

JANET W. LERNER AND BEVERLEY H. JOHNS

Learning Disabilities and Related Disabilities

STRATEGIES FOR SUCCESS

THIRTEENTH EDITION



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**Learning Disabilities and Related Disabilities:
Strategies for Success, Thirteenth Edition**

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Cover Image: Hero/Fancy/Corbis/Glow
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WCN: 02-200-208

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Library of Congress Control Number: 2013937078

ISBN 13: 978-1-285-43320-2

ISBN 10: 1-285-43320-3

Cengage Learning

200 First Stamford Place, 4th Floor
Stamford, CT 06902
USA

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Printed in the United States of America

1 2 3 4 5 6 7 17 16 15 14 13

To Eugene—J.L.

To Lonnie—B.J.

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PREFACE



Learning Disabilities and Related Disabilities: Strategies for Success, Thirteenth Edition, focuses both on students with learning disabilities and on students with related disabilities. **Learning disabilities** is a category of disability that is identified in special education law. Related **disabilities** are those that are increasingly found in schools that serve children within a cross categorical approach. Students with learning disabilities and students with related disabilities are perplexing in that each individual has a unique combination of talents, characteristics, strengths, and weaknesses. The concepts and strategies presented in this text are broad in scope and are applicable for students with learning disabilities and students with related disabilities. Students with learning disabilities and related disabilities are found in every classroom. Unless these students are recognized and treated, they are destined to have many difficulties throughout life. The primary concerns and goals of this textbook are identifying students with learning disabilities and related disabilities and helping them to succeed in school and in life.

This Thirteenth Edition reflects contemporary views of students with learning disabilities and students with related disabilities, includes the critical advances in research, and recognizes the changes in policies that are occurring in both general education and special education today. The revised text strives to provide a fair and clear explanation of new and controversial issues within the field. In addition to covering new trends, this textbook also presents the basic and classic foundations, concepts, and strategies that have helped teachers, parents, and students over the years.

Audience, Approach, and Purpose

Learning Disabilities and Related Disabilities, Thirteenth Edition, is an introductory textbook written for undergraduate and graduate students who are majoring in general education or special education. It provides a comprehensive view of the field, describes the characteristics of various disabilities, and offers teaching strategies for general education teachers, special education teachers, school psychologists, administrators, language pathologists, counselors, and related professionals. *Learning Disabilities and Related Disabilities* is particularly useful for preservice teachers and in-service classroom teachers who are increasingly responsible for teaching students with special needs within general education or inclusive classrooms. In addition, this textbook provides parents with the necessary background information to better understand their child and their child's problems. Learning disabilities and related disabilities are conditions that impede learning for many children, adolescents, and adults, affecting their schooling and adult lives. Their problems can lead to serious difficulties in school learning, and those difficulties often

continue into adulthood. Our multidimensional approach to learning disabilities and related disabilities enables readers to gain a comprehensive overview of this complex subject. Teachers must understand the diverse theoretical approaches within the field of disabilities. They must know procedures for evaluating students; possess skills in the art of clinical teaching; and be familiar with teaching methods, strategies, and materials. Teachers must also be familiar with the implications of the special education laws.

New and Updated for the Thirteenth Edition

The text coverage and special features are designed to help new teachers be successful in their future classrooms and with their future students. Below is a brief list that outlines some of the key revisions that we have made within the new edition:

New Colorful Design

This edition is a full-color text with an appealing interior design and larger page size to help enhance student learning.

New Learning Objectives

New Learning Objectives correlated to the main sections in each chapter show students what they need to know to process and understand the information in the chapter. After completing the chapter, students should be able to demonstrate how they can use and apply their new knowledge and skills.

New Standards Included with Each Chapter

At the start of every chapter, a list of standards addressed within the chapter appears. In chapters 1–10, the standards come from the Council of Exceptional Children Initial Level Special Education Standards as Approved by the National Council for the Accreditation of Special Education. In Chapters 11–14, the Common Core Standards are discussed.

New Digital Downloads

New Digital Downloads include tips, boxes, figures, and tables in the textbook plus a complete Sample IEP for students to download, often customize, and use to review key concepts and in the classroom! Look for the Digital Download label that identifies these items.

New Did You Get It? quizzes

New Did You Get It? quizzes allows students to measure their performance against the learning objectives in each chapter. One question for each learning objective is featured in the textbook to encourage students to go to *cingagebrain.com*, take the full quiz, and check their understanding.

TeachSource Video Cases

TeachSource Video Cases feature footage from the classroom to help students relate key chapter content to real-life scenarios. Critical-thinking questions, artifacts, and bonus video help the student reflect on the content in the video.

New Chapter on Special Education Law and Regulations

This edition provides a new chapter, Chapter 10, that focuses on the laws, regulations, and court cases that impact students with disabilities.

New Coverage of English Language Learners (ELLs)

Special consideration is given across the text to English Language Learners (ELLs)—students whose native language is not English and who are not yet proficient in English. Marginal icons throughout the chapters highlight where this material is covered. Preservice teachers must learn about the unique needs of ELL students who have mild disabilities. These issues are discussed in Chapter 11, and across the book as well.

New Marginal Key Terms and Definitions

As an additional study aid, this edition features key terms and their definitions in the text margins, next to where the boldface key terms are defined in the text. At the end of each chapter, a list of the key terms appears, and at the end of the book, there is a comprehensive glossary of key terms.

Cross-Categorical Emphasis

Many states are changing their teacher certification policies and certifying special education teachers *cross-categorically*, using a designation such as “mild disabilities” or in some cases, “mild/moderate disabilities.” The designation of “mild disabilities” often includes students that qualify for special education services within several different categories—such as learning disabilities, intellectual disabilities, emotional/behavior disorders, and other disabilities—depending on the individual state’s certification rules. To meet the new certification requirements of their states, college-level teacher preparation programs now include broader, cross-categorical courses of study for teaching students with varying disabilities. This text can be used in these broader courses (often entitled “Teaching Students With Mild Disabilities”), as well as the more traditional courses about “Students With Learning Disabilities.” The concepts presented in this text are broad in scope and are applicable to both types of courses. For example, the topics and coverage on the law, assessment, response-to-intervention (RTI)

procedures, and instructional strategies readily apply to students with both learning disabilities and related disabilities.

More Coverage on Instruction in General Education Classes

The educational setting for the majority of students with learning disabilities and related disabilities is the general education classroom, and teaching these students becomes the responsibility of the general education teacher. Each chapter of the textbook addresses strategies for the general education teacher to instruct students with learning disabilities and related disabilities—both within special text boxes and within each chapter’s narrative.

Today, many students with learning disabilities and related disabilities receive instruction in general education classes or inclusive classrooms. There are many benefits of inclusion. General education classrooms can provide students with disabilities greater access to their general education peers, raise expectations for student performance, help general education students be more accepting of diverse students, and improve coordination between regular and special educators.

Response-to-Intervention (RTI)

RTI is a process for instructing all students and also affects the determination of eligibility of students with learning disabilities and related mild disabilities. RTI is comprehensively addressed in Chapter 2, and discussed wherever relevant throughout the text.

Web-Based Resources

Students today want to investigate certain topics further through the Internet. Throughout this textbook, we have provided the URLs of websites relevant to the topics being discussed. These website references enable students to identify high-quality, accurate website content more easily. In addition, greater coverage of certain topics and a variety of learning resources are provided on the website that accompanies this textbook.

Chapter Coverage and Key Revisions within the Thirteenth Edition

- The field of special education is changing and Chapter 1 provides the latest information about the field, including changes and new directions. It provides an overview of the field of learning disabilities and other related disabilities. It also discusses the neuroscience and the study of the brain.

- Chapter 2 explains the importance of assessment to plan appropriate instruction. A significant part of the chapter is devoted to response to intervention, including benefits and concerns about the use of RTI as a sole assessment tool for students with learning disabilities. Curriculum-based measurement is reviewed and the details of a comprehensive evaluation are provided. The IEP process is detailed and included in the chapter for the first time, as are present levels of academic achievement and functional performance. A sample IEP is provided as a Digital Download.
- Chapter 3's new content is devoted to specialized instruction, clinical teaching, and differentiating instruction. Discussion focuses on the difference between specialized instruction and accommodation and modifications. Part of the chapter is focused on effective instructional strategies for general education and also on the importance of task analysis.
- Chapter 4 describes the continuum of alternative educational settings for students with disabilities and how the decision about the appropriate placement is made. Included in this chapter is also a description of the art of collaboration with educators and families.
- Chapter 5 provides a comprehensive description of the theories of learning including development psychology, behavioral psychology, and cognitive psychology. Also included in this chapter is a description of learning strategies.
- Chapter 6 is devoted to the social, emotional, and behavioral challenges that students with learning disabilities and related disabilities often exhibit. An explanation of the importance of functional behavioral assessment and a positive behavior intervention plan based on that assessment is stressed. Also included is a description of Positive Behavioral Interventions and Supports. An explanation about why school suspension is an ineffective intervention is provided.
- A thoroughly revised Chapter 7 includes information about new research and medications for ADHD. Chapter 7 also addresses related Autism Spectrum Disorders, such as autism and Asperger's syndrome and includes the latest information from the Diagnostic and Statistical Manual 5. A description of nonverbal learning disorders is also provided.
- Chapter 8 is devoted to young children with disabilities and describes the developmental indicators of problems in young children and stresses the importance of assessment. The chapter provides an overview of laws impacting young children and provides multiple strategies for working with young children, including those children who are in general education classes.
- What is happening to our students with learning disabilities and related disabilities after they exit the school system is covered in Chapter 9. This chapter explores the characteristics and needs of adolescents and adults with learning disabilities and related disabilities. Effective inclusionary strategies for the general education classroom are provided and the learning strategies model is described. Characteristics of postsecondary programs are discussed.

- Chapter 10, the newest addition to this edition, provides an explanation of the federal laws and regulations that impact students with disabilities. It also covers the Supreme Court cases that have had major implications for services for students with disabilities.
- Chapter 11 includes an explanation of the types of language problems exhibited by students with learning disabilities and related disabilities, difficulties encountered by students who are English-Language Learners, and types of language assessment. It also includes a discussion of the use of technology.
- Chapter 12 focuses on phonemic awareness, word recognition, comprehension, and fluency with a multitude of practical reading strategies for struggling readers.
- Chapter 13 stresses the importance of teaching writing so that students can achieve the Common Core Standards. Instructional strategies that focus on the Common Core are provided.
- Chapter 14 focuses on mathematical difficulties with particular attention given to the Common Core Standards for Math and the instructional strategies to meet those standards.
- Updated citations. Current citations and many updated citations appear throughout the textbook.

Additional Student Learning Aids and Special Features

To make this textbook easy to read and appealing to use, we have added many valuable features to the Thirteenth Edition (as noted above in the “New and Updated” section) and retained those learning tools from previous editions that were the most successful.

QUOTATIONS at the beginning of each chapter help to focus the reader and to provide stimulating insights.

TEACHING TIPS BOXES provide examples of practical instruction models, methods, and strategies for teaching students with learning disabilities and related mild disabilities. Many of these are now also Digital Downloads.

STUDENT STORIES are interspersed throughout each chapter. These short illustrative vignettes are real-life situational snapshots of students that illustrate the topic under discussion. Reflective questions are posed to readers at the end of each Student Story.

INCLUDING STUDENTS IN GENERAL EDUCATION BOXES offer ideas and strategies for teaching students with learning disabilities and/or related mild disabilities included in general education classes. Many of these are now also Digital Downloads.

I HAVE A KID WHO.... These brief, accessible case studies allow students to apply the content that they have read in each chapter, and are accompanied by reflective questions.

CHAPTER SUMMARIES at the end of each chapter highlight, in a clear point-by-point format, the major ideas presented in the chapter.

QUESTIONS FOR DISCUSSION AND REFLECTION follow the summary section at the end of each chapter and offer an opportunity to pull together and elaborate on the major ideas of the chapter.

Ancillaries

Student Ancillaries

Education CourseMate Cengage Learning's Education CourseMate brings course concepts to life with interactive learning, study, and exam preparation tools that support the printed textbook. Access the eBook, Did You Get It? quizzes, Digital Downloads, TeachSource Video Cases, flashcards, and more in your Education CourseMate. Go to *cengagebrain.com* to register or purchase access.

TeachSource Video Cases The TeachSource Video Cases feature footage from the classroom to help students relate key chapter content to real-life scenarios. Critical-thinking questions, artifacts, and bonus video help the student reflect on the content in the video.

Instructor Ancillaries

Education CourseMate Cengage Learning's Education CourseMate brings course concepts to life with interactive learning, study, and exam preparation tools that support the printed textbook. CourseMate includes the eBook, quizzes, Digital Downloads, TeachSource Video Cases, flashcards, and more—as well as EngagementTracker, a first-of-its-kind tool that monitors student engagement in the course. The accompanying instructor website, available through *login.cengage.com*, offers access to password-protected resources such as PowerPoint® lecture slides and the online Instructor's Manual with Test Bank. CourseMate can be bundled with the student text. Contact your Cengage sales representative for information on getting access to CourseMate.

Online Instructor's Manual and Test Bank An online Instructor's Manual accompanies this book. It contains information to assist the instructor in designing the course, including sample syllabi, discussion questions, teaching and learning activities, field experiences, learning objectives, and additional online resources. For assessment support, the updated test bank includes true/false, multiple-choice, matching, short-answer, and essay questions for each chapter.

Online PowerPoint Slides These vibrant, Microsoft PowerPoint lecture slides for each chapter assist you with your lecture by providing concept coverage using images, figures, and tables directly from the textbook!

Cengage Learning Testing Powered by Cognero

- Author, edit, and manage test bank content from multiple Cengage Learning solutions.
- Create multiple test versions in an instant.
- Deliver tests from your LMS, your classroom or wherever you want.

Acknowledgments

Learning Disabilities and Related Disabilities grew out of our experiences from working in public schools with students who had learning disabilities, serious learning difficulties, social problems, and emotional/behavioral challenges. We also learned by teaching courses on learning disabilities, emotional/behavioral disorders, and special education in colleges and universities. This textbook was influenced greatly by the feedback from students in our courses. Students, colleagues, and organizations also alerted us to new concepts, programs, assessment instruments, and intervention strategies. We are indebted to many scholars, researchers, authors of books and articles, speakers at conferences, and educators in school districts and universities with whom we have worked.

We extend our thanks to the following reviewers who read the manuscript at various stages and provided helpful suggestions and criticisms:

Dawn Atlee, *Southern Illinois University, Carbondale*
Patricia Clark, *University of Maine Augusta*
Rebecca Cohen, *Pima Community College*
Barbara Cordasco, *Georgian Court University*
Tara Cosco, *Glenville State College*
Karen Coughenour, *Francis Marion University*
Ken Dobush, *Bridgewater State College*
Robin Ennis, *Georgia State University*
Patricia Frawley, *Fairleigh Dickinson University*
Leah Hoover, *Kentucky Wesleyan College*
MeShelda Jackson, *Benedictine University*
Jane Leatherman, *Indiana University–Purdue University Ft. Wayne*
Linda McCuen, *Anderson University*
Amy Nissley, *East Texas Baptist University*
Danielle Parisi, *Montclair State University*
Melissa Phillips, *Brandman University*
Peggy Rawn, *Loyola Marymount University*
Valerie Roderick, *ASU/Mary Lou Fulton Teachers College*
Lynn Stafford, *Rockford College*
Roben Taylor, *Jacksonville State University*
Doris Tyler, *North Carolina Central University*
Alandra Weller-Clarke, *Benedictine University*

Glenda Windfield, *Jackson State University*
Roberta Wohle, *Fairleigh Dickinson University*
Jie Zhang, *SUNY College at Brockport*

We also wish to acknowledge Kate Scheinman, freelance development editor at Cengage Learning, who skillfully guided us through the process of writing this book.

Janet Lerner acknowledges her first college instructor in special education, a stimulating and provocative scholar and writer, the late Dr. Samuel A. Kirk, who played a significant role in the inception of this book. She also thanks her family—Susan, Laura, Dean, James, Aaron, Lee, Sue, Anne, and Sarah. Finally, she recognizes her husband, Eugene, who continues to provide the encouragement and support every author needs.

Beverley Johns wants to thank the professor who most influenced her career, Dr. Beth Sulzer-Azaroff, for her guidance and inspiration. She values the long dedication of Janet Lerner to the field of learning disabilities and greatly appreciates being her co-author. Her family (James, Martha, Jim, Craig, Babs, Luverne, Judi, and Jan, and Don) has provided the training, discipline, and encouragement that every author must have. Her husband, Lonnie, is a source of constant support and personal security.

Janet W. Lerner
Beverley H. Johns



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PART I Overview



Learning Disabilities and Related Disabilities: Characteristics and Current Directions

A teacher affects eternity; he can never tell where his influence stops.

—Henry Adams

LEARNING OBJECTIVES

After reading this chapter, you should be able to:

- 1.1 Describe key changes in special education
- 1.2 Describe the categories of learning disabilities and other related disabilities
- 1.3 Describe the neurosciences and the brain
- 1.4 Identify new issues and directions in special education

Part 1 of this book consists of Chapter 1, “Learning Disabilities and Related Disabilities: Characteristics and Current Directions.” In this chapter, we consider (1) some significant changes in special education, (2) the category of learning disabilities and the history of learning disabilities, (3) related other disabilities, (4) neurosciences and study of the brain, and (5) major current issues in the field of special education.

STANDARDS Addressed in This Chapter:



Council for Exceptional Children
Initial Level Special Educator
Preparation Standards as
approved by the National
Council for the Accreditation of
Teacher Education

CEC Initial Preparation Standard 1:
Learner Development and Individual
Learning Differences

- 1.0—Beginning special education professionals understand how exceptionalities may interact with development and learning and use this knowledge to provide meaningful and challenging learning experiences for individuals with exceptionalities.
- 1.1—Beginning special education professionals understand how language, culture, and family background influence the learning of individuals with exceptionalities.

- 1.2—Beginning special education professionals use understanding of development and individual differences to respond to the needs of individuals with exceptionalities.

CEC Initial Preparation Standard 6:
Professional Learning and Ethical
Practice

- 6.0—Beginning special education professionals use foundational knowledge of the field and their professional Ethical Principles and Practice Standards to inform special education practice, to engage in

lifelong learning, and to advance the profession.

- 6.2—Beginning special education professionals understand how foundational knowledge and current issues influence professional practice.
- 6.3—Beginning special education professionals understand that diversity is a part of families, cultures, and schools, and that complex human issues can interact with the delivery of special education services.

learning disabilities

A disorder in one or more of the basic processes involved in understanding spoken or written language. It may show up as a problem in listening, thinking, speaking, reading, writing, or spelling, or in a person's ability to do math, despite at least average intelligence. The term does not include children who have learning problems that are primarily the result of visual, hearing, or physical handicaps, mental retardation, or emotional disturbance, or of environmental, cultural, or economic disadvantage. Individuals with learning disabilities encounter difficulty in one or more of seven areas: (1) receptive language, (2) expressive language, (3) basic reading skill, (4) reading comprehension, (5) written expression, (6) mathematics calculations, or (7) mathematics reasoning.

mild disabilities

A grouping of students with different disabilities for instruction, such as learning disabilities, mild intellectual disabilities, emotional disturbances, and other disabilities.

mild/moderate disabilities

A term that includes both students with mild disabilities and students with moderate disabilities.

Intellectual disabilities

The term *intellectual disabilities* has replaced the term *mental retardation* and is characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. The disability originates before age 18.

This book focuses both on students with **learning disabilities** (a category in special education) and on students with **disabilities**. Learning disabilities and related other disabilities are conditions that impede learning for many children, adolescents, and adults, affecting their schooling and their adult lives. Some states have categorical certification and programs for specific categories of special education, such as for learning disabilities or emotional/behavioral disorders. Some states have noncategorical (or cross-categorical) certification and programs for students with **mild/moderate disabilities**.

1.1 Recent Changes in Special Education

A number of recent significant changes have occurred in the field of special education (U.S. Department of Education, 2012). Based on data from the 2012 report:

- **The term *Intellectual Disabilities* replaces the term *Mental Retardation*.** The term “mental retardation” has been in the federal law for special education for over 50 years, but over time it has taken on a pejorative connotation. In October 2010, the law changed the term to “intellectual disabilities.”
- **Although *Learning Disabilities* remains the largest category of disability, the percentage of children identified with learning disabilities has decreased considerably.** Over 4.4% of the population ages 6 through 21 were identified with learning disabilities in 2000, but in 2012 this percentage decreased to 4.0% (U.S. Department of Education, 2012).
- **The category of “Other Health Impaired” (OHI) has increased significantly.** The category of OHI includes children with “attention deficit/hyperactivity disorder” (ADHD). Because an increasing number of students are identified with ADHD, the category of OHI has increased significantly. Almost 1% of the general population is identified with OHI (U.S. Department of Education, 2012).

- **The number of children identified with “Autism” has increased significantly.** This is in part due to the expanded designation of autism to include “autism spectrum disorder.” In 2000, 1% of the population was identified with autism, but this percentage increased to 3% (U.S. Department of Education, 2012). The Centers for Disease Control and Prevention (CDC) reported that a new estimate of American children having autism spectrum disorder is 1 in 50 (CDC, 2013).
- **Common Core Standards**

Over the next several years, most schools will be working to implement the common core standards since the majority of the states have adopted them. These will have major implications for students with disabilities as educators work to provide universally designed procedures to ensure that students with disabilities have access to the standards. All educators will also be working to task analyze the common core skills to determine the specific strategies that will be utilized to ensure progress in the standards. An increasing emphasis on differentiated instruction will be necessary to include all students in the common core. Specific attention to vocabulary development and critical thinking will be essential.

These standards are designed to result in uniform expectations and are sequential. New assessments based on these standards will be utilized. There is a strong emphasis within the common core on critical thinking skills, literacy, collaborative work, text complexity and on 21st century skills for career preparation.

According to the National Governors’ Association for Best Practices, teachers, parents, and community leaders have weighed in to help create the Common Core State Standards. The standards communicate what is expected of students at each grade level. Provided teachers are given adequate training and support, these standards will allow teachers to be better equipped to know exactly how to help students learn and establish individualized benchmarks for them. The Common Core Standards focus on the core conceptual understandings and procedures and give students the opportunity to master them. (National Governors Association Center for Best Practices, 2010).

The concepts and strategies presented in this text are broad in scope and are applicable for students with disabilities. Table 1.1 describes some of the characteristics of students with disabilities.

In the following section, we briefly review the major categories of special education. Specifically, we review the categories of Intellectual Disabilities, Social/Emotional Disturbance, Learning Disabilities, and Other Disabilities.

1.1a Intellectual Disabilities

The term *Intellectual Disabilities* is used in the 30th Annual Report to Congress (U.S. Department of Education, 2012) instead of *mental retardation*, which was previously used in the special education law (IDEA-2004). Many special educators and parents have long felt that the term *mental retardation* is stigmatizing and demeaning. In response to this concern, the American Association for Mental Retardation (AAMR), the foremost organization supporting the needs of people with mental retardation, in February 2007 changed its name to the

TABLE 1.1

Common Learning and Behavioral Characteristics of Students With Related Other Disabilities

Characteristic	Description
Disorders of attention	Does not focus when a lesson is presented; short attention span, easily distracted, poor concentration; may display hyperactivity
Poor motor abilities	Difficulty with gross motor abilities and fine motor coordination (exhibits general awkwardness and clumsiness)
Psychological processing differences	Problems in processing auditory or visual information (difficulty in interpreting visual or auditory stimuli)
Poor cognitive strategies for learning	Does not know how to go about the task of learning and studying; lacks organizational skills; passive learning style (do not direct their own learning)
Oral language difficulties	Underlying language disorders (problems in language development, listening, speaking, and vocabulary)
Reading difficulties	Problems in learning to decode words, basic word-recognition skills, or reading comprehension
Writing difficulties	Performs poorly in tasks requiring written expression, spelling, and handwriting
Mathematics difficulties	Difficulty with quantitative thinking, arithmetic, time, space, and calculation facts
Poor social skills	Does not know how to act and talk in social situations; difficulty with establishing satisfying social relationships and friendships

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American Association on Intellectual Disabilities (<http://www.aaid.org>). The law and many agencies and organizations now refer to *intellectual disabilities* rather than to *mental retardation*. On September 24, 2010, Congress passed S. 2781 known as “Rosa’s Law,” which changed the term *mental retardation* to *intellectual disabilities* in all laws that refer to individuals with disabilities. In “Rosa’s Law” an intellectual disability shall mean a condition previously referred to as mental retardation or a variation of this term, and shall have the same meaning with respect to programs or qualifications for programs for individuals with such conditions. (S. 2781, September 24, 2010).

In 2002, the AAMR’s definition of mental retardation was revised as follows:

Mental retardation is characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. The disability originates before age 18.

The revised definition recognizes that mental retardation is a set of conditions that blends together intelligence and adaptive behavior. **Adaptive behavior** refers to practical skills, such as self-care skills, independent skills, or social skills. The levels of mental retardation are structured by the level of supports that the student needs. Thus, mental retardation is a particular state of functioning that begins in childhood and is characterized by limitations in both intelligence and adaptive skills (Kirk et al., 2009; Hunt & Marshall, 2013).

Students with mild intellectual disabilities can learn academic skills, but their learning rate is slow and they will need sufficient supports along the way.

adaptive behavior

Skills that people need to function in their everyday lives, such as independent skills and social responsibility. Part of the definition of mental retardation.

TABLE 1.2

Levels of Support Needed by Students With Intellectual Disabilities

1. Intermittent support	Support provided as needed, and not at all times. This level is similar to mild intellectual disabilities.
2. Limited support	Support provided on a regular basis for a short period of time. This level is similar to moderate intellectual disabilities.
3. Extensive support	Support provided on an ongoing and regular basis. This level is similar to severe intellectual disabilities.
4. Pervasive support	Support consists of constant high-intensity help across environments and involves more staff members. This level is similar to profound intellectual disabilities.

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Levels of Intellectual Disabilities When levels of intellectual disabilities were based on IQ scores, they were defined with the terms *mild*, *moderate*, *severe*, or *profound*. Currently four levels of intellectual disabilities are based on the level of support that students need (Table 1.2).

Prevalence of Intellectual Disabilities Most students with intellectual disabilities considered mild (87%) are likely to be in programs for mild disabilities. About 16% of all students with intellectual disabilities are in general education classes for 80% or more of the day, and 29% are in regular classes for 40% to 79% of the day (U.S. Department of Education, 2012). About 8% of all students with disabilities are in the category of intellectual disabilities. Useful websites for intellectual disabilities include <http://thearc.org> (the ARC) and <http://www.aaidd.org> (American Association on Intellectual and Developmental Disabilities). Children with intellectual disabilities are found in every economic, racial, cultural, and language group.

1.1b Emotional/Behavioral Disorders

The term used in the federal law is *emotional disturbance* (Individuals with Disabilities Education Improvement Act (IDEA-2004)). *Emotional Disturbance* is defined in the federal IDEA-2004 regulations, shown in Table 1.3.

TABLE 1.3

Emotional Disturbance as Defined in Federal Law (IDEA-2004 Regulations)

<p>A condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects educational performance—</p> <ul style="list-style-type: none"> A. An inability to learn that cannot be explained by intellectual, sensory, or health factors; B. An inability to build or maintain satisfactory interpersonal relationships with peers and teachers; C. Inappropriate types of behaviors or feelings under normal circumstances; D. A general pervasive mood of unhappiness or depression; or E. A tendency to develop physical symptoms or fears associated with personal or school problems

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TeachSource Video Case Activity



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Watch the TeachSource Video Case entitled “Foundations: Aligning Instruction with Federal Legislation.” In this video a teacher, a specialist, an intern, and the principal discuss the federal laws of the Individuals with Disabilities Education Act (IDEA) and **No Child Left Behind Act (NCLB)**, and the implementation of these laws.

QUESTIONS

1. What problems did these educators discuss in the process of implementing these laws?
2. What are the differences between IDEA and NCLB?

Watch on CourseMate.

No Child Left Behind Act (NCLB)

The 2001 revision of the Elementary and Secondary Education Act of 2001. Public Law 107–110.

emotional/behavioral disorders (EBD)

Students who have emotional disorders or behavioral disturbances. Many states use the designation EBD to refer to both conditions.

emotional disorders

Involves feelings about oneself, such as depression or low self-esteem, that can interfere with a person's outlook on life and the ability to learn.

behavioral disorders

Disabilities that result in an adverse effect on educational performance and are characterized by one or more of these problems: An inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behaviors or feelings under normal circumstances; general pervasive mood of unhappiness or depression; or a tendency to develop physical symptoms or fears associated with personal or school problems.

Many experts note that there are problems with the federal definition; and instead, they suggest using the term *emotional/behavioral disorders* (EBD) (Kauffman & Landrum, 2009; Forness & Knitzer, 1992; Stichter, Conroy, & Kauffman, 2008). Forness & Knitzer (1992) indicate that the term *emotional/behavioral disorders* has several advantages over the federal term of *emotional disturbance*. It (a) reflects terminology that reflects current professional preference, (b) includes both disorders of emotion and behavior, (c) focuses on behaviors that occur within the school, and (d) excludes minor or temporary problems.

Many states and school programs use the term **emotional/behavioral disorders (EBD)**. Emotional/behavioral disorders interfere with learning, and students with this type of disability present a significant challenge to teachers and others. Often students with emotional/behavioral disorders are included in programs for mild disabilities.

Characteristics of Emotional/Behavioral Disorders

The characteristics of emotional disorders and behavioral disorders differ. **Emotional disorders** involve feelings about oneself. For example, the student may feel so chronically sad or depressed or have such a low self-concept that these feelings interfere with the individual's outlook on life and ability to learn.

Behavioral disorders involve more overt problems, such as aggressive or antisocial behavior. Often behavioral and emotional challenges are interdependent or overlap with each other and are interrelated. A student who feels poorly about himself or herself may engage in specific behaviors that lead to being socially isolated. A student who is depressed may engage in withdrawal behavior, which leads to poor peer relationships. Moreover, emotional and behavioral challenges occur in diverse populations, and they are found in every economic, racial, cultural, and language group.

Students with emotional/behavioral disorders are discussed in detail in Chapter 6, “Social, Emotional, and Behavioral Challenges.” Chapter 6 also describes teaching strategies and the needed supports for students with emotional and behavioral challenges.

Prevalence of Emotional Disturbance About 7% of all students with disabilities are identified under the category of emotional disturbance (see Table 1.4). About 35% of these students are in general education classes (80% or more of the day) and 21% are in general education classes for 40% to 80% of the day (U.S. Department of Education, 2012).

TABLE 1.4

Categories of Children With Disabilities, Ages 6–17

Type of Disability	Percent of Population	Percent of All Disabilities
High-Incidence Categories		
Learning disabilities	5.36	46.2
Language impairment	2.29	19.7
Intellectual disabilities	0.98	8.4
Emotional disturbance	0.92	7.9
Other health impairment	0.99	8.5
Low-Incidence Categories		
Autism	0.32	2.8
Hearing impairment	0.14	1.2
Orthopedic impairment	0.12	1.0
Visual impairment	0.05	0.1
Traumatic brain injury	0.04	0.3
Developmental delay	0.15	1.3
Multiple disabilities	0.23	2.0
Deaf-blindness	0	0
All disabilities	11.60	100.0

Source: From U. S. Department of Education. (2012). Thirtieth annual report to Congress on the implementation of the Individuals with Disabilities Education Act. Washington, DC: Westat.

1.1c The Series of Special Education Laws

There have been a series of special education laws, as shown in Table 1.5. Under this series of laws, all children and youth ages 3 through 21 with disabilities have a right to a free and appropriate public education. Further, each state must have a special education plan that is in compliance with the federal law.

TABLE 1.5

Series of Special Education Laws

Year	Number	Name of Law
1975	P.L. 94-142	The Education of All Handicapped Children Act
1986	P.L. 99-457	The Education for All Handicapped Children Act Amendments
1990	P.L. 101-476	The Individuals with Disabilities Education Act of 1990
1997	P.L. 105-117	The Individuals with Disabilities Education Act of 1997
2004	P.L. 108-456	The Individuals with Disabilities Education Improvement Act of 2004

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Public Law 94-142

The Education for All Handicapped Children Act, Public Law 94-142 was passed by Congress in 1975.

The law guarantees a free and appropriate public education to children with disabilities. This law was reauthorized in 1990 and 1997 as the Individuals with Disabilities Education Act (IDEA). The most recent version is the 2004 Individuals with Disabilities Education Improvement Act (IDEA-2004).

Special education laws are considered civil rights legislation that guarantees education to individuals with disabilities. The first law providing for students with disabilities was called the **Education for All Handicapped Children Act (Public Law 94-142)**, passed by Congress in 1975. The most recent law in the series is the *Individuals with Disabilities Education Improvement Act of 2004* (IDEA-2004).

1.1d Learning Disabilities

Students with learning disabilities are typically included within the designation of “high incidence disabilities.” A more detailed discussion of learning disabilities is given in the next section. A concise description of learning disabilities is that it is a neurological condition that interferes with a person’s ability to store, process, or produce information. It can affect the person’s ability to read, write, speak, spell, compute math, reason, and can also affect one’s attention, memory, coordination, social skills, and emotional maturity (Learning Disabilities Association of America, 2009). There are several other widely used definitions of learning disabilities, which are presented in the next section, on the category of learning disabilities.

About 40% of all students with disabilities are identified under the category of learning disabilities. About 55% of these students are in general education classes for 80% or more of the school day, and about 31% are in regular classes for 40% to 79% if the school day (U.S. Department of Education, 2012). Students with learning disabilities are often included in groups of mild disabilities. Children with learning disabilities are found in every economic, racial, cultural, and language group.

1.1e Other Disabilities

Children with other disabilities are often included in the designation *high incidence disabilities*, depending in large measure on the individual state’s certification requirements for special education teachers, as well as specific programs that are in the schools. For example, in Illinois, the initial certification for special education teachers certifies teachers to teach seven different categories of disabilities: learning disabilities, intellectual disabilities, emotional/behavioral disturbance, orthopedic impairments, traumatic brain injury, autism, and other health impairments. Thus, types of other disabilities that may be included in mild disabilities depend on individual state certification regulations and school programs. Children with other disabilities are found in every economic, racial, cultural, and language group.

Did You Get It?

The U.S. Department of Education has pointed to several trends in its 2012 Annual Report to Congress. One such change pertains specifically to the category of “Learning Disabilities,” a category whose number of identified students has _____ in recent years.

- a. virtually remained the same
- b. decreased slightly
- c. decreased markedly
- d. increased dramatically

Take the full quiz on CourseMate.

1.2 The Category of Learning Disabilities: A Field in Transition

A learning disability is a neurological condition that interferes with a person's ability to store, process, or produce information, affecting the person's ability to read, write, speak, spell, or compute mathematics. It can also interfere with attention, memory, coordination, and social skills. If provided with the right support and interventions, students with learning disabilities can succeed in school and have a successful, and often distinguished, career later in life. Parents and teachers can help the student achieve success by both fostering the student's strengths and knowing the student's weaknesses.

The enigma of the youngster who encounters extraordinary difficulty in learning, of course, is not new. Throughout the years, children from all walks of life, in all cultures, nations, and language groups have experienced serious difficulties in learning. The condition of learning disabilities has been recognized for over 50 years, and its recognition offered a welcome explanation for misunderstood children who were encountering serious problems in school and in learning.

1.2a Prevalence of Learning Disabilities

Beginning in 2000, the number of students identified with learning disabilities in the public schools has decreased. In 1997, 4.4% of the population were identified with learning disabilities. By the year 2006, the number had dropped to 4.0%. This decrease in learning disabilities occurred, even though the numbers of students eligible for special education continued to grow—increasing 16% over the past 7 years (see Figure 1.1). Probably, some students are being identified in other areas of disabilities, such as ADHD or Autism Spectrum Disorder.

Several possible reasons for this decrease in the prevalence of students identified with learning disabilities are suggested by Cortiella (2009) in the *State of Learning Disabilities*. They include:

- Shifts of students to other disability categories, such as ADHD, which is included in the category, Other Health Impairments, or Autism.

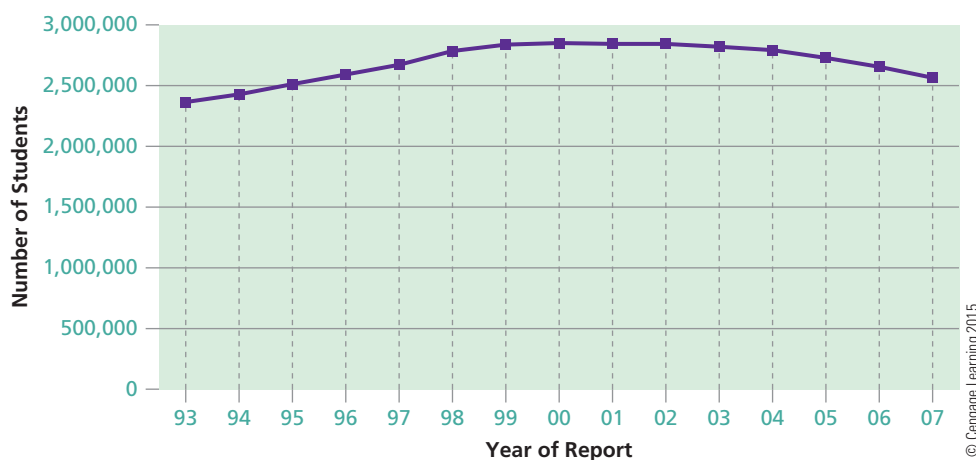


FIGURE 1.1
Students With Learning
Disabilities

- Expansion and attention to early childhood education.
- Improvements in reading instruction provided in general education.
- Shifts in identification approaches, including the use of Response-to-Intervention (RTI).

1.2b Definitions of Learning Disabilities

The Federal Definition The most widely used definition of learning disabilities first appeared in 1975 in Public Law 94-142, the Education for All Handicapped Children Act. It also has been incorporated in the series of revisions of this law, including the federal Individuals with Disabilities Education Improvement Act of 2004 (IDEA-2004): The definition of learning disabilities in the federal law forms the basis of many state definitions, and it is used by many schools. The definition of learning disabilities in the federal law IDEA-2004 is:

The term “specific learning disability” means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. Such term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Such term does not include a learning problem that is primarily the result of visual, hearing, or motor disabilities; of mental retardation; of emotional disturbance; or of environmental, cultural, or economic disadvantage.

—Source: U.S. Department of Education. 2012. The Individuals with Disabilities Education Improvement Act of 2004 (IDEA-2004). Washington, DC.

To summarize, the federal definition of learning disabilities includes the following major concepts (some of which have become controversial):

1. The individual has a *disorder in one or more of the basic psychological processes*. (These processes refer to mental abilities, such as memory, auditory perception, visual perception, oral language, and thinking.)
2. The individual has *difficulty in learning*, specifically, in speaking, listening, writing, reading (word-recognition skills and comprehension), and mathematics (calculation and reasoning).
3. The problem is *not primarily due to other causes*, such as visual or hearing impairments, motor disabilities, intellectual disabilities, emotional disturbance, or economic, environmental, or cultural disadvantage.

In addition, there is an operational definition in IDEA-2004 that first appeared in a separate set of regulations for children with learning disabilities (U.S. Department of Education, 1977). These regulations state that a student has a specific learning disability if: (1) the student has a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations; (2) the student may have such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia; (3) the student does not achieve at the proper age and ability levels in one or more specific areas when provided with appropriate learning experiences; and (4) the student has a severe discrepancy between achievement

and intellectual ability in one or more of these seven areas: (a) oral expression, (b) listening comprehension, (c) written expression, (d) basic reading skills, (e) reading comprehension, (f) mathematics calculation, and (g) mathematics reasoning.

To determine eligibility for services for a student with learning disabilities, the school may consider whether a severe discrepancy exists between the student's apparent ability for learning and his or her low level of achievement. As noted later in this chapter and in Chapter 2, "Assessment and the IEP Process," the school may also consider the student's *response-to-intervention* to determine eligibility.

Other Significant Definitions of Learning Disabilities Two other significant definitions of learning disabilities are offered by the [National Joint Committee on Learning Disabilities](#) and the [Interagency Committee on Learning Disabilities](#). Additional definitions of learning disabilities have been developed by other organizations and in other countries.

National Joint Committee on Learning Disabilities (NJCLD) The **National Joint Committee on Learning Disabilities (NJCLD)** is an organization of representatives from 14 professional organizations and disciplines involved with learning disabilities. The NJCLD definition includes the following highlights (National Joint Committee of Learning Disabilities (NJCLD), 1990; National Center for Learning Disabilities, 2009):

- Heterogeneous (or diverse) group of disorders
- Significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical skills
- Disorders are intrinsic (or inherent) to the individual, presumed to be due to central nervous system dysfunction
- Occurs across the life span
- Often problems in self-regulatory behaviors, social perception, and social interaction
- May occur concomitantly with other disabilities, (e.g., sensory impairment, mental retardation, serious emotional disturbance) or with extrinsic influences (such as cultural differences, or insufficient or inappropriate instruction). They are not the result of those conditions or influences.

Interagency Committee on Learning Disabilities (ICLD) The **Interagency Committee on Learning Disabilities (ICLD)** is a government committee that was commissioned by the U.S. Congress to develop a definition of learning disabilities. ICLD includes representatives of 12 agencies within the Department of Health and Human Services and the Department of Education. The ICLD definition includes social skills deficits as a characteristic of learning disabilities (Interagency Committee on Learning Disabilities, 1988).

Diagnostic and Statistical Manual of Mental Disorders (DSM 5) The **Diagnostic and Statistical Manual of Mental Disorders (DSM 5)**, published in May 2013, represents 36,000 individuals in the field of mental health. This includes many physicians and psychologists. The definition for this organization in its 5th edition is not *learning disabilities*. Instead, they use the terms *reading disorders*, *written expression disorders*, and *mathematics disorders* (American Psychiatric Association, 2013).

National Joint Committee on Learning Disabilities (NJCLD)

An organization of representatives from several professional organizations and disciplines involved with learning disabilities.

Interagency Committee on Learning Disabilities (ICLD)

A committee commissioned by the U.S. Congress and made up of representatives from 12 agencies of the Department of Health and Human Services and the Department of Education to develop a federal definition of learning disabilities.

1.2c Common Elements in the Definitions of Learning Disabilities

The various definitions of learning disabilities have several elements in common: (1) neurological factors, (2) cognitive processing factors, (3) difficulty in academic and learning tasks, (4) discrepancy between potential and achievement, and (5) exclusion of other causes. The nature of each of these elements and the problematic issues that surround them are briefly described in the following section.



Neurological Factors Although not always stated directly, implied in many of the definitions is the view that learning disabilities are related to neurological factors. All learning originates within the brain and, consequently, a disorder in learning can be caused by a dysfunction in the central nervous system, which is an organic system comprising the brain and the spinal cord. In many cases, the neurological condition is difficult to detect by medical examination or external medical tests. Central nervous system dysfunction is therefore usually determined through observation of behavior. Neuroscience and medical research report growing evidence of the neurological basis for learning disabilities through functional Magnetic Resonance Imaging (fMRI) studies (Shaywitz, 2003; Sousa, 2001).

Cognitive Processing Factors Cognitive processing factors refer to an uneven development of the various components of mental functioning. Mental ability is not a single capacity; rather, it is composed of many underlying mental abilities. For the individual with learning disabilities, these component abilities do not develop in an even fashion. That is, whereas some of the components are maturing in an anticipated sequence or rate, others are lagging in their development, thereby appearing as symptoms of the learning problem. Students with learning disabilities manifest strengths and weaknesses in different mental processes. A key phrase in the federal definition that refers to this component of the definition is *a disorder in one or more of these basic psychological processes*.

Difficulty in Academic and Learning Tasks Individuals with learning disabilities encounter different types of problems in learning. One child's challenge may be in the acquisition of speech and oral language; another's may be in reading, arithmetic, handwriting, motor skills, or writing. As noted earlier, the operational portion of the federal definition identifies seven specific academic areas of learning in which learning disabilities can be detected.

Discrepancy Between a Student's Potential for Learning and Academic Achievement The most controversial component in the definitions of learning disabilities is the identification of a gap between what the student is potentially capable of learning and what the student has in fact learned or achieved. The operational portion of the federal definition states that the child with learning disabilities has a **severe discrepancy** between achievement and intellectual ability in one or more of seven areas.

severe discrepancy

A significant difference between a child's current achievement and intellectual potential.

current achievement level

A student's present stage of performance in an academic area.

To determine if a discrepancy exists between potential and achievement, one must (1) determine the student's potential for learning, (2) the student's **current achievement level**, and (3) the degree of discrepancy between the

student's potential for learning and the actual achievement level. This evaluation process entails a number of issues, such as the use of IQ tests to determine a student's potential for learning and the degree of severe discrepancy needed to ascertain a learning disability. Some states quantify the learning disability discrepancy using one of several forms of "discrepancy formulas" to determine if a child is eligible for learning disabilities services. (Visit the Student website for more information on these eligibility formulas.)

Exclusion of Other Causes This component of the definition reflects the notion that learning disabilities are not primarily the result of other conditions, such as intellectual disabilities; emotional disturbance; visual or hearing impairments; or cultural, social, or economic environments.

In practice, however, the exclusion component of the definition of learning disabilities becomes difficult to implement because children often exhibit co-occurring (or comorbid) problems. Teachers who work with children with other disabilities often observe that many students appear to have two problems—their primary disability plus their learning disabilities. There is growing acceptance that other conditions often co-occur with learning disabilities (Silver, 2006).

1.2d Gifted and Talented Children With Learning Disabilities

Some children with learning disabilities also may be gifted and talented (Vukovic & Siegel, 2006; Lovett & Lewandowski, 2005). Characteristics of giftedness include spontaneity, inquisitiveness, imagination, boundless enthusiasm, and emotionality; and these same traits are often observed in children with learning disabilities. Often, children with learning disabilities, like gifted children, seem to require a great deal of activity. They may find the general education classroom environment uninviting, or they may have trouble attending to the classroom instruction. If their learning needs are not being met, they may respond by becoming fidgety, inattentive, and even disruptive. It is especially important that difficulty with school for these children does not lead to the withholding of learning opportunities, which can develop into frustration, failure, or depression.

Gifted and talented individuals with learning disabilities can become high-achieving adults. Successful adults with learning disabilities may find the world of work to be quite different from the world of school. Studies show that many highly successful people have learning disabilities. In fact, one



Some children with learning disabilities can also be gifted or talented.

study shows that 30% to 40% of 300 individuals who had achieved a high level of financial success had learning difficulties in school (Kantrowitz & Underwood, 1999; West, 2003). A major business magazine, *Fortune*, did a cover story on chief executive officers (CEOs) of major corporations who have learning disabilities (Morris, 2002). There appears to be a strong, positive side to learning disabilities that requires further research (West, 2003).

1.2e Characteristics of Learning Disabilities

Many different characteristics are associated with learning disabilities. However, each individual is unique and will display only some of these characteristics. No one individual displays all of the characteristics and traits. Some students have disabilities in mathematics, whereas others excel in mathematics. Attention problems are symptomatic for many students with learning disabilities, but not for all. Further, certain characteristics are more likely to be exhibited at certain age levels. For example, young children are more likely to be hyperactive than adolescents. In addition, deficits are manifested in different ways at different age levels. For example, an underlying language disorder may appear as a delayed speech problem in the preschooler, as a reading disorder in the elementary pupil, and as a writing disorder in the secondary student. Moreover, these characteristics are also found among students with mild disabilities. The implications of each of these learning and behavioral characteristics are complex, and they are discussed in detail throughout this book.

Gender Differences Clinics and schools identify four times more boys than girls who have learning disabilities. However, gender research shows that there actually may be as many girls with learning disabilities as boys, but they are not being identified. Boys and girls with learning disabilities have different characteristics. Boys tend to exhibit more physical aggression and loss of control; however, they also exhibit visual-motor abilities, spelling ability, and written language mechanical aptitude. Girls with learning disabilities tend to have more cognitive, language, and social problems and to have severe academic achievement deficits in reading and math. Girls tend to be more verbal and display less physical aggression. Girls with learning disabilities who are not identified are an underserved group that is at significant risk for long-term academic, social, and emotional difficulties (Cortiella, 2009; Shaywitz, 2003).

Explanations of why more boys than girls are identified with learning disabilities include *biological causes* (males may be more vulnerable to learning disabilities), *cultural factors* (more males may be identified because boys tend to exhibit more disruptive behaviors that are troublesome to adults), and *expectation pressures* (the expectations for success in school may be greater for boys than for girls).

1.2f Characteristics at Different Stages of Life

When the initial small group of concerned parents and professionals first sought to obtain help for their children and to promote the field of learning disabilities in the 1960s, their efforts focused on the pressing needs of the elementary-level child. Today, we recognize that learning disabilities become evident at many stages of life and that the problem appears in a different form at each stage.

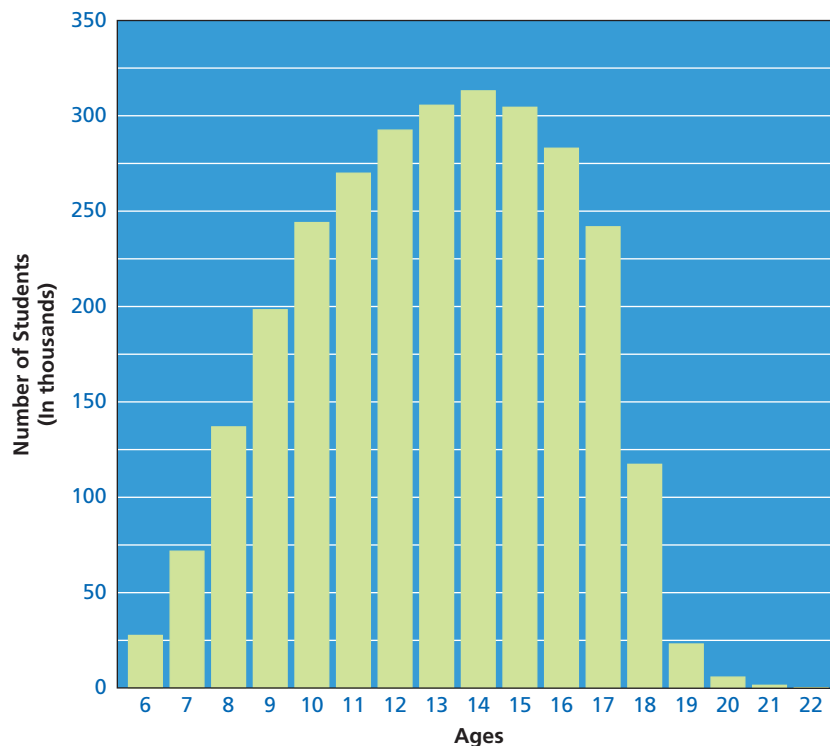


FIGURE 1.2
Age Distribution of Students With
Learning Disabilities

Source: To assure the free appropriate public education of all children with disabilities. Twenty-eight annual report to congress in the Implementation of the individual with Disabilities Education Act, by the U.S. Department of Education, 2008. Washington, DC: Westat.

Figure 1.2 illustrates the number of children identified with specific learning disabilities at each age, from ages 6 to 21 (U.S. Department of Education, 2012). The number of students gradually increases from age 6 to 9, a majority of students are in the 9 to 14 age range, and the number decreases sharply from age 16 to 21. This pattern suggests that substantial numbers of children with learning disabilities are identified in the age range of 9 through 14. Most children are not identified until age 9, and the decrease during the late teen years may relate to the large school dropout rate of adolescents with learning disabilities.

Each age group (preschoolers, elementary children, adolescents, and adults) needs different kinds of skills. Therefore, certain characteristics of learning disabilities assume greater prominence at certain age levels.

The Preschool Level Because growth rates are so unpredictable at young ages, educators are generally reluctant to identify preschoolers under a categorical label such as *learning disabilities*. Very young children (under age 6) who appear to have learning disabilities are often identified with a noncategorical label such as *developmental delay*. Legislation for preschool children with disabilities includes two different laws. (1) Ages birth to age 3 for infants and toddlers, and (2) ages 3 to age 6 for preschoolers. Preschool children are further discussed in Chapter 8, “Young Children With Disabilities.” Experience and research show that intervention programs for infants and toddlers (ages birth to 3) and preschool children (ages 3 to 6) are very effective and that intervention efforts have a high payoff (Lerner, Lowenthal, & Egan, 2003).

Among the characteristics displayed by preschool children with developmental delays are poor motor development, language delays, speech disorders, and slow cognitive and concept development. Common examples of problems at the preschool level are the 3-year-old child who cannot catch a ball, hop, jump, or play with manipulative toys (poor motor development); the 4-year-old

child who does not use language to communicate, has a limited vocabulary, and cannot be understood (language and speech disorders); and the 5-year-old child who cannot count to 10, name colors, or work puzzles (poor cognitive development). In addition, preschoolers often exhibit behaviors of hyperactivity and poor attention. The problems and treatment of the preschool child are so unique that a special chapter of this text is devoted to the topic (see Chapter 8, “Young Children with Disabilities”). Data for 3- to 5-year-old children are not counted by category of disability (e.g., learning disabilities), but 5.8% of all children receiving special education services are in the 3 to 5 age group (U.S. Department of Education, 2012).

The Elementary Level For many children, learning disabilities first become apparent when they enter school and fail to acquire academic skills. The failure often occurs in reading, but it also happens in mathematics, writing, or other school subjects. Among the behaviors frequently seen in the early elementary years are inability to attend and concentrate; poor motor skills, as evidenced in the awkward handling of a pencil and in poor writing; and difficulty in learning to read.

In the later elementary years, grades 4 through 8, as the curriculum becomes more difficult, problems may emerge in other areas, such as social studies or science because more higher-level thinking skills are required. Emotional problems also become more of an impediment after several years of repeated failure, and students become more conscious of their poor achievement. For some students, social problems and the inability to make and keep friends increase in importance at this age level. About 40% of all children with learning disabilities are in the 6 to 11 age group (U.S. Department of Education, 2012).

The Secondary Level A radical change in schooling occurs at the secondary level, and adolescents find that learning disabilities begin to take a greater toll. The tougher demands of the middle school and high school curricula and teachers, the turmoil of adolescence, and the continued academic failure combine to intensify the learning disability. Adolescents are also concerned about life after completing school. They may need counseling and guidance for college, career, and vocational decisions. To worsen the situation, a few adolescents find themselves drawn into acts of juvenile delinquency or are tempted to drop out of school.

Because adolescents tend to be overly sensitive, some emotional, social, and self-concept problems often accompany a learning disability at this age. Most secondary schools have programs for adolescents with learning disabilities. Although this age group is considered throughout this text, some of its unique features and some special programs for adolescents are discussed in Chapter 9, “Adolescents and Adults With Learning Disabilities and Related Mild Disabilities.” About 60% of all students with learning disabilities are in the 12 to 17 age group (U.S. Department of Education, 2012).

The Adult Years By the time they finish schooling, some adults overcome their learning disabilities, are able to reduce them, or have learned how to compensate or circumvent their problems. For many adults, however, the learning problems continue, and vestiges of their disorder continue to hamper them in adulthood. Both reading difficulties and nonverbal social disabilities may limit their career

development and may also hinder their ability to make and keep friends. Many adults voluntarily seek help in later life to cope with their learning disabilities.

1.2g Some Eminent People With Learning Disabilities

The life stories of some individuals who eventually became eminent, successful contributors to society reflect their travails with serious learning disabilities. Student Stories 1.1, “Childhood Memories,” describes the childhood stories of such people with learning disabilities. These persons of eminence, fortunately, were somehow able to find appropriate ways of learning, and they successfully overcame their initial failures.

STUDENT STORIES 1.1

Childhood Memories

Charles Schwab, the founder of the successful and innovative stock brokerage firm, struggled with severe reading problems throughout his life. Schwab explains that he coped by developing his other abilities, such as the capacity to envision, to anticipate where things are going, and to conceive a solution to a business problem (Kantrowitz & Underwood, 1999). Schwab believes his reading problem forced him to develop these skills at a higher level than is attained by people for whom reading comes easily: “I’ve always felt that I have more of an ability to envision, to be able to anticipate where things are going, to conceive a solution to a business problem than people who are more sequential thinkers” (West, 1997, p. 349). A website for Charles Schwab is at <http://www.schwablearning.org>.

Nelson Rockefeller, who served as vice president of the United States and governor of the state of New York, suffered from severe dyslexia, a type of learning disability that involves extreme difficulty in learning to read. His poor reading ability kept him from achieving good grades in school, and his learning disability forced him to memorize his speeches during his political career. In describing his feelings about growing up with a learning disability, Rockefeller (1976) recalled,

I was dyslexic...and I still have a hard time reading today. I remember vividly the pain and mortification I felt as a boy of eight when I was assigned to read a short passage of scripture at a community vesper service and did a thoroughly miserable job of it. I know what a dyslexic child goes through... the frustration of not being able to do what other children do easily, the humiliation of being thought not too bright when such is not the case at all. But, after coping with this problem for more than 60 years, I have a message of hope and encouragement for children with learning disabilities and their parents (pp. 12–14)

As a child, Thomas Edison, the ingenious American inventor, was called abnormal, addled, and mentally defective. Writing in his diary that he was never able to get along at school, he recalled that he was always at the foot of his class. His father thought of him as stupid, and Edison described himself as a dunce.

Auguste Rodin, the great French sculptor, was called the worst pupil in his school. His teachers diagnosed Rodin as uneducable and advised his parents to put him out to work, although they doubted that he could ever make a living.

Woodrow Wilson, the scholarly 28th president of the United States, did not learn his letters until he was 9 years old and did not learn to read until age 11. Relatives expressed sorrow for his parents because Woodrow was so dull and backward (Thompson, 1971).

Albert Einstein, the theoretical physicist, did not speak until age 3. His search for words was described as laborious and, until he was 7, he formulated each sentence, no matter how commonplace, silently with his lips before speaking the words aloud. Schoolwork did not go well for young Albert. One teacher predicted that “nothing good” would come of him. Einstein’s language disabilities persisted throughout his adult life. When he read, he heard words. Writing was difficult for him, and he communicated badly through writing. In describing his thinking process, he explained that he rarely thought in words; it was only after a thought came that he tried to express it in words at a later time (Isaacson, 2007; Patten, 1973).

REFLECTIVE QUESTION

1. How did these early years of academic struggle affect the lives of these individuals?

1.2h The Cross-Cultural Nature of Learning Disabilities

The condition of learning disabilities is a universal problem that occurs in all cultures and nations in the world. The problem is not confined to the United States or to English-speaking countries. Accumulating research shows that in all cultures and societies there are children who seem to have normal intelligence but who also have severe difficulty in learning language, acquiring reading or writing skills, or doing mathematics. The International Academy for Research in Learning Disabilities (IARLD), an organization dedicated to fostering international research on learning disabilities, publishes a journal called *Thalamus* and has a website at <http://www.iarld.com>.

Clinical reports of the personal travails of children from all corners of the world are remarkably similar. In the following excerpt, for example, a Chinese adult remembers his first baffling failure in a Chinese school; the story parallels the bewildering episodes that children with learning disabilities face in U.S. schools (Lerner & Chen, 1992).

My first recollection of learning problems occurred at age 7, when I entered the first grade in school in Taiwan. My teacher wrote characters on the blackboard and the pupils were to copy this board work into their notebooks. I clearly remember that I was simply unable to perform this task. Observing how easily my classmates accomplished the assignment, I was perplexed and troubled by my inability to copy the characters and words from the board.

Research reports about learning disabilities come from many parts of the world: South Korea (Kim, Rhee, Burns, & Lerner, 2009), the Netherlands (Van der Lief & Morfidi, 2006; Stevens & Werkhoven, 2001), Great Britain (Wedell, 2001), Scandinavia (Lundberg & Høien, 2001), New Zealand (Chapman, 1992), Germany (Opp, 2001), Italy (Fabbro & Masutto, 1994), Mexico (Fletcher & DeLopez, 1995), Portugal (da Fonseca, 1996), Canada (Wong & Hutchinson, 2001), Australia (Elkins, 2001), Russia (Korkunov et al., 1998), South America (Bravo-Valdivieso & Müller, 2001), and Israel (Shalev et al., 1998). The problem appears in children learning an alphabet-based system of written language, such as English, and with children learning a logographic (pictorial) system of written language, such as Chinese (Hsu, 1988) or Japanese (Tsuge, 2001).

1.2i History of the Field of Learning Disabilities

This section offers a brief history of the field of learning disabilities. A more detailed history appears on the student section of the Education CourseMate, under Additional Information for Chapter 1.

The term *learning disabilities* was first introduced in 1963, when a small group of concerned parents and educators met in Chicago to consider linking the isolated parent groups active in a few communities into a single organization. Each of these parent groups identified the children of concern under a different name, including children with *perceptual handicaps*, **brain-injured children**, and *neurologically impaired children*. To unite these groups, they needed to agree on a single term to identify the children of concern. When the term *learning disabilities* was suggested at this meeting by Sam Kirk (Kirk, 1963), it met with immediate approval. The organization today known as the Learning Disabilities Association of America (LDA), <http://www.ldaamerica.org>, was born at this historic meeting.

brain injured child

A child who before, during, or after birth has received an injury to or suffered an infection of the brain. As a result of such organic impairment, there are disturbances that prevent or impede the normal learning process.

During the 50 years since learning disabilities were first recognized, the field has wrestled with many controversial issues, and our notion of learning disabilities is different from what it once was (Hallahan, 2007). Although the term *learning disabilities* had immediate appeal and acceptance, the task of developing a definition of learning disabilities that is acceptable to all has proved to be a formidable challenge. Indeed, defining this population is considered so overwhelming that some have likened learning disabilities to Justice Potter Stewart's comment on pornography: impossible to define, "but I know it when I see it." The most influential definition of learning disabilities is in the federal law IDEA-2004.

Learning disabilities was first identified as a category of special education in federal law in 1975 (PL 94-142). These were heady days for parents, who finally had a sensible explanation of their child's problems and for educators who were passionately committed to instructing students with learning disabilities and providing the kind of intensive, relentless, iterative individualized instruction they needed (Hallahan, 2007).

Prior to the establishment of the field of learning disabilities (1800–1930), there was a period of broad scientific research on the functions and disorders of the brain. Many of the early brain researchers were physicians who were involved in investigating the brain damage of adult patients who had suffered a stroke, an accident, or a disease. These scientists gathered information by studying the behavior of patients who had lost some brain function, such as the ability to speak or to read. Through autopsies of many of these patients, the scientists were able to link the loss of functions to specific damaged areas of the brain.



This brain research became the foundation of the field of learning disabilities (1930–1960), when the scientific studies of the brain were applied to the clinical study of children and were then translated into ways of teaching. Psychologists and educators developed instruments for assessment and for methods of teaching students with learning disabilities. During the transition phase, terminology changed many times, with various terms being used to describe the problem—*brain-injured children*, *minimal brain dysfunction*, and, finally, *learning disabilities*.

The term *brain-injured child* was first used by Alfred Strauss and Laura Lehtinen (1947), pioneers who identified brain-injured children as a new category of exceptional children. Strauss and Lehtinen hypothesized that a brain injury could occur during one of three periods in the child's life: *before* birth (prenatal stage), *during* the birth process, or at some point *after* birth (postnatal stage). These scholars believed that as a result of such organic impairment, the normal learning process was impeded. Many of these children previously had been classified as mentally retarded, emotionally disturbed, autistic, aphasic, or behaviorally maladjusted. A large number of children exhibited such severe behavioral characteristics that they were excluded from the public schools.

One characteristic of the brain-injured child is a **perceptual disorder**, which is a disturbance in the ability to perceive objects, relations, or qualities—a difficulty in the interpretation of sensory stimulation. For example, one teacher noted that when she wore a particular dress with polka dots, the children with perceptual disorders seemed compelled to touch it to verify what they thought they perceived. Figure 1.3 illustrates the ambiguity in perception that the normal observer senses, and which can help a normal observer understand the

perceptual disorder

A disorder in which the student is unable to recognize and interpret information received through the senses.

FIGURE 1.3

Do You See a Young Woman or an Old Woman in This Picture?



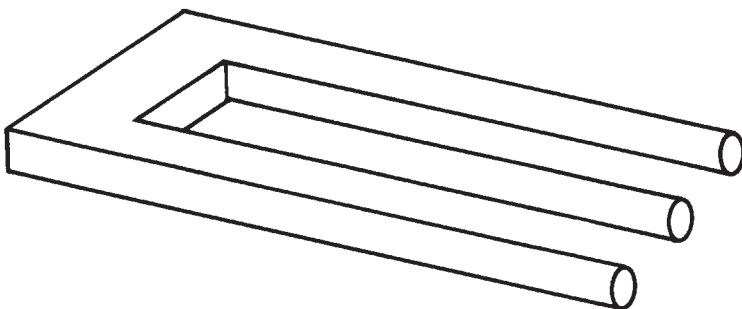
Source: Illustration by W. E. Hill in Puck, 1915.

minimal brain dysfunction (MBD)

A term that refers to mild or minimal neurological abnormality that causes learning difficulties.

FIGURE 1.4

Examine This Drawing;
Try to Copy or Sketch
It From Memory



© Cengage Learning

unstable world of the child with a perceptual disorder. In this figure, we are asked to determine whether the picture is the face of an old woman or a young woman. Do you see a young woman or an old woman in this picture?

In Figure 1.4 one is asked to look at the drawing and then to sketch it from memory. (Even copying this figure while viewing it may prove to be difficult.) These illustrations produce a perceptual confusion, much like that experienced by a child with perceptual disorders.

Strauss's work with brain-injured children laid the foundation for the field of learning disabilities by perceiving similar characteristics in a diverse group of children who had been misdiagnosed by specialists, misunderstood by parents, and often discarded by society.

The term **minimal brain dysfunction (MBD)** is defined as a mild or minimal neurological abnormality that causes learning disabilities, and the term *MBD* was recommended as a way to identify these children by the U.S. Department of Health, Education, and Welfare (Clements, 1966). MBD was used to describe children with near-average intelligence and with certain learning and behavioral disorders associated with deviations or dysfunctions of the central nervous system. Many medical professionals employed the term *MBD* when diagnosing children.

Learning disabilities successfully serves as a recognized way to refer to individuals with problems that are the concern of this text.

Learning disabilities became an established discipline in schools throughout the United States. The field grew rapidly as programs for learning disabilities were developed, teachers were trained, and children began to receive services.

One of the first public school programs for learning disabilities was established in Syracuse, New York (Cruikshank et al., 1961). By the 1960s and 1970s, public school programs for learning disabilities were rapidly established throughout the nation. Several strong forces promoted this development, including parental pressures, an increase of professional information, the availability of teacher training programs, and state laws requiring services for students with learning disabilities. All of this took place before the passage of the first comprehensive special education law in 1975, the Education for All Handicapped Children Act (PL 94-142).

Most of the early programs were for students at the elementary level. In these early programs, children with learning disabilities were placed in separate classes, a setting that followed the traditional instructional programs in

special education at that time. Later in this period, resource room programs were introduced, and the secondary schools also began to serve adolescents with learning disabilities. Many new tests and teaching materials were developed during this period to serve the growing number of students identified under the category of learning disabilities.

1.2j The Common Core Standards

Learning Disabilities is the largest category, accounting for 40% of all disabilities, Intellectual Disabilities accounts for 0.9%, and Emotional Disturbance accounts for 0.7.% of all disabilities. The category “Other Health Impaired” (OHI), which includes ADHD, accounts for 8.5% of all disabilities.

The designation “Other Disabilities” refers to Low-incidence categories and accounts for approximately 1% of children receiving special education services. Other Disabilities consists of several categories of exceptionality, and often these students are included in the group of Mild Disabilities. For a student to be eligible for special education services, the student must have an identified category of disability that adversely impacts educational performance.

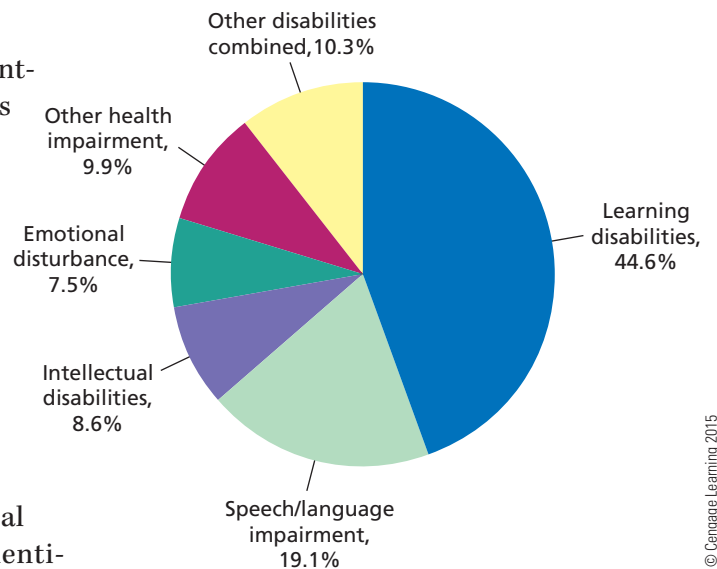


FIGURE 1.5
Composition of Students With All Learning Disabilities

Did You Get It?

In terms of a “federal” definition of learning disabilities, which of the following is not one of the component criteria?

- a. The disability has no possible cause other than learning-related.
- b. The individual experiences at least one form of emotional and/or behavioral difficulty in addition to his or her learning disability.
- c. A difficult in learning exists.
- d. The disorder affects at least one psychological process.

[Take the full quiz on CourseMate.](#)

1.3 Neurosciences and Study of the Brain



Informed educators need up-to-date information about the brain and learning. Scientific investigations that attempt to unravel the mysteries of the human brain and learning are fascinating in themselves. Knowledge about the brain is increasing rapidly and promises to further our understanding of the enigma of learning disabilities. Recent neuroscience advances have new technologies to study the brain and its role in learning (Dehaene, 2009; Sousa, 2001).

The **neurosciences** are the cluster of disciplines that investigate the structure and functions of the brain and the central nervous system. In this section, we briefly examine two facets of the neurosciences: (1) the structure and functions of the brain and (2) recent brain research.

neurosciences

Disciplines that are involved with the study of the brain and its functions.

1.3a The Brain: Its Structure and Functions



All human behavior, including learning, is mediated by the brain. The process of learning is one of the most important activities of the brain. From a neurological perspective, difficulty in academic learning and reading represents a subtle malfunction in this most complex organ of the human body (Dehaene, 2009; Sousa, 2001). Figure 1.6 shows the four major lobes of the brain.