Sixth Edition

Assessing & Correcting
Reading and Writing Difficulties

Thomas G. Gunning

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Pearson

To Joan, my wife and best friend, with love and
gratitude for our many happy years together

Ⓟ **Pearson**

About the Author

THOMAS G. GUNNING has taught courses in methods of teaching reading and writing for more than 20 years and was director of the Reading Clinic at Southern Connecticut State University. Before that, as a secondary English teacher, a reading specialist, and an elementary school reading consultant, he worked extensively with achieving and struggling readers and writers.

Over the years, Dr. Gunning's research has explored reading interests, informal reading inventories, decoding strategies, readability, higher-level literacy skills, response to intervention, and the use of digital technologies to build literacy. As a result of his research, he has created a number of informal assessments and programs for developing decoding and comprehension skills.

As a well-known and highly regarded textbook author, Dr. Gunning has written and revised such titles as *Creating Literacy Instruction for All Students,* Ninth Edition (ISBN 0133846571); *Developing Higher-Level Literacy in All Students: Building Reading, Reasoning, and Responding* (ISBN 0205522203); *Closing the Literacy Gap* (ISBN 020545626X); *Building Literacy in the Content Areas* (ISBN 020545626X); *Best Books for Building Literacy for Elementary School Children* (ISBN 0205286259); and *Building Words: A Resource Manual for Teaching Word Analysis and Spelling Strategies* (ISBN 0205309224)—all published by Pearson Education. Dr. Gunning is also the author of a number of children's books, including *Dream Cars* (Dillon Press) and *Amazing Escapes* (Dodd, Mead) and an intervention program for students experiencing difficulty learning decoding skills. The program is entitled *Word Building, A Response to Intervention Program* (Galvin Publishing/Phoenix Learning Resources).

Contents

Preface

Although *Assessing and Correcting Reading and Writing Difficulties,* Sixth Edition, is grounded in theory and research, it is above all a practical text. It describes in careful detail how to assess students and how to use assessment results to screen students, monitor progress, and provide effective instruction. More than 40 sample lessons, covering virtually every major skill or strategy, are presented. The lessons are described in an easy-to-follow, step-by-step fashion. The emphasis in the text is on teaching students strategies that they can use independently for developing skills in word recognition, vocabulary, comprehension, reading in the content areas, writing, spelling, and studying.

Recognizing that one reason low-achieving readers fall behind is that they typically read less than their higher-achieving peers, the text provides numerous suggestions for books and real-world and digital materials that can be used to provide additional reinforcement or that students might want to read for enjoyment. Because low-achieving readers read below grade level, books, periodicals, and websites that are easy to read yet appealing to older students have been emphasized. Recognizing, too, that low-achieving readers and writers need a lot of practice, the text contains numerous suggestions for reinforcement activities.

To make the text as concrete as possible, numerous examples are presented of low-achieving readers being assessed and instructed. Most chapters also present an Exemplary Teaching box, which is a vignette of especially effective instruction, and a Mini–Case Study, which exemplifies the major principles explored in that chapter.

Plan for the Text

The first portion (Chapters 1–2) of the text provides an overview of reading and writing difficulties and a summary of the factors that contribute to reading and writing problems. The second section (Chapters 3–6) presents ways of assessing the strengths and weaknesses of low-achieving readers and writers. The third section of the text (Chapters 7–10) features a chapter on improving emergent literacy skills (Chapter 7), with an emphasis on phonological awareness, along with chapters on phonics, high-frequency words, and fluency (Chapter 8), and syllabic analysis, morphemic analysis (meaningful word parts), contextual analysis, and dictionary skills and strategies (Chapter 9). The section ends with a chapter on developing vocabulary (Chapter 10).

The fourth portion of the text (Chapters 11–12) is devoted to understanding the written word and includes chapters on general comprehension and reading in content areas (together with study skills). The last section of the text (Chapters 13–15)

explores writing strategies (Chapter 13) and intervention programs for students, with a section on helping students who have severe word-learning problems (Chapter 14). Chapter 14 also describes programs for older problem readers and programs for students who are English learners. The text concludes with a chapter on organizing a program for low-achieving readers and writers, including providing for materials, voluntary reading, and technology (Chapter 15). Suggestions are made throughout the text for implementing response to intervention (RTI) and also for preparing students to be college- and career-ready.

With its broad coverage, detailed lessons, and numerous suggestions for reinforcement, it is my hope that this text will be both a practical guide and ready reference for teachers who work with low-achieving readers and writers.

Changes to the Sixth Edition

Since the appearance of the fifth edition of this book, electronic texts and devices have become more advanced and more widely available, and in many instances they provide tools that enhance accessibility and instructional potential. Emphasis has been put on describing appropriate e-texts and electronic interventions and blended learning programs that would be of special benefit to struggling readers and writers. Also more readily available are databases of digital text, including electronic copies of dozens of children's and young people's periodicals, which are available at no charge from school, local, and state libraries. These treasure troves of materials, which include periodicals and other texts specifically designed for struggling readers and writers, are emphasized in this edition.

With discussions of executive functioning, growth mindset, and self-efficacy and the importance of choice and interest, there is an increased emphasis on combining will with skill. Also emphasized in the sixth edition is the need to provide struggling readers and writers with research-based approaches and programs, such as deliberate practice, that will assist them in narrowing the literacy gap and approaching college and career readiness as mandated by the recently passed Every Student Succeeds Act.

One of the biggest changes has been revising the text so that it is now in digital format. The digital text features a Check Your Understanding quiz for each section of each chapter—some 71 quizzes—and video clips—a total of 86—that illustrate assessment and instructional techniques and feature advice and explanations from experts in literacy and related fields. Providing strategic stopping places for students to quiz themselves and receive feedback on their responses, the Check Your Understanding quizzes should foster both increased understanding and retention.

As with previous revisions, this edition also contains updated information and research as well as the additions and revisions listed below.

Chapter 1

- Additional information about RTI
- Information about the Every Student Succeeds Act and its implications for struggling readers and writers
- Description of delayed readers
- Extension of discussion about dyslexia
- Use of deliberate practice to help struggling readers and writers catch up
- Explanation of Section 504 of the Rehabilitation Act

Chapter 2

- Additional information about the functioning of working memory
- Explanation of the role of executive functioning in attention deficit
- Additional information about self-efficacy
- Explanation of growth mindset

Chapter 3

- Expanded information on assessing for learning
- Expanded information on adaptive testing

Chapter 4

- Expanded information on running records
- Use of adaptive tests to place students
- Using portfolios to monitor progress

Chapter 5

- Discussion of additional tests for assessing foundational decoding skills

Chapter 6

- Discussion of the WISC-V and its role in planning an intervention
- Discussion of Woodcock-Johnson IV

Chapter 7

- Discussion of prevention programs in early childhood instruction
- Additional information about sources of materials for shared reading
- Descriptions of additional assessments for preschool and primary grades
- Use of technology in prevention and intervention programs in preschool and primary grades
- Use of periodicals in prevention and intervention programs in preschool and primary grades

Chapter 8

- Information about integrating instruction in consonant and vowel correspondences
- List of additional books and children's periodicals for reinforcing phonics
- Listing of digital programs to reinforce phonics
- Additional information about teaching high-frequency words

Chapter 9

- Additional information about syllable types
- Explanation of spelling-by-syllables as a technique for learning syllabic analysis
- Additional examples for reinforcing morphemic analysis
- Explanation of the Word Mapping Strategy for morphemic analysis
- Use of glossaries in electronic texts

Chapter 10

- Additional information about vocabulary activities
- Using periodicals and ebooks to build vocabulary
- Explanation of Rewordify, a device for teaching meanings of difficult words in a text
- Explanation of Word Generation program for developing academic language

Chapter 11

- Discussion of standard of coherence
- Additional information about using summarizing techniques
- Description of Bloom's revised taxonomy
- Additional information on sentence comprehension

Chapter 12

- Explanation of SMARTER, an approach to teaching content-area subjects
- Comparison of levels of texts widely used in schools and students' reading levels
- Descriptions of Social Studies Generation and Science Generation, programs that bolster the reading proficiency of middle schoolers

- Using online and print periodicals
- Using databases and websites
- Description of the Strategic Adolescent Reading Intervention, a program for middle schoolers
- Information about composing constructed responses

Chapter 13

- Building well-constructed sentences
- Additional information for writing narrative texts
- Additional information about Cognitive Strategy Instruction in Writing
- Keyboarding and word-processing skills

Chapter 14

- Intervention programs for older students
- Electronic intervention programs
- Additional information about the importance of independent reading by struggling readers

Chapter 15

- Professional learning communities
- Using electronic programs to extend learning
- Need for instruction and guidance when using technology

Supplements for Instructors and Students for the Sixth Edition

The following resources are available for instructors to download on **http://www. pearsonhighered.com/educators**. Instructors enter the author or title of this book, select this particular edition of the book, and then click on the "Resources" tab to log in and download textbook supplements.

- *Instructor's Resource Manual and Test Bank*

  The Instructor's Resource Manual and Test Bank includes a wealth of interesting ideas and activities designed to help instructors teach the course. Each chapter includes a chapter-at-a-glance grid, the chapter purpose, underlying concepts, student objectives, activities and discussion questions, and test questions for each chapter.

- *TestGen*

  TestGen is a powerful test generator that instructors install on a computer and use in conjunction with the TestGen testbank file for the text. Assessments, including equations, graphs, and scientific notation, may be created for both print or testing online.

e-Text Enhancements

This book is available as an enhanced Pearson e-text* with the following features:

- Video Margin Notes are available throughout the sixth edition. Three to five videos are included in most chapters. In these videos, students will listen to experts, watch footage of diverse classrooms, and listen to and watch effective teachers talk about and practice strategies that promote learning.
- Check Your Understanding quizzes. Using short-answer questions, the quizzes allow readers to review their knowledge of the concepts, research, strategies, and practices discussed in each section.

*Please note that eText enhancements are available only in the Pearson eText, and are not available in third-party eTexts such as VitalSource or Kindle.

Acknowledgments

Introduction to Literacy Difficulties

1

USING WHAT YOU KNOW

This chapter serves as an overview and introduction to a complex topic: reading and writing difficulties. Before reading the chapter, think about the knowledge you bring to the topic, so that you will be better prepared to interact with the information presented. Have you read books or articles on reading and writing difficulties? Do you remember from your school days what steps were taken to help those classmates who struggled with reading or writing? If you are teaching now, think about students of yours who may have difficulty with reading or writing. What problems are they manifesting? How are these students being helped?

After reflecting on your knowledge of the topic, complete the Anticipation Guide that follows. The Guide is a device that will help you interact with the chapter's main concepts. Most of its statements are open-ended and often do not have any right or wrong answer; they are designed to help you explore your beliefs and attitudes. They can also help indicate topics about which you might need additional information. The Anticipation Guide is also a device teachers can use with their students. Suggestions for teaching the Anticipation Guide are presented in Chapter 12.

ANTICIPATION GUIDE

Read each of the following statements. Put a check under "Agree" or "Disagree" to show how you feel about each. If possible, discuss your responses with classmates.

	AGREE	DISAGREE
1. A problem reader is one reading below his or her grade level.	_____	_____
2. In most instances, reading problems can be prevented.	_____	_____
3. Most cases of reading difficulty should be handled by the classroom teacher.	_____	_____

4. Low-achieving readers need to have tasks broken down
   into their components.   _____   _____

5. There is no one best approach for working with
   low-achieving readers.   _____   _____

▦ The Nature of Reading Difficulties

There are many ways of defining reading difficulty, but the most telling definition was uttered by Awilda, a fourth-grader in a large urban school. Asked how school was going, she replied, "I got trouble with my reading."

Counting the extra year spent in second grade, Awilda had received more than four years of formal instruction in reading. However, despite having average intelligence, she was reading only on an early first-grade level. Although she had a stable personality, a caring family, and dedicated, highly competent teachers, she was reading at a level far below what might reasonably be expected. Intervention attempts, including one-on-one instruction, had failed to help her. Further, Awilda's difficulty was interfering with her functioning both in school and the larger society. She lacked the skills necessary to read the literature, social studies, and science selections typically required of a fourth-grader. Outside school, she was unable to read the letters her grandmother sent from Houston, decipher the ads on cereal boxes, or engage in any of the literacy tasks fourth-graders might encounter. Worst of all, Awilda's self-esteem was being eroded.

Awilda was manifesting a reading difficulty in several related but different ways. There was a discrepancy between her overall cognitive ability and reading achievement. Although she had average ability, she was reading well below grade level. And her lack of reading ability was interfering with the demands made by her life circumstances. Awilda was evidencing a functional difficulty. In addition, when provided with extra help, first by the classroom teacher and then by the reading specialist, who implemented an intervention approach that worked with most students, she failed to make progress and was recommended for additional assessment and a more intensive intervention. Currently there is an emphasis on preparing all students to be college- and career-ready by the time they graduate from high school. Given her current level of achievement, Awilda was not on track to become college- or career-ready.

A New Approach to Identifying Reading Disability

A problem with the discrepancy concept is discussed in this video. Why might it take several years for disabled readers to be identified?

https://www.youtube.com/watch?v=hgj2sqXtr6U

A sizable discrepancy can be a sign of a severe difficulty. Badian (1997) found that students with large gaps between ability and achievement had a greater number of deficits.

Until the reauthorization of the Individuals with Disabilities Education Improvement Act (IDEA) in 2004 (IDEIA, 2004, PL-108-446), a **discrepancy** definition was used to identify students with learning disabilities (LDs). (About 80 percent of students judged to have LDs receive their classification because of a reading disability.) According to a discrepancy definition, students were said to have a learning disability if there was a significant difference between their measured ability and their achievement. Because the difference needed to be a large one for classification purposes, identification of a learning disability wasn't made in many instances until students were in third or fourth grade. It took that long for students' performance to lag sufficiently so there was a significant difference. In addition, there was controversy around the measuring of ability. One issue was that students with LDs learn less and so perform more poorly on tests of academic ability. There was also the question of the cultural fairness of ability tests.

Now school districts no longer have to adhere to a discrepancy definition but may if they choose to. With IDEA, they may be identified through **response to intervention (RTI)** complemented by other indicators or measures. The change in the way students are identified as having LDs is influencing the way that all reading difficulties are identified.

RTI is a commonsense approach in which struggling students are offered increasingly intensive additional instruction. This is typically a three-tier process. In Tier I, the student is given high-quality instruction in the regular general education program and may be given added help by the classroom teacher. If the student continues to lag behind, he or she is given supplementary instruction (Tier II)—usually in a small group. If the student still fails to make adequate progress, a more intensive intervention program is provided (Tier III). Placement in special education might be considered.

The advantage of the RTI approach is that the focus is on prevention and remediation, rather than on waiting for the student to fail. Under RTI, all students benefit. RTI emphasizes improving the classroom program and offering extra help to all students who are struggling. With high-quality classroom instruction, then supplementary instruction, and finally intensive instruction, most students will make progress (Vellutino et al., 1996; Vellutino, Scanlon, Small, & Fanuele, 2006; Vellutino, Scanlon, Zhang, & Schatschneider, 2008). However, Berninger and O'Malley (2011) recommend conducting a diagnosis along with RTI, especially if students have severe problems: "The disadvantage of RTI is that it does not pinpoint, that is, diagnose why an individual failed to respond to instruction and identify how any teacher in general or special education might adapt instruction so that the individual begins to respond to instruction" (p. 168). It is also important that RTI be of sufficient duration and intensity. Tier II struggling first-graders in a 14-week, three-times-a-week program made encouraging progress and outperformed similar students provided only Tier I instruction (Gilbert et al., 2013). However, 41 percent still scored below average on word reading tests. The students scoring below average needed a longer program. Tier III students had the same program as Tier II students and also were taught one on one, five days a week. However, they did not outperform Tier II students. Having greater needs, Tier III students needed a more intensive program than Tier II students.

Clarifying the Discrepancy Concept

Despite the shift to an RTI approach for identifying students with reading difficulties, each reader's intellectual capacity and/or language development should be taken into consideration. Theoretically, students should be able to read at a level equal to their intellectual capacity or level of oral language development. Gifted students should be expected to read above grade level because their capacity is above average (Rosenberger, 1992). On the other hand, a student with intellectual disabilities would not be expected to read at grade level when her or his capacity is well below average. In one study, students with IQs between 56 and 69 needed three years of intensive instruction before achieving an end-of-first-grade reading level. Students with IQs between 70 and 80 required one and a half years to make a year's gain (Allor, Mathes, Roberts, Cheatham, & Otaiba, 2014).

Students with below-average intelligence are often denied corrective services because it is believed that diminished intellectual functioning is the cause of their reading problem. However, if a student with an intellectual disability is reading below the level indicated by his or her listening and/or cognitive ability test, that student is demonstrating a reading problem. In a sense, a struggling reader is one who is reading below intellectual capacity or oral language development.

Traditionally, discrepancies have been described in terms of students reading one or more years below their capacity—for instance, an average fifth-grader reading at a third-grade level. In many programs, discrepancies were expressed in **standard deviations**. A standard deviation is a measure of the degree to which a score is above or below average. For placement in programs of students with serious reading disabilities, many states set the discrepancy at 1.5 standard deviations between performance on a test of academic ability and a test of reading

achievement (Snow, Burns, & Griffin, 1998). This is a very large difference and explains why discrepancies that meet the criterion for placement take so long to show up. Using RTI is a better procedure than using large discrepancies for identi-fication of a reading disability. However, being aware of the discrepancy between a student's cognitive and/or language ability and reading achievement can be diag-nostically helpful, as long as the information is used judiciously. Judicious use of the discrepancy approach means being aware of some of the shortcomings of measur-ing cognitive and language ability. The fairness of intelligence tests has been called into question, as IQ tests tend to discriminate against students from lower socioeco-nomic groups. Since IQ scores, at least in part, reflect the environment in which students grow up, students from disadvantaged environments tend to score lower on them (Siegel, 1998).

One solution to the IQ controversy has been to use listening tests as measures of students' potential (Badian, 1999; Catts, Kamhi, & Adlof, 2012). Listening com-prehension is the level of material that students can understand when the material is read to them. If a student's listening comprehension is at a fifth-grade level, and he or she is reading on a first-grade level, there is a four-year discrepancy between listening capacity and achievement.

However, in both listening and intelligence tests, there is the issue of the confu-sion of cause and effect. Because poor readers are unable to fully utilize reading, which is a major source of intellectual and language development, they may do less well on verbal intelligence and listening tests (Stanovich, 1991). Through wide reading, verbal abilities such as word knowledge and using and comprehending language are fostered, so that the reading process actually makes students smarter (Stanovich & Cunningham, 1992). As Siegel (1998) notes, "It is a logical paradox to use IQ scores with learning disabled children because most of these children are deficient in one or more of the component skills that are part of these IQ tests and, therefore, their scores on IQ tests will be an underestimate of their competence" (p. 128).

Some students may have a discrepancy because of an internal characteristic that makes it difficult for them to learn. Others may have a discrepancy because of illness, absenteeism, a mismatched reading program, or high mobility. Recently, I worked with a fourth-grader reading at a first-grade level who scored slightly above average on a test of cognitive ability. She easily met the discrepancy definition. However, when instructed, she learned word-analysis skills easily and made rapid progress. Her family had moved often, so the student had missed large chunks of school. When her family finally settled down and she attended the same school for a sustained period of time and was given an appropriate program, she made rapid progress. On the basis of an RTI approach, she did not have a serious reading disability.

Functional Definition

Many programs also use a **functional** definition in identifying problem readers. They simply provide instruction for the lowest achievers in reading. All states now administer reading achievement tests in grades 3 through 8 and in high school. In many areas, students who fail to reach a designated cutoff score are provided with intervention, regardless of ability. Reading Recovery, a highly successful program designed to boost the reading performance of low-achieving first-graders, provides intensive one-on-one instruction for those students identified as being in the bot-tom 20 percent of reading achievement. Again, academic aptitude is not a factor. All students within the lowest 20 percent are provided with assistance. Although the functional approach may overlook some bright underachievers, it provides added help for the poorest readers, regardless of any labels that may have been attached to them. In some programs, students whose reading achievement is 1.5 standard devi-ations below grade level are designated as in need of intervention. This would

consist of 9 percent of the population. Similarly, some systems use a benchmark or proficiency definition. A student is labeled a struggling reader if he fails to read at a certain level.

Another way of looking at reading difficulty from a functional approach is to judge whether it interferes with the reader's life circumstances. Does it hinder her or him from engaging in reading and writing activities that others in similar circumstances encounter? Awilda was unable to text her grandparents or complete her schoolwork. For high school students, it might take the form of reading so slowly that they cannot keep up with outside reading assignments.

From a practical point of view, current emphasis in literacy education is preparing all students to be college- and career-ready (Every Student Succeeds Act, 2015). Every state is required to adopt challenging academic standards, but it is not required to submit these to the Secretary of Education for approval. This provides states with flexibility. However, the states are also mandated to demonstrate that the standards are aligned with entrance requirements for credit-bearing courses in the state's higher education system and career and technical educational standards. States are also free to select or create assessments aligned with the standards, but should assesses "higher-level thinking skills and understanding." A number of states have adopted the Common Core State Standards (CCSS), which are designed to prepare every student to be college- and career-ready. A number of other states have established their own standards, which like Common Core are designed to provide students to be college- or career-ready. Thus, a current criterion is whether students are meeting state standards. The ultimate criterion is whether students are on track to becoming college- and career-ready.

Because the Every Student Succeeds Act (ESSA) is calling for challenging standards, chances are more students will be identified as needing help. On the Smarter Balanced assessment, which is aligned with the Common Core and was administered in 18 states, approximately 50 percent met or exceeded the standard. Approximately 25 percent nearly met the standard and the remaining 25 percent did not.

In this text, the emphasis will be on an RTI approach combined with ongoing assessment and diagnosis. However, the difference between students' ability and/or language development and achievement and their ability to meet literacy demands in and out of school will also be considered. Keeping in mind the limitations of intelligence and listening tests, it is recommended that one adopt a broad view of ability. Students can manifest ability in a variety of ways: by the thinking and language abilities they display in classroom discussions and collaborations with peers, by their ability to solve everyday problems, or by their knowledge of the world around them. One way of estimating students' learning abilities is by teaching them and seeing how much they learn. Many students who have been written off as incapable bloom when provided with the right kind of instruction.

Delayed or Disabled

Below-level readers might be **delayed readers** rather than disabled (McCormick & Zutell, 2015). Recently, I worked with a first-grader who was not meeting benchmark for first-grade reading. I was encouraged by her strengths. Phonemic awareness was well established, as was her command of initial consonants and short vowels. For instance, she spelled *one* as WUN. This indicated that she heard the three sounds in the word and was also able to represent them with letters that most frequently indicated those sounds. However, her reading was slow. She still needed to sound out most words, even short-vowel ones such as *hat* and *run*. She was progressing but at her own pace. She needed time and lots more experience reading easy text.

Although there is no federal test that students are required to take, a number of states are requiring high school students to take the SAT or ACT, even if they are not planning on going to college.

To learn more about the Common Core State Standards, go to the Common Core State Standards Initiative website.

Incidence of Reading Problems

What proportion of the population has a reading difficulty? The National Assessment of Educational Progress (NAEP) (National Center for Educational Statistics, 2015, 2016) found that the following percentages of students were unable to function on a basic level, which means they could not comprehend text at a literal level, relate it to their lives, make simple inferences, or draw conclusions from it.

> Grade 4: 31 percent
>
> Grade 8: 24 percent
>
> Grade 12: 28 percent

The basic level is a conservative estimate of grade-level reading (Allington, 2011; Pellegrino, Jones, & Mitchell, 1999). Over the years, there has been a decrease in the percentage of students reading below a basic level. In 1992 the percentage below basic was 38 percent for grade 4 and 31 percent for grade 8. Today the figures are 31 and 24. However, there has been an increase at grade 12 from 20% reading below grade level in 1992 to 28% in 2015.

On the basis of NAEP, Smarter Balanced test results, and other data, it is estimated that up to 25 percent of the population has some difficulty with reading. Not all of these students have serious problems. Most have mild to moderate difficulty. They may be functioning a year or two below what might be expected. Only a small percentage has severe problems. (Awilda would be classified as having a severe reading problem.) Approximately 10 percent of the school population have a mild problem, 12 percent have moderate difficulties, and some 3 to 6 percent have a more serious difficulty (Badian, 1999; Fuchs, Fuchs, & Compton, 2012; McCormick, 1999; Torgesen, 2004b; Vellutino et al., 1996). These include students who are known as "nonresponders" because they fail to profit from carefully planned, expert instruction. Only about 1 in 100 has a severe reading disability.

> For the latest information on NAEP performance, see the Nation's Report Card website.

Persistence of Severe Problems

Unlike mild or moderate difficulties, severe reading problems, often referred to as **reading disabilities** (RDs), can be chronic and require intensive intervention. Students with RDs are those "who have unusual difficulty learning to read and whose reading problems cannot be accounted for by other disabilities, broad intellectual limitations, impoverished home environment, or generally inadequate instruction" (Spear-Swerling, 2004, p. 517). An RD typically involves a severe difficulty learning basic skills, such as the ability to decode printed words (Spear-Swerling, 2011). There are relatively few disabled readers, but they need intensive long-term instruction. In close to three decades of work with struggling readers, Morris (2008) reports encountering just a few dozen children who don't respond to a traditional intervention program but need intensive long-term instruction that may last for several years. The term **primary reading disability** is sometimes used to label the most seriously disabled readers, who are distinguished by a severe difficulty learning to associate printed letters and words with their spoken counterparts.

The term **dyslexia** is frequently used to indicate a reading disability and is included as an example of a specific learning disability under the Individuals with Disabilities Education Act. Snowling and Hulme's (2012) explanation of dyslexia is similar to Spear-Swerling's definition of reading disorder. "Dyslexia refers to children . . . who have difficulty in mastering the relationships between the spelling patterns of words and their pronunciations. These children typically read aloud inaccurately and slowly, and experience additional problems with spelling. Dyslexia appears to arise principally from a weakness in phonological (speech sound) skills." However, the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*), the manual used by mental health professionals to describe and code disorders, uses the term **specific learning disorder, impairment in reading** instead of *dyslexia.*

Because of "the many definitions of dyslexia," the committee working on that section of the *DSM-5* concluded that dyslexia "would not be useful" as a disorder name (American Psychiatric Association, 2013a). However, *dyslexia* is allowed by the *DSM-5* as an "alternate" term.

Whether called reading disabilities, reading disorders, or dyslexia, reading difficulties can be thought of as being categorical or continuous (McCormick & Zutell, 2015). A categorical disability is defined by certain characteristics or symptoms. A continuous trait is one that ranges in degree from a lot to a little to hardly any to none. As Peterson and Pennington (2012) conclude, "dyslexia represents the low end of a normal distribution of word reading ability" (p. 1997). However, as Peterson and Pennington also note, this means setting an arbitrary cutoff. At what point does a deficiency in word recognition become "dyslexia"? Reading difficulties do vary in severity, so the terms *mild, moderate,* and *severe* are used in this text. However, there is one reading difficulty so severe and so dramatically different from others that it is categorical in nature. As noted earlier, because of its unique characteristics, it is termed the *primary reading disability,* which is discussed in Chapters 2 and 14.

English Language Learners as Struggling Readers

Disproportionate numbers of English language learners (ELLs) are classified as struggling readers (Orosco & O'Connor, 2011). For instance, only about 10 percent of ELLs met standards on the Common Core assessments, whereas 50 percent of English speakers did. However, poor performance on an English reading test does not mean that an ELL student is a struggling reader. Newly arrived students still learning the rudiments of the language would not be expected to be reading at grade level in English. It would be helpful to know how well the student is reading in his or her native language. If an ELL is having difficulty reading both English and the native language, this is an indicator of a reading difficulty. On the other hand, if an ELL is struggling to learn to read, one cannot dismiss this as due to the fact that he or she speaks another language. One needs to have some measure of the student's knowledge of English and opportunity to learn to read before that judgment can be made.

For most ELLs, progress in literacy is limited by their command of English. As they learn the language, they will be better able to improve their reading skills in it. However, because they are still learning English, ELLs will need extra assistance learning to read. Most will improve in reading as they acquire English and are given appropriate instruction. Students who can read in their native tongue can transfer many of their skills to reading in English.

> The National Clearinghouse for English Language Acquisition (NCELA) has a website that provides information about programs for ELLs.

✔ Check Your Understanding 1.1: **Click here** to assess your understanding of this section.

The Nature of Intervention and Corrective Instruction

Intervention and corrective instruction come in many forms. Although specialized techniques are sometimes used, intervention and corrective instruction are often simply more individualized applications of methods employed in the regular classroom. They can be classified as part-to-whole, whole-to-part, or interactive.

Part-to-Whole Approach

In a part-to-whole or **bottom-up** approach, students learn the nuts and bolts of reading and assemble them into a whole. Proceeding from the bottom of the process, they learn letter sounds and then blend them into whole words, which are then read

in brief stories. Incorporating the belief that reading is easier if it is broken down into its parts and then reconstructed, many corrective programs have taken this approach.

Whole-to-Part Approach

In a whole-to-part or **top-down** approach, students start at the top of the reading process and proceed downward to letters and sounds. Instruction is initiated by reading whole stories with teacher assistance. Through reading whole stories and by using their knowledge of language patterns, students learn individual printed words and letter–sound relationships. Holistic approaches are based on a top-down view of reading. Students learn to read and write by being immersed in meaningful literacy activities. Whereas in a bottom-up approach meaning is constructed by decoding words and assembling sentences and paragraphs, in a top-down approach meaning is inferred.

An Interactive View

In this text, reading is viewed as an interaction between part-whole and whole-part or top-down and bottom-up processes. As Rumelhart (1985) hypothesized in his classic **interactive** model, reading is not linear. We don't proceed from letters to words to meaning in step-by-step fashion. Nor do we proceed from the whole to the part. Rather, we engage in parallel processing so that we simultaneously use knowledge of language as well as contextual and letter–sound cues for decoding and background knowledge and strategies as we construct understanding of what we read (Kamhi & Catts, 2012). Reading is simultaneously both top-down and bottom-up. One indication that students use parallel processing is that context aids their decoding. When students encounter words in context that they missed when presented in list form, they are able to read about 25 percent of the missed words correctly (Alexander, 1998).

The truth is that readers, especially ones with serious problems, need to use all the reading processes. Because low-achieving readers often have difficulty decoding words, there is a temptation to focus on lower-level processes, such as sounding out words and literal comprehension. However, reading is very much a total language process. The most effective programs for struggling readers are those that include a strong decoding component along with plenty of opportunity to apply skills by reading (Santa & Høien, 1999). The efficient reader simultaneously uses background knowledge, facility with language, ongoing comprehension of a selection, and decoding skills. When reading the following sentence, Jason, a fourth-grade, low-achieving reader who has been receiving intensive instruction in decoding strategies, uses a variety of sources to help him decipher the word *cocoa*, which for him is an unfamiliar print form:

After shoveling the snow, Grandpa had a cup of hot cocoa.

Because Jason has had experience with hot cocoa, his ability to use the context of the sentence enhances his use of decoding skills so that he is able to process the word faster and more readily than he would have if the word *cocoa* had not been in his listening vocabulary. Top-down processes, including language ability and background knowledge, have made it easier for him to apply lower-level decoding processes. Had the context been weak or had the word *cocoa* simply been in a list, Jason would have had to rely more heavily on decoding.

Using a computer analogy, Adams (1990) theorizes that orthographic (letter), phonological (sound), meaning, and context processors all work simultaneously to decode words. However, the way that processors are brought into play is partly dependent on the nature of the task. As adept readers, our decoding skills become so well learned and rapid that they function automatically. There are occasions, however, when bottom-up processes are brought to the fore. Notice how consciously you use decoding skills as you read the following sentence:

Thēz wrdz ar speld fnetiklé.

Did you notice that you had to deliberately sound out each word? With your processes being slowed down, were you also able to notice how you used your knowledge of language and background of experience along with decoding skills to reconstruct the sentence?

Approaches to intervention can also be categorized as being cognitive-process or sociocultural or a combination of the two. A cognitive-process perspective focuses on the individual and emphasizes perceptual abilities, the limitations of memory, and the use of strategies to foster more efficient processing. Background knowledge is also stressed, and the learner is seen as an active participant who constructs meaning in terms of his or her background of experience. Socioculturalists see reading and writing as social processes in which participants learn from each other. What students learn is heavily determined by the social and cultural contexts in which it is learned. Problems are likely to arise when one approach is overemphasized to the detriment of the other. One of the most successful intervention approaches, reciprocal teaching, combines strategy instruction with collaboration.

Impact of Literacy Difficulties

Reading and writing problems, especially when they are severe, affect all aspects of a student's life. Although Robert was easily the brightest student in first grade, he was facing possible retention. Robert had serious difficulty learning to associate spoken words with their printed symbols. Despite special assistance, he had learned only a half-dozen words by the end of the year. Unfortunately, he learned to fear reading in the process. By the time he was referred to a university reading clinic, he was refusing to attempt to read. Why try, when failure was virtually guaranteed? The wall he had built around himself to prevent further failure was so impenetrable that counseling was required.

Robert's reading problem also manifested itself physically. Complaining of stomach pains, Robert was given a thorough examination. Unable to find a medical cause for the pains, the doctor believed they were caused by stress at school. Even Robert's social relationships were harmed by his reading difficulty. Classmates teased him for his slowness in catching on to reading. Baffled by Robert's difficulty, his family was torn between sympathy for his plight and a suspicion that maybe the source of Robert's problem was lack of effort. Meanwhile, at school, Robert mentally withdrew from all tasks involving reading and writing. He noted that his favorite part of school was "the bus ride home."

Understanding a student's reading difficulty, especially when it is a severe one, means finding out how it affects and is affected by the significant aspects of his life: family, school, and friends. For older low-achieving readers, society at large and the world of work must also be figured into the equation. The understanding must be ecological. For instance, it is important to see how the low-achieving reader functions in her or his classroom. Questions that need to be answered include: How does the student interact in the classroom? How do other students respond to her or him? What changes might be made to improve the student's progress? If the student is in an intervention program, the key questions are: How might the intervention and regular classroom program be coordinated so as to achieve maximum benefit for the student? How can the classroom teacher and the reading or learning disabilities specialist support one another's efforts? What assistance might other staff members and the administration provide? How might the home be involved? A comprehensive plan of assistance must take into account how the school, the home, and other institutions might play a role in remediation. Whole-school efforts are generally most effective.

✔ Check Your Understanding 1.2: **Click here** to assess your understanding of this section.