any reader. What is useful to know is (a) the gravity of the problem (mild, moderate, or severe) in order to pace instruction and (b) the individual’s specific learning phase in order to precisely target lessons.

Thus, instead of a categorical model, many researchers favor a dimensional model focusing on differences, not defects. Such a model conceptualizes reading achievement across the dimensions of a bell-shaped curve indicating the normal distribution of human behaviors. In this view, individuals may have a strong, average, or low aptitude for reading, as they might for any ability (for example, aptitudes for musical, mathematical, writing, or athletic achievement). Perceived this way, poor readers simply fall in the curve’s left-hand portion indicating low functioning when it comes to reading-skill aptitude.

Echoing this standpoint, Spear-Swerling and Sternberg (1998) have said that all reading disability cases are likely a part of a normal continuum of individual differences. Roller (1996) titled her book on struggling readers Variability, Not Disability, reflecting this trend. Today the term dyslexia is used in definitions for disabilities in some states, but rejected in others.

To end our section on definitions and terminology, consider the following outlook offered by Spear-Swerling and Sternberg (1998):

Because there is little evidence that most school-labeled children with reading disabilities suffer from an intrinsic abnormality, the terms reading disability and learning disability are at best misleading. . . . In our opinion, children who are currently called “learning disabled” or “reading disabled” should receive labels using purely descriptive terminology, as in “poor readers,” “children with reading difficulties,” “children with word-recognition problems,” and the like. (p. 317)

The Incidence of Reading Delay

Accurate figures on individuals with serious reading delays are difficult to obtain, largely because criteria for determining if students should receive special reading services differ. Some programs include students with a 1-year discrepancy, whereas others specify a larger or smaller delay. To be eligible for U.S. Title I reading programs, students often, but not always, must score in the lower 33rd percentile on reading achievement tests. LD program eligibility can vary somewhat from state to state. Prevalence studies—that is, studies estimating numbers of individuals with reading
delays found in a geographical area—may use strict or less stringent criteria for defining a reading delay (e.g., 2 vs. 1.5 standard deviations below the mean). Because of such differences, accounts of numbers of delayed/disabled readers may disagree.

Snow et al. (1998) reported that U.S. Department of Education figures showed that approximately 3.5% of American youngsters in the United States were enrolled in learning disability classes because of reading delays. This is roughly equivalent to Drummond’s (2005) estimate that approximately 10 million individuals out of the total U.S. population of 308.7 million⁴ have difficulties with reading. Similar percentages have been given for serious reading delays in Great Britain (Yule, Rutter, Berger, & Thompson, 1974). In considering students with mild delays as well as those with moderate and severe problems, it has been suggested that as many as 15% of students probably warrant special instruction in reading—and indeed prevalence studies in the United States (Shaywitz & Shaywitz, 1996) and Canada (Commission on Emotional and Learning Disorders in Children, 1970) have produced comparable statistics. In U.S. poverty areas, one in five first graders participates in Title I remedial reading programs (Institute for Education Sciences, 2001), and according to sources at the National Institute of Child Health and Human Development (NICHD), about 75% of youth who drop out of school report reading problems (Lyon, 2003).

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**Learning from Text**

**Relating Information to Your Own Experiences.** How do these estimates compare to your own experience? (Relating information to your background experiences assists understanding and recall.)

**Milestones in the History of Remedial and Clinical Reading Instruction**

Reading instruction, like much of education, has been subject to cyclical movements. Educators should be familiar with previous points of view so that when ideas reappear, they can be recognized as ones that have been suggested before. Although many old ideas still have validity—others do not. Certain concepts that seem nonsensical in current thinking were once accepted as genuinely useful. Sometimes old ideas may resurface that prove to be as unsuccessful the second or third time around as they were the first. Furthermore, theories of reading tend to swing from one extreme to another. Being familiar with the history of the field can help teachers examine questionable notions that arise in the present and avoid either/or positions that deny students adequate instruction.

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**Learning from Text**

**Setting a Purpose for Reading.** The history of remedial and clinical reading instruction is summarized in a long table (Table 1–4). For this kind of information, you should ask the instructor what it is that he or she thinks is important for you to know. Teachers should help students set purposes for reading. For example, if the instructor wants you to note general trends, you would study this information differently than if you were expected to know dates and very specific details. To note major trends, you may approach it by reading the columns vertically. First, read down through the dates through the entire table to see the time periods involved. Next, read down through the entire column titled “Instructional Approaches,” then try to orally summarize significant trends indicated there. Do the same for the other three columns.

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<table>
<thead>
<tr>
<th>Time Period</th>
<th>Instructional Approaches</th>
<th>Suggested Causes of Reading Difficulties</th>
<th>Prevalent Assessment Techniques and Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to the 1800s</td>
<td>The alphabetic method of reading instruction is used for the first time. Students spell words by letter and reading is mainly oral.</td>
<td></td>
<td></td>
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<tr>
<td>1800s</td>
<td>The whole-word method is introduced in the 1700s. Phonics methods become popular.</td>
<td>Kussmaul suggests “word blindness” as a cause of reading disability.</td>
<td>The first standardized reading achievement tests are used. The first journal article on reading disabilities is published (Uhl, W. L. [1916]. The use of the results of reading tests as bases for planning remedial work. Elementary School Journal, 17, 266–275).</td>
</tr>
<tr>
<td>1900–1909</td>
<td>The “non-oral” method is introduced.</td>
<td>Peripheral difficulties, such as injuries during birth, are postulated by Bronner as causal factors.</td>
<td>The first edition of the Gray Standardized Oral Reading Paragraphs is published; it provides teachers with the opportunity to observe and analyze students’ reading errors.</td>
</tr>
<tr>
<td>1910–1919</td>
<td>The “non-oral” method is introduced.</td>
<td>The concept of multiple causation is introduced.</td>
<td>The first reading clinic is begun at UCLA.</td>
</tr>
<tr>
<td>1920–1929</td>
<td>The kinesthetic method is introduced.</td>
<td>The linguistic approach gains some popularity.</td>
<td>Brain damage is thought by many to be a major causal factor.</td>
</tr>
<tr>
<td>1930–1939</td>
<td>The language experience approach is developed.</td>
<td>The concept of multiple causation is considered to be most viable by many.</td>
<td>Certification of reading teachers begins in many states.</td>
</tr>
<tr>
<td>1940–1949</td>
<td>The “non-oral” method is introduced.</td>
<td>The concept of multiple causation is considered to be most viable by many.</td>
<td>The training of students’ visual perception skills is advocated.</td>
</tr>
<tr>
<td>1950–1959</td>
<td>The “non-oral” method is introduced.</td>
<td>The concept of multiple causation is considered to be most viable by many.</td>
<td>The concept of multiple causation is suggested to replace many diverse labels for the same general condition.</td>
</tr>
<tr>
<td>1960–1969</td>
<td>The “non-oral” method is introduced.</td>
<td>The concept of multiple causation is considered to be most viable by many.</td>
<td>The concept of multiple causation is considered to be most viable by many.</td>
</tr>
<tr>
<td>1970–1979</td>
<td>The “non-oral” method is introduced.</td>
<td>The concept of multiple causation is considered to be most viable by many.</td>
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</tr>
<tr>
<td>1980–1989</td>
<td>The “non-oral” method is introduced.</td>
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</tr>
<tr>
<td>Time Period</td>
<td>Suggested Causes of Reading Disabilities</td>
<td>Instructional Approaches</td>
<td></td>
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<td></td>
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<tr>
<td>Prior to the 1800s</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1800s</td>
<td>Kussmaul suggests “word blindness” as a cause of reading disability.</td>
<td>Phonics methods become popular.</td>
<td></td>
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<tr>
<td>1900–1909</td>
<td>Perinatal difficulties, such as injuries during birth, are postulated by Bronner as causal factors.</td>
<td>Russell and Schmitt suggest a method for teaching nonreaders consisting of elaborate phonics stories and the acting out of action words.</td>
<td></td>
</tr>
<tr>
<td>1910–1919</td>
<td>The “non-oral” method, consisting of an exaggerated emphasis on silent reading, is introduced.</td>
<td>The first edition of the Gray Standardized Oral Reading Paragraphs is published; it provides teachers with the opportunity to observe and analyze students’ reading errors.</td>
<td></td>
</tr>
<tr>
<td>1920–1929</td>
<td>“Congenital word-blindness” is popularized as the cause of reading disability.</td>
<td>The first standardized reading achievement tests are used in diagnosis.</td>
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<tr>
<td>1930–1939</td>
<td>The language experience approach (LEA) is developed.</td>
<td>Much emphasis is given to emotional disturbance as a cause.</td>
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<tr>
<td>1940–1949</td>
<td>An emphasis on silent reading is prevalent.</td>
<td>The kinesthetic method is introduced.</td>
<td></td>
</tr>
<tr>
<td>1950–1959</td>
<td>Interest in LEA revives.</td>
<td>Both oral and silent reading are advocated.</td>
<td></td>
</tr>
<tr>
<td>1960–1969</td>
<td>Body management activities (e.g., walking balance beams) are suggested as remedial activities.</td>
<td>Interest in LEA subsides.</td>
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</table>

(continued)
### TABLE 1–4  Some Trends and Issues in Remedial and Clinical Reading Instruction (continued)

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Instructional Approaches</th>
<th>Suggested Causes of Reading Difficulties</th>
<th>Prevalent Assessment Techniques and Tools</th>
<th>Milestones</th>
</tr>
</thead>
</table>
| 1970–1979   | ● There is strong interest in reading instruction based on psycholinguistic research, with an accompanying emphasis on LEA.  
● Another major interest is diagnostic/prescriptive teaching.  
● There is a movement away from training visual, auditory, and motor processes. | ● Inappropriate diet is purported to be a causal factor in lay press articles.  
● An interest in the role of defective memory processes as etiology in reading disabilities is seen.  
● There is a de-emphasis on brain damage as a cause.  
● The concept of multiple causation continues to be supported by most authorities. | ● Criterion-referenced tests are widely used.  
● The Reading Miscue Inventory (RMI), devised to promote qualitative as well as quantitative judgments about reading errors, receives much attention and use.  
● The cloze procedure is considered an important diagnostic technique. | ● The National Right-to-Read Effort is begun.  
● The Education for All Handicapped Children Act is passed; this increases the number of LD classes in public schools.  
● An interactive model of the reading process is proposed by Rumelhart. |
| 1980–1989   | ● There is a heavy emphasis on techniques for improving comprehension.  
● Computer-based instruction is being used and its value debated.  
● There is interest in how reading and writing are linked. | | | |
| 1990–1999   | ● There is an interest in whole-language and literature-based instruction.  
● Interest in word recognition processes revives.  
● The Reading Recovery Program shows success with at-risk first graders.  
● “Balanced reading instruction” becomes a watchword, advocating attention both to connected text reading and to direct instruction of strategies. | ● Research demonstrates that a strong characteristic distinguishing good from poor readers is the latter’s lack of phonemic awareness.  
● The cyclical effects of a student’s reading history (or, Matthew effects) is considered to have serious impact on achievement. | ● Portfolio assessment is popular.  
● For both reading and writing, authentic assessment is advocated. | ● Marilyn Adams publishes *Beginning to Read: Thinking and Learning About Print*, providing a research base supporting phonics instruction.  
● Research specifying natural phases of word learning receives attention. |
<table>
<thead>
<tr>
<th>Time Period</th>
<th>Milestones</th>
</tr>
</thead>
</table>
              - There is interest in effects of tutoring, partly the result of the U.S. Department of Education program, America Reads.  
              - Research-based reading instruction is urged, even required, in many programs.  
              - Research support continues to build specifying lack of phonemic awareness as a major source of reading delays.  
              - Interest in neurobiological factors revives with availability of technologies such as magnetic resonance imaging (MRI) for examining brain behaviors.  
              - A dimensional model is proposed suggesting reading disability as simply a part of a normal distribution of individual differences.  
              - Statewide literacy tests are mandated in most U.S. states.  
              - Assessment practices are linked to literacy standards.  
              - Issues of testing for improvement of learning vs. testing for accountability are prevalent.  
              - Pressures to meet state and federally imposed goals for adequate yearly progress (AYP) influence curriculum.  
              - The Report of the National Reading Panel is issued providing a review of scientific research findings in reading.  
              - The No Child Left Behind Act of 2001 and its subcomponent, Reading First, shape literacy programs in schools with high percentages of low-achieving students.  
              - The Response to Intervention (RTI) initiative receives considerable attention. |
              - Participation in the Response to Intervention (RTI) educational reform movement becomes widespread. In these programs, collaboration of reading teachers and special education teachers is common practice.  
              - Increasingly, paraprofessionals are employed to tutor high-needs readers.  
              - Emphases on decoding instruction and on the strengthening of meaning vocabulary knowledge are seen, the latter especially in relation to content-area reading.  
              - The accepted view is that there are multiple reasons for reading difficulties, with particular attention during this time period to poverty, low aptitude for reading, low phonemic awareness, and failure of educators to use—or correctly interpret—findings from reading research.  
              - Mandated high-stakes testing continues as a result of government policies meant to raise reading achievement.  
              - To focus assessment on instruction to a greater degree than is typical with standardized tests, reading educators call for, and engage in, more extensive use of formative assessment tools.  
              - Two assessment consortia, the Smarter Balanced Assessment Consortium (SBAC) and the Partnership for the Assessment of Readiness for College and Career (PARCC), develop computerized testing systems that are adopted for English language arts/literacy and mathematics assessment in most U.S. states.  
              - There is large-scale use of short screening tests in response to the necessity to assess frequently in some programs for delayed readers, although other programs advocate more extensive, complete assessments.  
              - The Common Core State Standards (CCSS), developed by the National Governors Association Center for Best Practices and the Council of Chief State School Officers, predominantly pertain to normally achieving readers, but have some influence on programming for delayed readers. The CCSS advocacy for use of complex text draws fire from professionals who work with struggling readers. |

Sources: Table 1–4 draws upon numerous sources. Some of the most useful historical sources are the following: Cook (1977); Critchley (1970); Evans (1982); Hall (1970); Harris (1968, 1976, 1981); Hildreth (1965); Matthews (1966); Ribovich (1978); H. A. Robinson (1966); Scheiner and Tanner (1976); N. B. Smith (1965); Thompson (1966). For more recent years, item analyses of journal topics, as well as conference programs and presentations, provided information for developing the timeline. In this 7th edition, years 2010, 2011, 2012, and 2013 of those sources are represented in the most recent tier.
Models of the Reading Process

Reading researchers have attempted to learn what our brains do to recognize words, combine them into sentences, and understand messages from written language. These researchers have developed "models" to explain their conclusions. The term reading model can mean a verbal explanation of the reading process or a diagram to clarify that verbal explanation.

Many believe that understanding these processes is crucial to solving the problems of low literacy. Several models are presently considered important.

Cognitive-Processing Models

The term cognitive derives from the word cognition, which refers to thinking. Cognitive-processing models attempt to explain how thinking processes allow us to know that little lines, squiggles, and shapes on paper represent specific words, thus enabling us to read.

Using Illustrative Aids. Many students consider information on reading models to be complex. Note that the Rumelhart model, discussed in the following section, is illustrated in an accompanying figure. Use the illustration. Preview the illustration. Then read the text and examine the illustration in more detail as you read and study the section on the model. Encourage your own students to use illustrative aids to bolster their understanding.

The Rumelhart Model. In 1976, David Rumelhart proposed an interactive model now widely accepted in the literacy profession.

Several older "serial" models previously had described text processing as occurring in serial steps, one after the other, with no immediate interaction among the steps. The serial models were divided into two types, and these have significance for understanding the Rumelhart model. One type, bottom-up models, suggested that a reader starts with smaller elements of language (such as letters and words) and goes up to larger portions and meaning. The second type, top-down models, described readers moving in the other direction, starting first by predicting meaning and then identifying words.

In contrast, Rumelhart’s model proposes that readers begin word identification and predict meaning at the same time and that lower-level processes (word identification) and higher-level processes (meaning) help each other. Thus, the model is designated “interactive.”

As you read the following explanation of the interactive process that Rumelhart proposed, also refer to Figure 1–2, which illustrates the process. In this model, the lines, squiggles, and shapes making up print (the “graphemic input”) are registered in the brain’s “visual information store,” a temporary storage place for lines and squiggles. While there, graphemic input is acted on by a “feature extraction device.” It determines the features (i.e., lines, circles, and positions or combinations of these) that identify what particular ink marks on the page represent; for example, a long line with a little humpy-thing next to it represents an “h.” Next, a “pattern synthesizer” acts on these features, using four knowledge sources, simultaneously. These are the reader’s syntactical knowledge (intuitive knowledge of sentence patterns based on the reader’s knowledge of oral and written language), semantic...
knowledge (knowledge of concepts), orthographic knowledge (knowledge of letters, spelling patterns, and sounds), and lexical knowledge (knowledge of word meanings)—all used to get at meaning (i.e., the most probable interpretation).

Many reading professionals agree that bottom-up and top-down models do not explain things we know to be true about the reading process, and experimental findings seem to confirm that the process is interactive.

**Practical implications.** Programs should emphasize both word identification and meaning because lower-level and higher-level processes aid each other. Because some decisions are based on knowledge of print structures, students need abundant opportunities to read; the more students read, the more efficient their print and meaning predictions can be.
Orthographic and lexical knowledge are important, but students also have syntactic knowledge, based on their use of oral language, that can assist in encounters with printed text. One must remember, however, that although there are more similarities than differences, written syntactic structures do vary somewhat from oral language patterns. Therefore, teachers should attempt to increase students’ knowledge of written language patterns. One way to do this is by reading to them.

For semantic knowledge to be accessible, meanings must be stored in the student’s background knowledge. Students can add to their store of meanings through direct experiences, discussions before reading, vicarious experiences (such as viewing pictures and other audiovisuals), and reading. Instructional strategies should lead students to apply their prior knowledge when they are reading.

**Applying What You’ve Learned.** What practical applications might the Rumelhart model suggest for use in your own classroom? Consider this question for the other models you read about in the following sections.

**The Stanovich Model.** Keith Stanovich (1980) proposed an interactive-compensatory model that has significance for delayed readers. Agreeing with Rumelhart that reading involves interactions of several knowledge sources, the added term *compensatory* extends that view. Stanovich advanced the notion that when there is a deficit in any of these knowledge sources, the reader compensates by using one or more of the others. As an illustration, Stanovich uses this frequently seen example: a poor reader, deficient in automatic word recognition (orthographic and lexical knowledge), turns to context clues (based on syntactic and semantic knowledge). This reader guesses unknown words based on what would seem correct—in terms of sentence patterns and in terms of meaning—as suggested by words that are known. In this case, context clues compensate for limited word knowledge. At some stages of learning, using one knowledge source to compensate for another at least allows readers to work their way through text.

However, in relation to this example, Stanovich believes his model explains individual differences in reading fluency and comprehension. He cites studies showing that poor readers use context more than good readers, and as a result have slower word recognition times as they guess their way through printed material. Conversely, good readers are more proficient in context-free word recognition (i.e., they recognize words immediately on sight) and have more effective phonological decoding skills (i.e., they easily use letter sounds to identify words). Both factors produce fluent reading. Proficient word recognition also may account for good readers’ superior comprehension: Because less attention is needed for word identification, more is available to focus on meaning.
Practical Implications. The interactive-compensatory model suggests that readers need a variety of knowledge sources to call on and also implies that readers must be flexible in strategy use. If one strategy does not work, students should ask themselves, “What could I try next?” and “What other information could help me?”

If poor readers are to become good readers, they must eventually learn to recognize words automatically. Moreover, during reading stages in which many words are still unknown, adept use of phonic and structural analysis strategies is an aid to fluent reading. Students should master these strategies so undue attention to word recognition does not detract from gaining meaning.

A Sociocognitive-Processing Model

Sociocognitive-processing models not only consider thinking processes, as the Rumelhart and Stanovich models do, but also take into account “social” factors related to learning. In this case, the designation social refers to environmental influences (sometimes called “contextual influences”) that affect understanding.

The Ruddell and Unrau Model. Whereas the two previously discussed models center largely on word recognition/word identification, the Ruddell and Unrau (2013) reading model focuses on processes for obtaining meaning from text. This model looks at several interacting elements in the learning environment: (a) the reader, (b) the teacher, and (c) the text and classroom context. The model suggests the following.

The Reader. The reader’s own knowledge-construction processes are important for obtaining meaning from text (see Figure 1–3). The term construction in this description is used to indicate that readers mentally engage in activities to build, develop, and “get at” meaning. Knowledge construction involves cognitive strategies such as purpose setting, planning, and organizing (e.g., the reader might, instinctively or deliberately, adopt different reading strategies depending on whether the text is a story or informational material). The reader’s knowledge-construction activities lead to tentative interpretations of what the text means.

However, that knowledge control also is affected by knowledge monitoring; that is, consciously or unconsciously, preliminary interpretations may be affected by the reader’s prior beliefs and prior knowledge. These preexisting factors include affective conditions (such as sociocultural values) and cognitive conditions (such as language knowledge). Based on these factors, readers may confirm or reject their initial interpretations.

The Teacher. The teacher’s beliefs and knowledge, which have critical impact on learning conditions, come into play through a variety of factors, such as instructional philosophy and familiarity with content areas. These influence the teacher’s cognitive strategies of purpose setting, planning, and organizing, which, in turn, influence strategy construction—that is, the selection or development of teaching strategies the teacher perceives to be relevant to a lesson’s goal and learners’ needs. The teacher may monitor and, if necessary, reconstruct activities if, based on that teacher’s standards, sufficient understanding is not occurring.

The Text and Classroom Context. There are additional interacting factors through which comprehension is mediated, beginning with the presence of the text that provides ideas and information, but also incorporating discussions and exchanges of interpretations with others in the classroom learning community (teacher and classmates).
Practical Implications. Numerous classroom suggestions are implied by the Ruddell-Unrau model. For example, readers should review their existing knowledge about a topic to build understanding of new content; teachers should monitor their instructional decisions; and others. However, most important is the concept of negotiation of meaning among the teacher and classmates. Exchange of meaning interpretations among all in the classroom community extends comprehension because considering divergent points adds to richness of understanding, dispels misconceptions, and provides new meanings from which to draw in the future.

A General Learning Theory with Implications for Reading

Vygotsky’s Model of Learning. Although not a reading model, Vygotsky’s (1978) learning theory is influential among literacy educators. Of particular interest is his notion of a zone of proximal development, a developmental area where tasks are slightly harder than what students can do by themselves.

Figure 1–4 illustrates this zone of proximal development within a learning continuum. The “easy” end represents what a student can do independently;
instructional time spent here is not particularly productive because the student has these understandings under control. The “hard” end of the continuum represents tasks presently far beyond the student’s capabilities. Between these is the zone of proximal development, the area where Vygotsky contended that maximum learning occurs—an area where the student is ready to learn, if given assistance.

Vygotsky believed that a distinct type of assistance is needed, however, a type now called scaffolding. In the house-building trades, scaffolding temporarily supports a house under construction; in scaffolded instruction, the teacher temporarily supports the learner until independence is achieved in learning a strategy or accomplishing a task (Pressley, 2002). To scaffold learning, the teacher determines a student’s present skill level or understanding, then guides the student through lessons at a level just slightly above what he or she can do independently. As the student approaches independence, the teacher increasingly releases more responsibility to the student. Following this pattern, the student is guided gradually upward to higher and higher levels of achievement.

The form of scaffolding most commonly advocated is what Clark and Graves (2005) call “moment-to-moment verbal scaffolding” in which teacher prompts may spontaneously vary in reaction to student responses during ongoing instruction. Whenever possible, the teacher does not supply solutions to tasks but leads students to discover solutions. The teacher may (a) model appropriate behaviors, (b) contribute cues about specific elements or strategies, and (c) urge students to think through problem-solving action plans.

Another important aspect of Vygotsky’s learning theory proposes that developmental levels are not predetermined by student age or intellectual ability. Vygotsky believed that careful student–teacher interactions can advance the levels at which most students operate.

**Draw a Schematic.** Research shows the effectiveness of schematic diagrams for enhancing comprehension. Now is an ideal time to try this strategy by drawing a simple diagram to illustrate written text information. Schematics accompany three of the models discussed. Draw your own schematic of the Stanovich model.
Reflections

This section, titled Reflections, ends most chapters. It is designed to involve you in decision-making activities related to the chapter content.

Cognitive research indicates that collaborative learning is helpful when concepts are novel and complex. This is a technique you can use with students in your own classroom. For now, try this yourself. Divide into teams of two. Each team should discuss a reading model presented in this chapter by doing the following.

1. Discuss each step until both partners understand it.
2. Now that you’ve dealt with details, think about what the main assumptions are that the model maker(s) believes underlie reading processes. Develop a short list with your partner.

LEARNING OUTCOMES AND SUMMARIES

1.01 Educational Initiatives
Identify recent major initiatives related to literacy instruction and discuss important characteristics of each.

- Major recent literacy-related initiatives include the Common Core State Standards (CCSS) and Response to Intervention (RTI). The focus of CCSS is on creating a clear and detailed set of Standards for student achievement at each grade level so that students have the skills they need to read and comprehend the complex texts they will encounter in college and the workplace. RTI is based on early identification of students at risk of failing to learn to read and write. This approach replaces a discrepancy model of identification (difference between potential and actual reading ability) with a three-tiered assessment and instruction plan that begins with research-based classroom intervention and moves to more individualized and more skilled instruction for students who are not fully responsive at earlier tiers. A significant advantage of this approach is that students receive support very early on; services are not delayed while students wait to be formally tested for the presence of a learning or reading disability.

1.02 Types of Reading Programs
Distinguish among the several types of reading programs as they relate to students with different abilities and needs. Identify common instructional components across all of them.

- A developmental program is meant for most school-aged students performing at grade level in the regular classroom. Corrective instruction is provided by classroom teachers to students who have mild delays in learning to read and write. In a remedial program, teachers trained to work with struggling readers deliver instruction to students in small groups or individually, usually away from large classes. Clinical instruction is meant for students with severe reading and/or writing delays. Assessment is more intensive and extensive, and instruction is highly individualized, almost always in a one-to-one setting with a trained specialist or by a tutor working under the careful direction of a clinical supervisor. Although these programs typically differ in individualization and pace, they all address significant components of skilled reading: phonemic awareness, phonics, automatic word recognition, fluency, meaning vocabulary, and comprehension. Most solid instructional techniques are usually appropriate for all learners.

1.03 Roles of Reading Specialists
Define the term reading specialist and describe some of the roles that reading specialists might perform.

- The term reading specialist is now often defined as referring to a person specially trained to work with struggling readers and writers. This training typically involves graduate education, and often certification, focused on assessment and instruction of literacy problems. When additional responsibilities include working with classroom teachers to improve their instruction, these specialists are often called literacy coaches. Reading specialists and literacy coaches are often expected to assume leadership roles in choosing approaches to assessment and instruction implementation at the school and/or district level.

1.04 Important Definitions
Discuss the use of various terms used to describe struggling readers. Explain the differences between categorical models and a dimensional approach.

- Different professions have a tendency to describe struggling readers in different ways depending on the perspective and history of that profession. Reading educators formerly used disabled reader/reading disability more frequently as basic terms for literacy problems, but have moved toward more
CHAPTER 1  Basic Concepts and Definitions in Reading  31

descriptive terms like delayed or struggling readers. Learning disabled (LD) educators (special education) have used learning disabled and reading disabled because the vast majority of students diagnosed as learning disabled are categorized that way based on a reading problem. Educational psychologists use similar labels, but recently have included the term garden-variety poor readers to describe students whose reading problems are believed to be experientially based and more readily responsive to well-designed instruction. Medical personnel are more likely to use a categorical term like dyslexia, which implies a biological base to the problem. Reading educators are less likely to use dyslexia because of conflicting definitions of the term, although it still is used somewhat frequently by LD educators and educational psychologists.

In a categorical model readers are placed into specific categories of disability based on specific characteristics such as problems with phonological processes or difficulty mastering other literacy skills, (i.e., spelling and writing). In a dimensional approach the focus is on differences, not defects, and difficulty is seen as on the lower end of a bell-shaped curve describing the variability of human behaviors. In this model the focus is to describe the problem rather than label the child.

1.05 The Incidence of Reading Delay

Explain why consistent estimates of students with serious reading delays are hard to obtain.

Such figures are hard to obtain because criteria for determining which students should receive special services vary from place to place. For example, some districts might use a 1-year difference between grade level and reading performance on a certain standardized test, whereas others might use a larger discrepancy or an easier or more difficult test. In addition, concentrations of struggling readers may be different in different areas. Students in inner-city communities are more likely to participate in federally funded remedial programs than students in wealthier suburban areas.

1.06 Milestones in the History of Remedial and Clinical Reading Instruction

Discuss why reading educators should have at least a basic knowledge of the history of remedial and clinical reading instruction.

Being knowledgeable about the history of remedial and clinical reading instruction can provide reading educators with useful information for judging current perspectives and approaches. Many ideas have resurfaced at various times in the history of the field. By knowing that history, informed educators are more able to judge which ideas are likely to be helpful and which have proved unsuccessful and/or misleading.

1.07 Models of the Reading Process

Explain how different models of the reading process view that process from different perspectives. Discuss the practical implications of each model for reading instruction.

Cognitive models focus on how the brain works in making sense of the marks on the page. There are top-down, bottom-up, interactive, and compensatory cognitive models. A top-down model places greatest emphasis on what knowledge the reader brings to the task and using that knowledge to unlock meaning; a bottom-up model emphasizes the importance of building up from smaller to larger segments of language—from grapheme–phoneme relationships to individual words to larger segments of meaning. An interactive model proposes that readers work on word recognition and meaning simultaneously and that bottom-up and top-down processes support each other. An interactive-compensatory model focuses on the importance of automatic word recognition and the need of poor readers to build this skill, so that the use of compensating strategies to resolve word recognition problems does not detract from focusing on meaning. A sociocognitive-processing model considers the relationships among the reader, teacher, text, and classroom context in the construction of meaning.

In a bottom-up model priority is given to building phonemic awareness and phonic skills to support word recognition. In a top-down model the emphasis is first to build syntactic, semantic, and contextual knowledge so that readers can use the power of prediction to create meaning. Individual words function to confirm meaning rather than create it. Words are learned primarily in context, so language and context skills are emphasized. In interactive models there is a recognition that both print and language skills need to be developed equally and at the same time. In an interactive-compensatory model, automatic, fluent word recognition is especially important. Students are encouraged to be flexible in using a wide variety of strategies, but when the number of known words is low, teachers help build student phonics and structural analysis strategies as a way to increase automatic word recognition. In a sociocognitive-processing model, it is especially important to review existing knowledge and establish a purpose for meaning. Sharing individual perspectives on a text helps build deeper and richer understanding, so that it is also especially important that readers have the opportunity to share their interpretations and points of view to learn from and with each other.

Although not a theory of the reading process, Vygotsky’s model of learning has important implications for reading instruction. Instruction is most effective when done in the zone of proximal development, that is, with materials and activities that pose a reasonable challenge for the learner. Teachers promote learning by scaffolding or supporting readers as they tackle material that is beyond their comfort level. As the reader becomes more successful, the teacher gradually increases student responsibility and also moves the zone to more difficult material. Teachers use pre-reading, during-reading, and post-reading exercises to support comprehension.