

An Introduction to Special Education



THIRTEENTH EDITION

# EXCEPTIONAL LEARNERS

An Introduction to Special Education



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# ABOUT THE AUTHORS

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# PREFACE

**Exceptional Learners:** An Introduction to Special Education, Thirteenth Edition, is a general introduction to the characteristics of exceptional learners and their education. (*Exceptional* is the term that traditionally has been used to refer to people with disabilities as well as to those who are gifted.) This book emphasizes classroom practices as well as the psychological, sociological, and medical aspects of disabilities and giftedness.

We've written this text with two primary audiences in mind: those who are preparing to be special educators and those who are preparing to be general educators. Given the federal legislative mandates, as well as ethical concerns, for including students with disabilities in general education classrooms whenever possible, general educators must be prepared to understand exceptional learners. And they must be ready to work with special educators to provide appropriate educational programming for students with disabilities. This book also is appropriate for professionals in other fields who work with exceptional learners (e.g., speech-language pathologists, audiologists, physical therapists, occupational therapists, adapted physical educators, counselors, and school psychologists).

We believe we've written a text that reaches both the heart and the mind. Feedback we've received from students and instructors on previous editions strengthens our confidence that we've done so. Our conviction is that professionals working with exceptional learners need to develop not only a solid base of knowledge, but also a healthy attitude toward their work and the people whom they serve. Professionals must constantly challenge themselves to acquire a solid understanding of current theory, research, and practice in special education and to develop an ever more sensitive understanding of exceptional learners and their families.

The Pearson eText for this title is an affordable, interactive version of the print text that includes videos in every chapter, an interactive chapter selfcheck quiz, and an opportunity for students to get feedback on their answers to the questions posed in interactive features. Look for the play button to see where video and interactive assessment is available.

To learn more about the enhanced Pearson eText, go to www.pearsonhighered.com/etextbooks.

## What's New in This Edition?

As with all of our previous revisions, we've approached this one with an eye toward providing the reader with the latest, cutting-edge information on research and best practices in special education. The most obvious innovation is that this edition is available as FULLY DIGITAL, with over 200 interactive elements (primarily videos) hot-linked throughout the text. After careful consideration, we as well as the publisher, Pearson, are convinced that the electronic format offers multiple benefits for students, instructors, and us, the authors. For students it offers a much more affordable learning resource than the traditional text. For instructors it offers a way of engaging students and opening up myriad possibilities for class discussions and lectures. For us, the authors, it offers a way to bring to life teaching practices, to portray the human side of disabilities, to go into more depth on critical topics. Excuse the cliché, but "a picture is worth a thousand words" comes to mind.

## **New Features**

New Feature:	Up Close With
Benefit:	Features individuals who, in various ways, serve as inspirational models for all people, whether disabled or not. Each is accompanied by a video that brings to life the person's accomplishments.
Location in text:	Every chapter; good example; Nick Vucijic, Chapter 1

New Feature:	End of Chapter Questions (15 per chapter)
Benefit:	End of chapter questions allow students to monitor their understanding of the material and prepare for evaluations.
Location in text:	End of each chapter

New Feature:	Interactive Elements
Benefit:	Over 200 electronic links to videos and websites of key concepts, recent scientific discoveries, human interest stories, cutting-edge technologies, teaching techniques. The student is able to delve deeper into the content by linking directly to research and related content, such as teaching methods, on the Internet that has been vetted for quality.
Location in text:	Throughout every chapter with a minimum of 10 links per chapter; good example—Chapter 2: tongue-in-cheek depiction of special education referral: http://www.youtube.com/watch?v=KrapFXnZIDE

New Feature:	Responsive Instruction Features: 1–2 Video Models of Teaching Techniques in 12 of the 15 chapters
Benefit:	The existing Responsive Instruction features have been updated and enhanced with video examples of the techniques described in the feature. Plus four new Responsive Instruction features have been added—Chapter 8: Bullying; Chapter 9: Video Modeling; Chapter 12: Technology for Writing in Braille; Chapter 15: Twice Exceptional.
Location in text:	In all categorical chapters and multicultural chapter; good example, Chapter 5: Classwide Peer Tutoring: http://mediaplayer.pearsoncmg.com/_blue-top_640x360_ccv2/ab/streaming/myeducationlab/heward/12.ClassPeerTutSci_iPad.mp4

New Feature:	Hot links to pertinent organizations
Benefit:	Students should be familiar with the pertinent organizations in their field. The links to the major organizations in the field of special education are provided at the end of each chapter. This feature helps to promote professionalism of the next generation of teachers. Additionally, students can count on these links being trustworthy sources.
Location in text:	At the end of every chapter; example, Chapter 1: www.cec.sped.org

New Feature:	Dozens of new or updated Focus On features (with links)
Benefit:	Highlights important concepts, hot new topics, humorous anecdotes; helps reader delve
	deeper into the content by linking directly to research and related content on the Internet
	that has been vetted for quality. Engages readers' attention.

**Location in text:** Every chapter

Example:

Focus On . . . Traumatic Brain Injury in Athletics: https://www.youtube.com/watch?v=

nrzyJ9P4YmU

This hot topic has been in the media for the last several years. Recent medical advances have indicated that concussions, while they seem mild, are significant injuries. As a result, many states have passed laws related to youth sports and concussion. It is critical that awareness increases as to the magnitude of concussive injuries and the laws that protect students. Future teachers should be aware of the legislation in their states (provided in an

active link) and the seriousness of any head injury.

## **Thoroughly Updated Feature**

Updated Feature: How Can I Help Students With \_\_\_\_\_\_ in the General Education Classroom?

(Updated, streamlined, retitled the Making It Work feature from previous editions)

Benefit: Authored by Dr. Margaret Weiss, these provide examples of how special education and

general education teachers can work together to benefit students with disabilities.

**Location in text:** One in most of the 11 categorical chapters.

# New or Thoroughly Updated Content within Chapters

- Chapters 6, 7, 8, 9: Inclusion of new definitions of Specific Learning Disorder, Attention Deficit Hyperactivity Disorder (ADHD), Emotional and Behavioral Disorders, and Autism Spectrum Disorders (ASD), from the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5, 2013)
- Chapter 1—Exceptionality and Special Education: More emphasis on abilities, rather than disabilities, of students in special education
- Chapter 2—Current Practices for Meeting the Needs of Exceptional Learners:
   Updated and expanded coverage of special education in the context of the Common Core State Standards Initiative
- Chapter 3—Multicultural and Bilingual Aspects of Special Education: Updated percentages of students of various ethnic groups receiving special education
- Chapter 4—Parents and Families: Greater emphasis on importance of family resiliency in the face of having a child with a disability
- Chapter 5—Learners with Intellectual and Developmental Disabilities: More succinct and clear-cut explanation of the critical role of systematic instruction for students with intellectual disabilities
- Chapter 6—Learners with Learning Disabilities: Expanded and more indepth discussion of literacy instruction and learning disabilities
- Chapter 7—Learners with Attention Deficit Hyperactivity Disorder: More emphasis on importance of executive functioning and behavioral inhibition
- Chapter 8—Learners with Emotional or Behavioral Disorders: A new Figure 8.1 depicting the process of early identification of emotional and behavioral disorders
- Chapter 9—Learners with Autism Spectrum Disorders: Importance of neuronal underconnectivity between the front and back of the brain in people with autism spectrum disorders
- Chapter 10—Learners with Communication Disorders: More streamlined coverage for definitions of speech and language disabilities

- Chapter 11—Learners Who Are Deaf or Hard of Hearing: Updated information on how sign language evolves naturally among people who are deaf, further demonstrating that sign language is a bona fide language
- Chapter 12—Learners with Blindness or Low Vision: The role humor can play in dispelling stereotypes about people who are blind
- Chapter 13—Learners with Low-Incidence, Multiple, and Severe Disabilities: Expanded coverage of traumatic brain injury, especially in the context of sports injuries
- Chapter 14—Learners with Physical Disabilities and Other Health Impairments: Research linking spina bifida and learning disabilities
- Chapter 15—Learners with Special Gifts and Talents: Difficulties of defining giftedness in a multicultural society

## **Retained Special Features**

#### PEER CONNECTIONS

We believe that students reading this book will have a better understanding of exceptionality if they read about the lives of exceptional learners who are young adults. The *Peer Connections* features, based on interviews conducted by Mira Cole, highlight individuals with a disability between the ages of 18 and 25. (Note the Chapter 9 feature, *Learners with Autism Spectrum Disorders*, has been updated.) Students reading the textbook will get to know individuals with disabilities through their personal stories and realize that their peers with disabilities are very much like themselves.

#### SUCCESS STORIES: SPECIAL EDUCATORS AT WORK

Special educators work in a variety of settings, ranging from general education classrooms to residential institutions. Although their main function involves teaching, these professionals also engage in a variety of activities, such as counseling, collaborating, and consulting. To illustrate this variety, each of the 11 categorical chapters (Chapters 5–15) includes an example of a special educator at work. (Note the Chapter 5 feature, *Learners with Intellectual Disabilities*, has been updated.) Written by Dr. Jean B. Crockett of the University of Florida, an experienced special education administrator and teacher educator, each story focuses on a special educator's work with an individual student and shows readers the wide range of challenges special educators face, the dynamic nature of their positions, and the competent, hopeful practice of special education. This feature emphasizes the importance of education for students with special needs that is intensive, relentless, and specific, and includes questions for students that relate to CEC Standards.

# MISCONCEPTIONS ABOUT EXCEPTIONAL LEARNERS: MYTHS AND FACTS BOXES

We start each chapter with a feature that juxtaposes several myths and facts about the subject of the chapter. This popular feature, familiar to longtime users of previous editions, serves as an excellent advance organizer for the material to be covered.

## Support Materials for Instructors

## Thoroughly Updated Online Instructors' Manual, with Over 150 New Electronic Resources for Instructors

#### Instructor's Resource Manual and Test Bank

The Online Instructor's Manual and Test Bank synchronize all of the resources available for each chapter and can be used for traditional courses as well as online,

or online-supported, courses. The Test Bank provides hundreds of multiple-choice, short-answer, and essay questions, all with answer keys. The manual now features OVER 150 ELECTRONIC RESOURCES.

**Feature:** Instructor Manual Interactive Elements

Benefit: Over 150 links to videos and websites of key concepts, recent scientific discoveries, hu-

man interest stories, cutting-edge technologies, teaching techniques. The instructor is able to delve deeper into the content with students by linking directly to research and related content on the Internet that has been vetted for quality. These differ from the links in the text in that some of them may be longer or provide more detailed information. This allows the instructor to select additional multimedia material for lectures and presentations or to develop a deeper background knowledge. These links may also provide additional mate-

rial for the graduate-level courses.

**Location in text:** Every chapter

Example: Chapter 6, video link on working memory, a difficult topic to understand/teach:

http://www.youtube.com/watch?v=S65D2oazf8M

#### **New Test Bank**

**Feature:** Author-Developed (Paige C. Pullen) New Test Bank

**Benefit:** Based on user feedback, we have developed a new test bank. Instructors can now rely on

accurate and fair questions on the most important concepts in each chapter.

**Location in text:** Online through Pearson

#### PowerPoint™ Slides

The PowerPoint slides include key concept summarizations, diagrams, and other graphic aids to enhance learning. They are designed to help students understand, organize, and remember core concepts and theories.

#### TestGen

Test Gen is a powerful test generator available exclusively from Pearson Education publishers. You install TestGen on your personal computer (Windows or Macintosh) and create your own tests for classroom testing and for other specialized delivery options, such as over a local area network or on the Web. A test bank, which is also called a Test Item File (TIF), typically contains a large set of test items, organized by chapter and ready for your use in creating a test, based on the associated textbook material. Assessments—including equations, graphs, and scientific notation—may be created for both print and online testing.

The tests can be downloaded in the following formats:

TestGen Testbank file—PC

TestGen Testbank file—MAC

TestGen Testbank—Blackboard 9 TIF

TestGen Testbank—Blackboard CE/Vista (WebCT) TIF

Angel Test Bank (zip)

D2L Test Bank (zip)

Moodle Test Bank

Sakai Test Bank (zip)

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Kerry Rubadue, Project Manager for this edition, brought all the complex pieces of the project to completion flawlessly. Our copy editor, Carey Lange, did a terrific job of keeping us stylistically and grammatically correct. Chris Boyer has made proving information for the Marketing Questionnaire a pleasant experience. And that's saying something.

## Some Final Thoughts

Given that this is the thirteenth edition, some readers might legitimately be wondering whether we have lost any enthusiasm for the at times tedious tasks required to produce a thorough, up-to-date revision. We assure you that we didn't approach this edition any differently than we did the first. In fact, if anything, we were energized by the freedom of expression that came with changing to digital format.

For those loyal users of previous editions, we assure you that we weighed carefully each change or update. We hope you agree that our revisions reflect the myriad changes in the field of special education over the past few years as well as the information explosion brought about by ever more accessible computer databases and the Internet. We also hope you'll agree that we haven't failed in our continuing commitment to bring you the best that research has to offer with regard to educating exceptional learners.

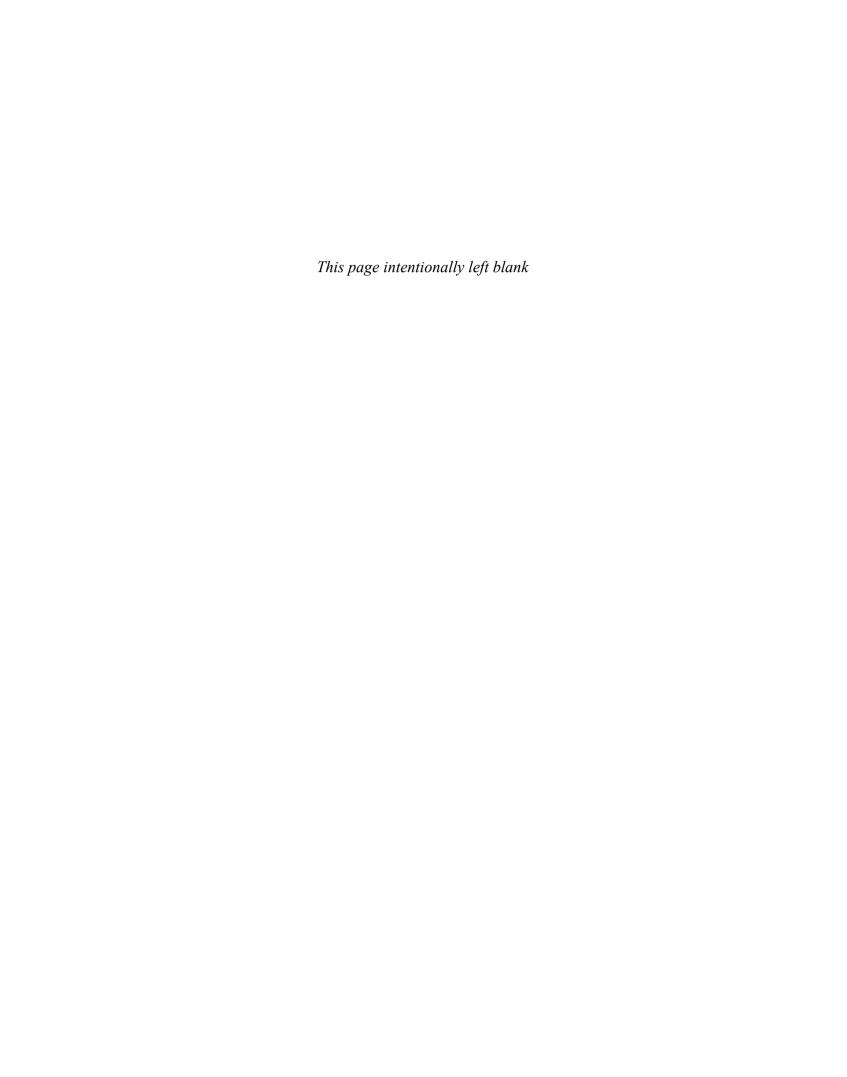
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JMK

**PCP** 

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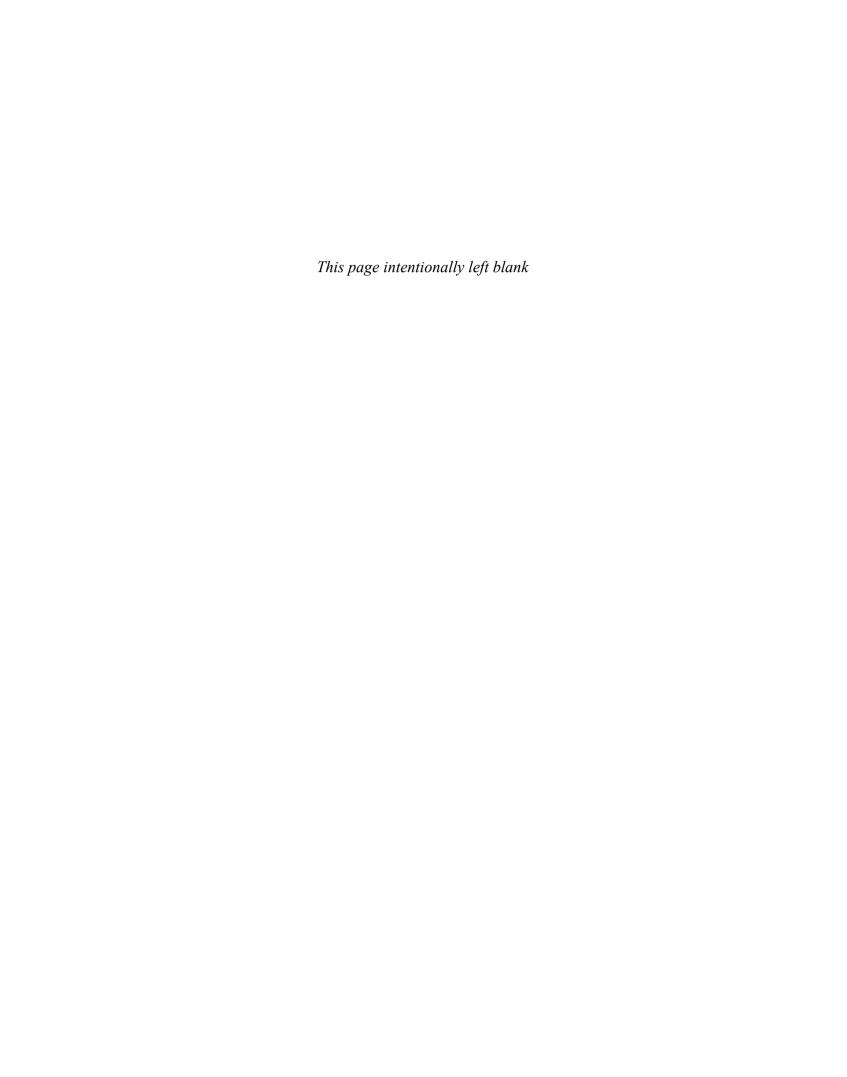
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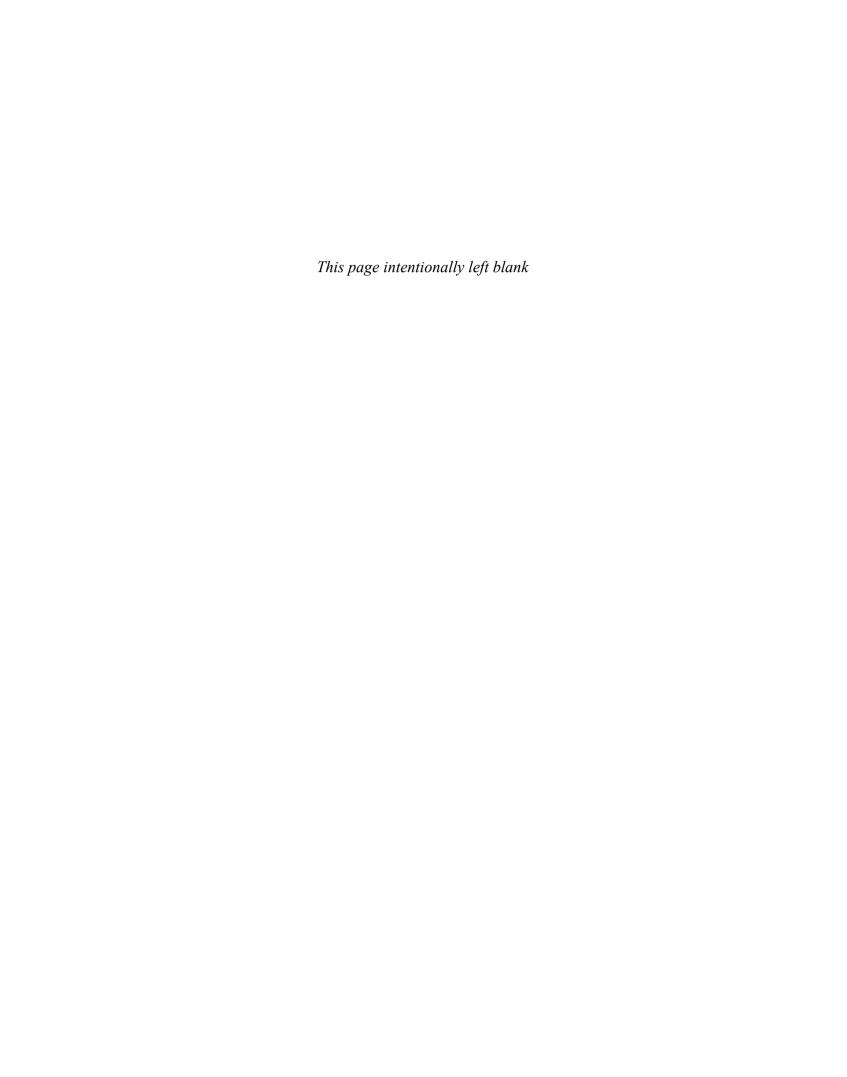
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#### THIRTEENTH EDITION

# EXCEPTIONAL LEARNERS

CHAPTER

# Exceptionality and Special Education



# QUESTIONS to guide your reading of this chapter...

- How can we get oriented to exceptionality and special education?
- What is the educational definition of exceptional learners?
- What is the prevalence of exceptional learners?
- What is the definition of special education?

- What are the history and origins of special education?
- What legislation and litigation have affected special education?
- What is our perspective on the reasons for optimism regarding special education?

#### MISCONCEPTIONS ABOUT

#### **Exceptional Learners**

MYTH Public schools may choose not to provide education for some students with disabilities.

FACT Federal legislation specifies that to receive federal funds, every school system must provide a free appropriate public education (FAPE) for every student, regardless of any disabling condition.

MYTH The causes of most disabilities are known, but little is known about how to help individuals overcome or compensate for their disabilities.

FACT In most cases, the causes of disabilities are not known, although progress is being made in pinpointing why many disabilities occur. More is known about the treatment of most disabilities than about their causes.

MYTH People with disabilities are just like everyone else.

FACT First, no two people are exactly alike. People with disabilities are unique individuals, just like everyone else. Often, most of their abilities are much like those of the average person who is not considered to have a disability. Nevertheless, a disability is a characteristic that is not shared by most people. It is important that disabilities be recognized for what they are, but individuals with disabilities must be seen as having many abilities—other characteristics that they share with the majority of people.

MYTH A disability is a handicap.

**FACT** 

A disability is an inability to do something, the lack of a specific capacity. A handicap, on the other hand, is a disadvantage that is imposed on an individual. A disability might or might not be a handicap, depending on the circumstances. For example, the inability to walk is not a handicap in learning to read, but it can be a handicap in getting into the stands at a ball game. Sometimes handicaps are needlessly imposed on people with disabilities. For example, a student who cannot write with a pen but can use a typewriter or word processor would be needlessly handicapped without such equipment.

he study of exceptional learners is the study of both differences and similarities. The exceptional learner differs in some way from the average. In very simple terms, such a person might have problems or special talents in thinking, seeing, hearing, speaking, socializing, or moving. More often than not, she has a combination of special abilities or disabilities. Today, more than 6 million learners with these differences have been identified in public schools throughout the United States. At least 2 of every 10 school-age students in the United States is considered exceptional. The fact that even many so-called normal students have school-related problems makes the study of exceptionality very demanding.

The study of exceptional learners is also the study of similarities. Exceptional individuals are not different from the average in every way. In fact, most exceptional learners are average in more ways than they are not. See, for example, the video (http://www.youtube.com/watch?v=\_rUIVxL19c0) about several children who highlight the fact that their disability doesn't make them different in many aspects of their life. And although not all individuals with Down syndrome are high functioning, the following feature demonstrates how many of these individuals aspire to and attain similar life goals as the typical adolescent or young adult (http://www.youtube.com/watch?v=VMoZhgN0V5o). Until recently, professionals—and laypeople as well—tended to focus on the differences between exceptional and nonexceptional learners, almost to the exclusion of the ways in which all individuals are alike. Today, we give more attention to what exceptional and nonexceptional learners have in common—to similarities in their characteristics,

needs, and ways of learning. As a result, the study of exceptional learners has become more complex, and many so-called facts about children and youths with disabilities and those who have special gifts or talents have been challenged.

# Getting Oriented to Exceptional Learners and Special Education

Students of one of the hard sciences might boast about the difficulty of the subject matter because of the many facts they must remember and piece together. Students of special education face quite different problems. To be sure, they study facts, but the facts they must master are relatively few compared to the unanswered questions or ambiguities within their mind. Any study of human beings must take into account inherent ambiguities, inconsistencies, and unknowns. In the case of the individual who deviates from the norm, we must multiply all the mysteries of normal human behavior and development by those pertaining to the person's exceptionalities. Because no single theory of normal development is universally accepted, it is not at all surprising that relatively few definite statements can be made about exceptional learners and that many controversies remain (Kauffman, 2008; Kauffman & Hallahan, 2011).

## The Importance of Abilities

Many people with disabilities have abilities that go unrecognized because their disabilities become the focus of concern and distract attention from what the individual can do. We must study the disabilities of exceptional children and youths if we are to learn how to help them maximize their abilities in school. Some students with disabilities that are not obvious to the casual observer need special programs of education and related services to help them live full, happy, productive lives. However, we must not lose sight of the fact that the most important characteristics of exceptional learners are their abilities, not their disabilities.

Consider Nick Vujicic, a Serbian-Australian who was born with a rare disorder called **tetra-amelia**, which results in the absence of all four limbs. In this video about Nick, (http://www.youtube.com/watch?v=Gc4HGQHgeFE) you will see that despite

We must not allow people's disabilities to keep us from recognizing their abilities or to become so much the focus of our concern that we overlook their capabilities.

Nick's physical disabilities he is more like than unlike people without disabilities. He has similar life goals—aspirations for meaningful relationships, gainful employment, and participation in athletics—but he is different in that he has no arms or legs. As educators, we need to focus on both similarities and differences. Moreover, we should be inspired by individuals such as Nick Vujicic to help individuals move beyond their disabilities to reach their maximum potential (http://www.youtube.com/watch?v=bQ0UFbU2tFU).

## Disability Versus Handicap

We recognize an important distinction between disability and handicap: A **disability** is an inability to do something, a diminished capacity to perform in a specific way (an impairment); a **handicap**, however, is a disadvantage

imposed on an individual. Thus, a disability might or might not be a handicap, depending on the circumstances. Likewise, a handicap might or might not be caused by a disability. For example, blindness is a disability that can be anything but a handicap in the dark. In fact, in the dark, the person who has sight is the one who is handicapped. Needing to use a wheelchair might be a handicap in certain circumstances, but the disadvantage may be caused by architectural barriers or other people's reactions, not the inability to walk. Other people can handicap those who differ from themselves (in color, size, appearance, language, and so on) by stereotyping them or not giving them opportunities to do the things they are able to do. When working and living with exceptional individuals who have disabilities, we must constantly strive to separate their disabilities from the handicaps. That is, our goal should be to confine the handicaps to those characteristics and circumstances that can't be changed and to make sure that we impose no further handicaps by our attitudes or our unwillingness to accommodate their disabilities.

### Disability Versus Inability

Another important distinction is that between inability and disability. All disabilities are an inability to do something. However, not every inability to do something is a disability. That is, disability is a subset of inability: "A disability is an inability to do something that most people, with typical maturation, opportunity, or instruction, can do" (Kauffman & Hallahan, 2005a, p. 30; see also Stichter, Conroy, & Kauffman, 2008). Consider age and ability. Most 6-month-old infants cannot walk or talk, but they are not thought of as having a disability because their inability is age appropriate. However, if that inability extends well past the time when most children learn to walk and talk, then we consider their inability a disability. Consider the role of instruction. An adult's inability to read is not a reading disability if she or he has not had reading instruction. Weigh the factor of typical adult human abilities. A typical adult male might not be able to lift 400 pounds, but this isn't considered a disability, because most men simply can't lift 400 pounds. Judging inability in the context of old age, the average 70-year-old can't run 10 miles, but most 70-year-olds can walk a considerable distance. Not being able to run 10 miles is not considered a disability for a 70-year-old, but being unable to walk at all is. The point is, simply, that disability is a significant difference from what we expect most people to be able to do, given their age, opportunities, and instruction.

# Educational Definition of Exceptional Learners

For purposes of education, exceptional learners are those who require special education and related services if they are to realize their full human potential (Kauffman & Hallahan, 2005a). They require special education because they differ markedly from most students in one or more of the following ways: They may have intellectual disabilities, learning or attention disabilities, emotional or behavioral disorders, physical disabilities, disorders of communication, autism, traumatic brain injury, impaired hearing, impaired sight, or special gifts or talents. The chapters that follow define as exactly as possible what it means to have an exceptionality.

Two concepts are important to this educational definition of exceptional learners: (1) diversity of characteristics and (2) need for special education. The concept of diversity is inherent in the definition of exceptionality; the need for special education is inherent in an educational definition. Exceptional learners differ from most (typical or average) individuals in a particular way that is relevant

to their education. Their particular educationally relevant difference demands instruction that differs from what most (typical or average) learners require (Kauffman & Hallahan, 2005a; Kauffman & Konold, 2007; Stichter et al., 2008). Consider the case of Doug Landis, a successful artist who is gifted at drawing but is paralyzed from the neck down. Doug is an example of how the focus on persons with disabilities must be on what they can do rather than how they are limited. (To learn more about this successful artist, see Up Close with Doug Landis).

#### **UP close** with Doug Landis

Doug Landis became quadriplegic (all four limbs are affected) in high school as a result of a wrestling accident. After Doug's accident, his brother thought he was watching too much television and challenged him to start drawing by putting a pencil in his mouth. Using a pencil attached to a mouth stick, Doug has become a major artist whose detailed line drawings of wildlife are highlighted, but he is gifted at drawing many things. He has also made short animated films. Doug is an active member of the organization Mouth and Foot Painting Artists (http://www.mfpausa.com), which assists artists with disabilities to meet their financial needs. Doug Landis's exquisite drawings and paintings of wildlife (http://www .youtube.com/watch?v=55AFFtP2pSA) illustrate how the focus on persons with disabilities must be on what they can do rather than on how they are limited. You may see Doug's art on his website (http://www.mouthart.com).

Sometimes seemingly obvious disabilities are never identified, and the consequences for the person and her family, as well as for the larger society, are tragic (Kauffman & Brigham, 2009). Sometimes disabilities are identified but special education is not provided, and opportunities for the child's development are thus squandered. Although early identification and intervention hold the promise of preventing many disabilities from becoming worse, preventive action often is not taken (Kauffman, 2005; Kauffman & Brigham, 2009; Stichter et al., 2008). In fact, the Centers for Disease Control and Prevention (CDC) (http://www.cdc.gov/) began a campaign to encourage the early identification of autism and developmental disabilities (http://www.youtube.com/watch?v=KrUNBfyjlBk).

Special education does not always work as it should, but when it does, educators identify a student's disability early and provide effective special education in the least restrictive environment. The student's parents are involved in the decision about how to address the student's needs, and the outcome of special education is the student's improved achievement and behavior.

Students with exceptionalities are an extraordinarily diverse group in comparison to the general population, and relatively

few generalizations apply to all exceptional individuals. Their exceptionalities can involve sensory, physical, cognitive, emotional, or communication abilities or any combination of these. Furthermore, exceptionalities may vary greatly in cause, degree, and effect on educational progress, and the effects may vary greatly depending on the individual's age, sex, and life circumstances. Any individual presented as an example of an "exceptional learner" is likely to be representative of exceptional learners in some respects but unrepresentative in others.

The typical student who receives special education has no immediately obvious or visible disability. He (more than half of the students served by special education are males) is in elementary or middle school and has persistent problems in learning and behaving appropriately in school. His problems are primarily academic and social or behavioral, and may not be apparent to many teachers until they have worked with him for a period of weeks or months. His problems persist despite teachers' efforts to meet his needs in the regular school program in which most students succeed. He is most likely to be described as having a learning disability or to be designated by an even broader label indicating that his academic and social progress in school is unsatisfactory owing to a disability.

By federal law, schools should not identify these exceptional students as eligible for special education until careful assessment indicates that they are unable to make satisfactory progress in the regular school program without special services designed to meet their extraordinary needs. Federal special education laws and regulations include definitions of several conditions (categories such as learning disability, autism, and hearing impairment) that might create a need for special education. These laws and regulations require that schools provide special services to meet whatever special needs are created by a disabling condition that can't be met in the regular educational program. The law doesn't require provision of special education simply because a student has a disability.

# Prevalence of Exceptional Learners

**Prevalence** refers to the percentage of a population or number of individuals having a particular exceptionality. Obviously, accurate estimates of prevalence depend on the ability to count the number of people in a given population who have a specific exceptionality.

The task of determining the number of students with exceptionalities might appear simple enough, yet the prevalence of most exceptionalities is uncertain and a matter of considerable controversy. Multiple factors make it hard to state the number of exceptional individuals with great accuracy and confidence. These factors include vagueness in definitions, frequent changes in definitions, and the role of schools in determining exceptionality—matters that we discuss in later chapters (see also Kauffman & Hallahan, 2011).

Government figures indicate that over 6.5 million students (8.5%) receive special education services in schools today (Data Accountability Center, 2013). It's important to keep in mind that the number of students served in special education is not necessarily equal to the number of students who actually have the disability. The latter is much more difficult to calculate than the former, because the federal government requires school districts to report each year the number of students with disabilities they are serving. Beginning in the mid-1970s, the number of students served by special education grew steadily, from about 3.75 million in 1976 to more than 6 million in the early 21st century. Most of the children and youths who are served by special education are between the ages of 6 and 17. Although preschoolers and youths ages 18 to 21 are being identified with increasing frequency as having disabilities, school-age children and youths in their early teens make up the bulk of the identified population.

The percentage of the special education population identified as having certain disabilities has changed considerably over several decades. For example, the number of students identified as having learning disabilities has more than doubled since the mid-1970s; these students now make up about half of the number of students receiving special education. In contrast, the percentage of students whose primary disability is speech or language impairments declined substantially (but is growing again), and the percentage identified as having intellectual disabilities is now about half of what it was in 1976. No one has an entirely satisfactory explanation of these changes. However, they might in part reflect alterations in definitions and diagnostic criteria for certain disabilities and the social acceptability of the "learning disability" label. In subsequent chapters, we discuss the prevalence of specific categories of exceptionality.

## High-Incidence and Low-Incidence Categories

Some disabilities occur with a relatively high frequency and are called *high-incidence disabilities* because they are among the most common. Learning disabilities, communication (speech and language) disorders, emotional disturbance, and mild intellectual disabilities are among those usually considered high incidence (Stichter et al., 2008). Other disabilities (such as blindness, deafness, severe intellectual disabilities, and autism) occur relatively rarely and are considered low-incidence disabilities.

Although the rates of occurrence of most of the high-incidence disabilities have remained relatively stable in the early 21st century, some of the low-incidence categories have increased dramatically. For example, the identification of **autism** or **autistic spectrum disorder** has increased dramatically since about 1995 (discussed further in Chapter 9; see also Stichter et al., 2008). In fact, some professionals speculate that it will eventually be considered a high-incidence disability. Other low-incidence categories showing a substantial increase in numbers include **traumatic brain injury (TBI)** and orthopedic impairments; much of this is due



The identification of autism or autistic spectrum disorder has increased dramatically, probably representing improved identification procedures and identification of milder cases of autism, not an epidemic.

to increases in spinal cord injury and in survival of severe physical trauma owing to better medical care.

Much of the increase in diagnosis of autism probably represents improved identification procedures and identification of milder cases of autism, not an epidemic (National Research Council, 2001). Although some of the increase in TBI might represent better diagnosis, it might also reflect actual increases in brain injuries, as we will discuss in Chapter 13. Increases in orthopedic impairments might reflect the increasing survival rates of infants born with significant physical anomalies and of children involved in accidents. Increases in hearing and vision impairments might represent better diagnosis of these disabilities, too.

# Definition of Special Education

Special education means specially designed instruction that meets the unusual needs of an exceptional student and that might require special materials, teaching techniques, or equipment and/or facilities. Students with visual impairments might require reading materials in large print or braille; students with hearing impairments might require hearing aids and/or instruction in sign language; those with physical disabilities might need special equipment; those with emotional or behavioral disorders might need smaller and more highly structured classes; and students with special gifts or talents might require access to working professionals. Related services—special transportation, psychological assessment, physical and occupational therapy, medical treatment, and counseling—might be necessary if special education is to be effective. The single most important goal of special education is finding and capitalizing on exceptional students' abilities.

The best general education cannot replace special education for those who need it; special education is more precisely controlled in pace or rate, intensity, relentlessness, structure, reinforcement, teacher–pupil ratio, curriculum, and monitoring or assessment (Hallahan & Pullen, 2014). We think it's a good idea to improve the education of all children, an objective of the federal education laws of the early 21st century; however, good or reformed general education does not and cannot replace special education for those students at the extremes of the range of disabilities (Hallahan & Pullen, 2014; Kauffman & Konold, 2007; Zigmond, 2007; Zigmond, & Kloo, 2011; Zigmond, Kloo, & Volonino, 2009).

# History and Origins of Special Education

There have always been exceptional learners, but there haven't always been special educational services to address their needs (see Holmes, 2004; Metzler, 2006). During the closing years of the 18th century, following the American and French Revolutions, effective procedures were devised for teaching children with sensory impairments (i.e., those who were blind or deaf; Winzer, 1993). In 1829, Samuel Gridley Howe created the first residential school for students who were blind; the curriculum focused on both traditional reading, writing, and mathematics and students' individual interests and abilities (Sapp & Hatlen, 2010). Early in

the 19th century, the first systematic attempts were made to educate "idiotic" and "insane" children—those who today are said to have **intellectual disabilities** and **emotional or behavioral disorders** (or **emotional disturbance**; Kauffman & Landrum, 2006; Stichter et al., 2008).

In the prerevolutionary era, the best that society offered most children with disabilities was protection—asylum from a cruel world into which they didn't fit and in which they couldn't survive with dignity, if they could survive at all. But as the ideas of democracy, individual freedom, and egalitarianism swept across America and France, a change in attitude occurred. Political reformers and leaders in medicine and education began to champion the cause of children and adults with disabilities, urging that these "imperfect" or "incomplete" individuals be taught skills that would allow them to become independent, productive citizens. These humanitarian sentiments surpassed a desire to protect and defend people with disabilities. The early leaders sought to normalize exceptional people to the greatest extent possible and confer on them the human dignity they presumably lacked.

Contemporary educational methods for exceptional children can be traced directly to techniques pioneered during the early 1800s. Many (perhaps most) of today's vital, controversial issues have been issues ever since the dawn of special education. Some contemporary writers believe that the history of special education is critically important to understanding today's issues and should receive more attention because of the lessons we can learn from our past (e.g., Gerber, 2011; Kauffman & Landrum, 2006). In our discussion of major historical events and trends since 1800, we comment briefly on the history of people and ideas, the growth of the discipline, professional and parent organizations, and legislation.

## People and Ideas

Most of the originators of special education were European physicians. They were primarily young, ambitious people who challenged the wisdom of the established authorities, including their own friends and mentors (Kanner, 1964; see also Kauffman & Landrum, 2006; Stichter et al., 2008).

Most historians trace the beginning of special education as we know it today to Jean-Marc-Gaspard Itard (1774-1838), a French physician who was an authority on diseases of the ear and on the education of students who are deaf. In the early 19th century, this young doctor began to educate a boy of about 12 years of age who had been found roaming naked and wild in the forests of France (sometimes referred to as the "wild child" or the "wild boy of Aveyron"). Itard's mentor, Philippe Pinel (1745–1826), a prominent French physician who was an early advocate of humane treatment of "insane" people, advised Itard that his efforts would be unsuccessful because the boy, Victor, was a "hopeless idiot." But Itard persevered. He did not eliminate Victor's disabilities, but he did dramatically improve the wild child's behavior through patient, systematic educative procedures (Itard, 1962). Recently, Mary Losure (2013) published a nonfiction book for children and adolescents that provides the history of the wild boy of Aveyron (http://www.youtube.com/watch?v=77j6OIX66Cc). Cases such as the wild boy of Aveyron bring into question the role of nature and nurture in human development (see the Focus on . . . The Nature-Nurture Controversy).

The ideas of the first special educators were truly revolutionary for their times. Following are some of the innovative



Special educators have the responsibility to offer not just good instruction, but also instruction that is highly individualized, intensive, relentless, urgent, and goal directed.