Strategies for Teaching Learners with Special Needs

Edward A. Polloway | James R. Patton | Loretta Serna | Jenevie Bailey

ELEVENTH EDITION

Pearson

Strategies for Teaching Learners with Special Needs

EDWARD A. POLLOWAY
Rosel H. Schewel Chair of Education, Lynchburg College

JAMES R. PATTON
University of Texas at Austin

LORETTA SERNA
University of New Mexico

JENEVIE W. BAILEY-JOSEPH
Lynchburg College in St. Lucia

In Memory of
Ruth Ann Payne and
James E. Smith, Jr.
Dedicated professionals, great friends, and co-authors

In Honor of
Jim Payne, mentor, friend and magician

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We are pleased to present the 11th edition of *Strategies for Teaching Learners with Special Needs*. It is our honor to share this book with preservice and in-service professional educators. We trust that the information contained in this textbook will complement your knowledge and skills for working with students with disabilities and other learning challenges.

Strategies for Teaching Learners with Special Needs has been published since 1977, by Merrill, Prentice Hall, and now Pearson. When a textbook goes through multiple revisions, it develops its own stories. In 1975, Dr. Jim Payne, teacher extraordinaire and mentor, mentioned to James (Smitty) Smith and me that he had an offer from Merrill Publishing to develop a methods book in special education. Smitty and I assured him that the two of us would gladly share the work of getting the book written. The 1st edition, with fourth author Ruth Ann Payne moved forward.

Several years later, we lost Smitty, a wonderful colleague and most special friend still missed by all. The book moved into its 3rd edition in 1985 with the addition of Jim Patton as the fourth author. Subsequently we lost Ruth Ann Payne, a person who had taught us so much.

For the 5th and 6th editions, Jim Patton and I served as co-authors of the text. Then we invited Loretta Serna to join us as co-author of the 7th edition. Loretta brought to the book numerous important additional areas of expertise. Beginning with the 10th edition, we were pleased that Wendy Bailey-Joseph joined us to further enhance the text. Their work continues to make the 11th edition what we believe to be a unique contribution to the special education literature, in part because of the breadth of coverage that is presented within the book.

Our hope is that *Strategies for Teaching Learners with Special Needs* (11e) will enhance your skills as you take on the world's most important work—that of teacher and particularly that of teacher of individuals with special needs.

ORGANIZATION OF THE TEXT

Although many of the core content topics remain consistent with that of previous editions, we have made some significant organizational and content changes in the 11th edition. The chapters in Part I, Teaching Learners with Special Needs, serve as a foundation for the later chapters in the text. In Part I we discuss:

- Special Education: An Introduction to Teaching Students with Special Needs (Chapter 1)
- Foundations of Effective Instruction (Chapter 2)
- Teaching and Differentiating Instruction in a Multi-Tiered System of Education (Chapter 3)
- Strategies for Classroom Management and Positive Behavioral Support (Chapter 4)

In Part II, Content Areas, we discuss strategies for specific content areas:

- Spoken Language (Chapter 5)
- Reading: Word Recognition (Chapter 6)
- Reading: Comprehension (Chapter 7)
- Written Language (Chapter 8)
- Mathematics Instruction (Chapter 9)
- Social Studies (Chapter 10)
- Science (Chapter 11)

In Part III, Critical Skills, we discuss additional strategies that complement the core content areas:

- Study Skills (Chapter 12)
- Social Competence and Self-Determination Skills (Chapter 13)
- Applied Academics (Chapter 14)
- Career Development and Transition across School Levels (Chapter 15)

FEATURES OF STRATEGIES 11TH EDITION

The focus of *Strategies for Teaching Learners with Special Needs* (11e) is on effective teaching strategies for students being taught in any setting. This increased emphasis on successful strategies—in the text and in your teaching—will enable students with special needs to be successful in inclusive classrooms. The following special features provide important complements to the core textual material:

- **Learning Outcomes**—Within each chapter, the chapter learning outcomes focus the reader on key information that will be presented.
- **Student Understanding Checks**—Corresponding with each learning outcome and major section within each respective chapter, students can access questions that serve as a check for understanding and can receive feedback on their responses.
- **Teaching Tips**—Two Teacher Tips features are included in the content-area chapters—one that relates to an elementary classroom and one that relates to a secondary school classroom.
- **Culturally Responsive Classrooms**—Throughout the text we have included diversity box features that relate specifically to chapter content and give readers a broader understanding of today's classroom.
- **Classroom Activities**—Ideas are presented on how concepts discussed in the chapter can be incorporated and/or applied to daily classroom activities and routines.
- **Video links**—Within each chapter, multiple links are included that lead the reader to brief videos that illustrate and/or further explain specific strategies discussed in text.
- **Learning Modules**—Throughout the text, a series of learning modules expand on key concepts and strategies noted in text.
- **Key Terms**—In this text key terms have been boldfaced to highlight their importance to understanding strategies for teaching students with special needs.

INSTRUCTOR SUPPLEMENTS

- **Test Bank**—Each chapter of the Test Bank contains the following: a test bank with answer key (multiple choice, true/false, short answer, and essay).
- **Online PowerPoint® Presentation**—Every lecture presentation (in PowerPoint) highlights the key concepts and content for each chapter.

Both the Test Bank and the PowerPoint Presentations are available online. To access these resources, go to www.pearsonhighered.com and click on My Instructor Resource Center to log in or register for user name and password to download the textbook supplement files directly to your computer.

The Instructor Resource Center opens the door to a variety of media resources in downloadable, digital format.

ACKNOWLEDGMENTS

Brief Contents

Contents

Edward A. Polloway is the Rosel H. Schewel Distinguished Chair of Education at Lynchburg College. He completed his bachelor's degree at Dickinson College and his graduate degrees at the University of Virginia. He is the author of over 100 professional articles on special education with particular emphases in the areas of intellectual disability and learning disabilities. In addition to co-authoring the prior ten editions of this textbook, he also is the co-author of *Teaching Students with Special Needs in Inclusive Settings* (sixth edition), *Language Instruction for Students with Disabilities* (fourth edition), *Attention-Deficit/Hyperactivity Disorder in the Classroom, Children and Adults with Learning Disabilities*, and *Language Arts: Teaching Exceptional Students*, and served as co-editor of the Conquest of Mental Retardation and editor of *The Death Penalty and Intellectual Disability*. He also served for six years as the editor of the journal *Remedial and Special Education.* He has been honored as the 2007 Distinguished Alumnus of the Curry School of Education at the University of Virginia, the Burton Blatt Humanitarian Award from the Division on Autism and Developmental Disabilities of the Council for Exceptional Children, Lynchburg College's James A. Huston award for scholarship and as a Fellow of the American Association on Intellectual and Developmental Disabilities.

James R. Patton is educational consultant and adjunct associate professor at the University of Texas at Austin. He received his master's and doctoral degree from the University of Virginia after completing his bachelor's degree at Notre Dame. He is a former high school biology teacher and elementary-level special education resource teacher. He has also taught students who were gifted and those who were gifted/learning disabled. His professional interests include transition, life skills instruction, adult issues related to individuals with special needs, behavioral intervention planning, study skills, and classroom accommodations. He has served on the national boards of the Division on Autism and Developmental Disabilities, the Council for Learning Disabilities, and the National Joint Committee on Learning Disabilities.

Loretta Serna is professor of special education at the University of New Mexico. She completed her doctoral degree in special education and developmental and child psychology at the University of Kansas. In addition to her work on multiple versions of this textbook, Dr. Serna also was the principal investigator of the Self-Determination in Integrated Settings project. She has significant experience working with adolescents in both individual and group work as well as with families of adolescents who are at risk for failure. Her research interests include social and self-determination skills for youth at risk, teacher preparation, and curriculum and program development.

Jenevie Wendy Bailey-Joseph completed her doctoral degree in leadership studies at Lynchburg College. She also holds bachelor's and master's degrees in special education from Lynchburg College and a master's degree in Language and Communication impairments from the University of Sheffield (United Kingdom). Dr. Bailey was both a high school special education and literacy teacher and former kindergarten teacher in St. Lucia. She also served in the capacity as special education resource person, conducting in-service trainings with early childhood practitioners and general education teachers at both the elementary and high school level throughout that nation. She currently directs Lynchburg College's undergraduate and graduate programs in St. Lucia. Her professional interests include early childhood education, the effects of culture on self-determination, transition, and post school outcomes for students with high incidence disabilities.

1

Special Education: An Introduction to Teaching Students with Special Needs

LEARNING OUTCOMES

Upon completion of this chapter, the reader should be able to:

1.1 Identify the populations of students with disabilities that are the primary focus of the text and summarize information concerning categories of exceptionality, prevalence, and educational environments for these students.

1.2 Identify and discuss significant educational program considerations for students with special needs.

1.3 Demonstrate an understanding of how considerations of professionalism frame the responsibilities of educators.

Special education was established to ensure that students with disabilities were provided opportunities to reach their learning and post-school potentials. Over 40 years have passed since the initial passage of the Education for All Handicapped Children Act (EHA; Public Law [P.L.] 94-142), later re-named the Individuals with Disabilities Education Act (IDEA). The key focus was to provide a free, appropriate education to students who, in many instances, had not received such opportunities in the past.

Special education is different today from the earlier days after P.L. 94-142 in a number of ways. The majority of students with special needs receive most or all of their education in the general education classroom. Standards-based education often now drives what schools do and how teachers function. It is related to the parallel emphasis on federal and state initiatives that most students with special needs should have access to the general education curriculum. As special education has changed, so also has the role of the special education professional.

This text focuses on effective teaching methods with an emphasis on evidence-based practices. The strategies presented seek to provide teachers with an opportunity to extend and refine their repertoire of knowledge and skills.

This first chapter introduces a number of key concepts and considerations that will then become the foundation of subsequent chapters. It is framed by the key questions that relate to the provision of special education.

Therefore, the chapter begins with a discussion of the question of *who?*, the target populations for whom the topics addressed in the text are most appropriate. Next, we address the question of *through what?*, briefly considering the concept of individualized educational programs for students with special needs. Subsequently, we briefly address the question of *where?*, with attention to the assumption of inclusion of students with special needs in general education classrooms as well as attending to some introductory information related to collaboration. Then we look at the question of *what?*, which relates to the curriculum for students, focusing in particular on students having access to the general education curriculum, including content commonly based on state standards or the common core of education. The focus then is on *how?*, with a discussion of evidence-based practices to enhance the learning of these students. Then brief consideration is given to *with whom?*, the collaborative partnerships with families that are important to successful programs in special education. Following this, we address the question of *toward what?*, looking specifically at school completion and transition. The chapter concludes with a discussion of professionalism.

Collectively, these concepts and considerations lay the foundation for much of the subsequent detailed discussion in this textbook and frame key aspects of the roles of special education professionals in schools. A final section of the chapter briefly highlights the structure of the book.

STUDENTS WITH DISABILITIES

The primary focus of this text is on strategies for teaching students who experience learning difficulties. Included in this generic category are subgroups of students who may have been formally identified by schools in a variety of ways, using terms such as *learning disabled*, *intellectually disabled*, *emotionally disturbed*, and *behaviorally disordered*. The particular terms vary on a state-by-state basis but, taken collectively, represent individuals who have often been referred to as constituting high-incidence disabilities or the more common term *mild disabilities*. However, the latter term frequently understates the significant learning needs of these students and thus inadvertently could be used to question their real need for specialized
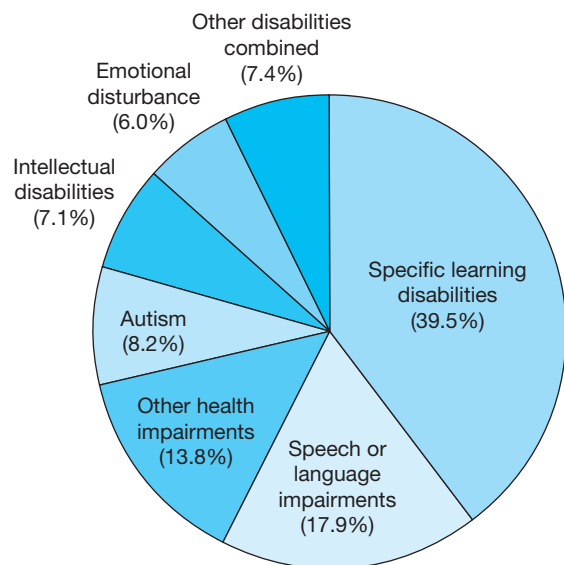
FIGURE 1–1 Percentages of Students Ages 6 to 21 by Disability Category

Source: 37th annual report to Congress on the implementation of IDEA (p. 36), by the U.S. Department of Education, 2015, Washington, DC: Author. (Note: Data from 2013)

instruction. Based on data from the U.S. Department of Education (2016), three key groups of students (those with learning disabilities, intellectual disabilities, and emotional and behavioral disorders) make up 52.1% of individuals served under IDEA (see also Figure 1-1). Percentages across key disability groups are highlighted in the figure.

Table 1-1 extends this analysis of prevalence by providing comparative data indicating the percentage of the school population with these selected disabilities in 2003 and 2014, respectively. As can be noted in the table, this decade shows an overall reduction in the number of students being identified and also parallel trends of lower prevalence for learning disabilities, intellectual disabilities, and emotional disturbance. Nevertheless, these three groups of students total 4.5% of the overall school population.

The above data are nationwide, but, of course, educators function within a state environment. It is therefore interesting to note that the overall number of students with disabilities reported across the states ranged from a low of 6.2% in Hawaii to highs of 11.7% in New Jersey and 14.9% in Puerto Rico. Variance by category of exceptionality also is quite common (USDOE, 2016).

TABLE 1–1 Percentage of school population with selected disabilities (ages 6 to 21)

Disability Area	2016 Report (2014 Data) of School Population	2003 Data
Specific learning disabilities	3.4%	4.3%
Intellectual disabilities	0.6%	0.9%
Emotional disturbance	0.5%	0.7%
All disabilities	8.6%	8.9%

Source: Adapted from *38th annual report to Congress on the implementation of IDEA* (p. 38), by the U.S. Department of Education, 2016, Washington, DC: Author.

Because federal and state legislation provide for special education based on certain eligibility standards within particular disability categories, we have begun our discussion of populations of students with disabilities from a categorical perspective. However, teachers are encouraged to consider several related caveats when attempting to match curriculum design and instructional methods to students' needs.

First, the population associated with specific categorical groups is continually influenced by public policy decisions and both research-informed and non–research-based professional decisions. Additionally, efforts to revise definitions and terminology regularly bring about regulatory changes that further alter those served under the labels of learning disabilities, emotional or behavioral disorders, intellectual disability, or other disability designations.

Second, categorical labels convey little about curriculum design and specific teaching strategies that should be used. Such labels at face value indicate only that a student has met a set of diagnostic criteria established by a state for a specific disability. Furthermore, these labels often indicate only that students so classified have experienced difficulty learning through traditional means or within traditionally organized general education classroom environments to such an extent that schools recognize and identify them. Ultimately, these students are likely to require more direct, intensive, extensive, or highly individualized instruction to reach their learning potential and also require

specific accommodations to existing curriculum and/or instruction.

Third, in a related vein, it is important that teachers view students with disabilities as students first and then address the needs that these students have for modifications in instruction and curriculum. Again, categorical labels do not yield specific prescriptions in terms of educational interventions.

Fourth, the strategies highlighted in this text have applicability for individuals with a variety of learning problems, regardless of whether they have been labeled as disabled or merely set apart from others in the classroom due to their difficulties. A large number of students who can be considered at risk for having academic, social, or behavioral difficulties will not meet eligibility criteria for special education yet may benefit greatly from the teaching methods presented in this text. This would include students who are identified with attention-deficit/hyperactivity disorder (ADHD). Ultimately, an analysis of an individual's learning needs is necessary to determine the relevance of any particular curricular orientation or any specific instructional procedure.

> ✓ **Check Your Understanding 1.1** Click here to gauge your understanding of the concepts in this section.

EDUCATIONAL PROGRAM CONSIDERATIONS

Individualized Education Program

All students identified as having a disability under IDEA must have an **individualized education program** (IEP). The IEP is a written document summarizing a student's learning program. The major purposes of an IEP are to establish learning goals for an individual student, to determine the educational services the schools must provide to meet those learning goals, and to enhance communication among parents and other professionals about a student's program.

The IEP includes attention to the student's participation in general education, levels of performance, annual goals, the special education and related services and supplementary aids to be provided, and the program adaptations or supports for

school personnel that will be provided to the child. Further, the IEP addresses the ways in which the student's disability is affecting his or her progress within the general curriculum. The IEP should explain the extent, if any, to which the student will not participate with students who are non-disabled. Statements related to the student's participation or lack of participation in statewide and districtwide assessments must also be included in the IEP. Critical considerations in the IEP should provide the basis for determining and implementing evidence-based educational practices. Significant detail on the development and implementation of individualized educational programs is provided in Chapter 3.

School Inclusion

The most consistent theme in special education over the past 50 years has been the increasing commitment to and the importance of providing persons with disabilities the opportunity to have a place in school and society. Schools seek to educate children with disabilities—to as great an extent as possible—with their peers who are non-disabled. The least restrictive environment (LRE) principle provided the initial impetus for students to attend school in the most inclusive setting possible, which is now most often defined as the general education setting (i.e., regular classroom).

Figure 1-2 provides a summative graphic of educational placement for students with disabilities based on data collected in 2013. Table 1-2 then provides a comparative analysis of these data across selected groups of students with disabilities. For both the figure and the table, the data reflect students with disabilities placed, respectively, more than 80% of the day in the general education classroom, between 40% and 79% of the time in the general education classroom (with the assumption that the remainder of the time is typically in resource rooms or self-contained classes), and less than 40% of the school day in the general education classroom (i.e., in special education classes) and enrolled in other environments (defined as special separate schools, residential facilities, homebound or hospitalization programs, correctional facilities, or parentally placed in private schools). The clear trend over the past several decades has been an increased percentage of students spending the majority of their time in general education classes with support from special education teachers.
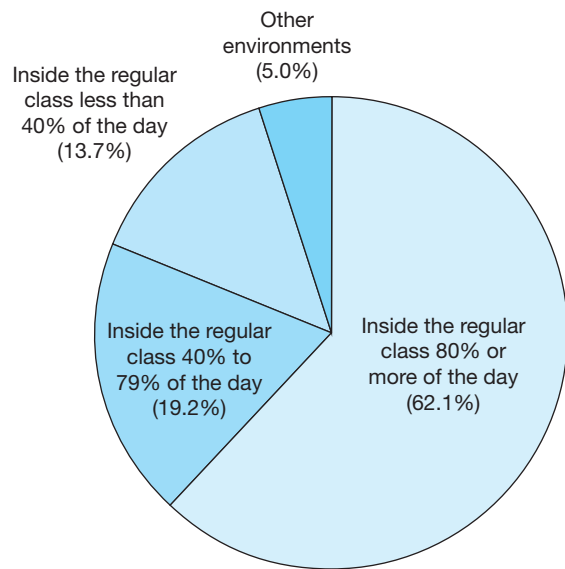
FIGURE 1–2 Percentage of Students Served under IDEA by Educational Environment

Source: 37th annual report to Congress on the implementation of IDEA (p. 45), by the U.S. Department of Education, 2015, Washington, DC: Author. (Note: Data from 2013)

As noted in the table, the educational placement percentages vary across disability group. The expectation is that primary services for students with disabilities will clearly be in general education programs for students that are taught for all or a significant percentage of the school day. However, for some disability groups, especially for students identified as having intellectual disabilities and emotional/behavioral disorders, there remains a greater likelihood of educational placement being in settings for a smaller percentage of the school day and, particularly in the case of students with emotional and behavioral disorders, in other environments.

In the discussion above concerning prevalence, it was noted that there are significant differences between states; this is certainly true in terms of educational environments as well. For example, the variance in terms of placement in the general education classroom at least 80% of the time ranges from 83.7% of all students with disabilities in Alabama to 35.8% in Hawaii. In terms of students spending less than 40% of the time in the special classroom, the range was from a high of 22.2% in California to a low of 5.4% in South Dakota (U.S. Department of Education, 2014).

TABLE I–2 Percentage of students with selected disabilities in variant educational environments (ages 6 to 21) (2014)

Disability Area	>80% in General Education	40% to 79% in General Education	<40% in General Education	Other Environments
Specific learning disabilities	69.2%	23.0%	5.8%	2.0%
Intellectual disabilities	16.9%	26.3%	49.2%	7.6%
Emotional disturbance	46.2%	17.6%	18.8%	17.5%
All disabilities	62.6%	18.6%	13.5%	5.3%

Source: Adapted from *38th annual report to Congress on the implementation of IDEA* (p. 50), by the U.S. Department of Education, 2016, Washington, DC: Author.

Teachers must carefully consider their role in providing effective instruction that facilitates the successful inclusion of students with disabilities in general education and in evaluating the efficacy of these efforts. The term *supported education* is an important complement to the term (and the process of) *inclusion* (Smith, Polloway, Doughty, Patton, & Dowdy, 2015). It emphasizes that successful inclusion hinges on the provision of appropriate supports in the general education classroom as a basis for establishing a successful learning environment, particularly for students with special needs. The most critical supports for these students will come from highly effective special education teachers. While inclusive environments are now most often the "home" for the majority of students with disabilities, the premise of special education is still that their educational program is to be individualized.

Thus, the emphasis in education is teaching the clear majority of students within the general education classroom. Increasingly, this is a reflection of the application of the three-tiered model for education (see Chapter 2 for a full discussion). Successful educational programs in general require that a collaborative environment be established within the school environment. Consequently, all special educators should presume that their ability to effectively collaborate with others is a significant part of their responsibilities. Special educators must operate as part of a team in many aspects of their roles, including screening, making assessments, planning individual programs, developing placement options, providing direct instruction and instructional supports, and monitoring success. Teachers must work with others to operationalize the required aspects of all initiatives or changes in effect within the instructional program. *School collaboration* considerations are addressed in Chapter 3.

ENHANCEDetext
video example 1.1
Watch this video for further discussion concerning placement issues and students with disabilities.

Curriculum

The core of educational programs is the curriculum. It is the essential "what" question for education. For individuals with special needs, there is a long history of variance in terms of the nature of curricular emphases for the students. The brief discussion here focuses on the contemporary emphasis on access to the general education curriculum with some additional discussion on functional curriculum considerations. This section essentially provides an overview of the chapters that follow, which address the areas of the curriculum relevant to students with disabilities.

The general curriculum is the same curriculum as that afforded to students without disabilities. It is the explicit curriculum (i.e., clearly identified by the district or state) for the majority of students in the school, as defined by standards that states have identified. Access to the general education curriculum is an overriding theme of special education service delivery. It underscores the focus of the

IEP that must be developed for each student with a disability (see the prior section on IEPs). A critical goal of special education is to help students gain those skills and acquire the knowledge that will allow them to access—and be successful in—the curriculum afforded to students who are not disabled.

Standards-based education refers to the curriculum in which what is taught is tied to the state-derived content and performance standards in the core subject areas of reading/language arts/English, mathematics, social studies, and science (either based in individual state standards or tied to the common core federal standards). The intent of developing standards is to have a common set of goals and mileposts. Although a number of ways exist for classifying standards, the most common distinction is between content standards that reflect the knowledge and skills that students are accountable for in academic subjects and performance standards that focus on achievement levels that they must meet to confirm proficiency. Most students with disabilities must meet a challenging set of standards and participate in the state testing process.

The trend toward standards-based education is reflected in development of the *common core state standards*. Developed in 2009 and based on collaborative research begun in 2007 and released in 2010, the common core standards have been adopted by 45 states. The Common Core State Standards Initiative (CCSSI) (2010) indicates that the standards are "research and evidence-based; clear, understandable, and consistent; aligned with college and career expectation; based on rigorous content in the application of knowledge through higher-order thinking skills; built upon the strengths and lessons of current state standards; and informed by other top-performing countries to prepare all students for success in our global economy and society" (para. 1).

The importance of standards (and the high-stakes testing that accompanies them) is a central fact of contemporary public education. The focal question now is not whether students with special needs will participate in a standards-based system but rather, more appropriately, how well students with special needs will do in this new system.

A curricular dilemma facing professionals in special education, particularly for teachers at the secondary school level, is finding the balance between addressing the content and performance standards of the general education curriculum (within which most students with disabilities must show progress) while ensuring that the current and future needs of their students are addressed. Making curriculum and instruction more life relevant requires knowledge, skills, and effort. A functional curriculum is particularly relevant in considerations of special education programs for students with intellectual disabilities. Particularly for this population, the functional focus in curriculum reflects its potential merits for successful post-school outcomes. In spite of the attention given to the possible role of functional curricula, Bouck and Satsangi (2014) found a limited body of research on such a focus. An extensive discussion of functional curriculum considerations is provided in Chapter 14.

Achievement Assessment. The advent of placing students with special needs in inclusive classrooms that followed the establishment of state standards has been accompanied by a parallel emphasis on student evaluation, typically by means of high-stakes testing. As Zumeta (2015) noted, "The inclusion of students with disabilities in the National Assessment of Educational Progress [reports], as well as in states' and districts' high stakes assessments . . . brought much-needed attention to the poor achievement of students with disabilities" (p. 84).

Most students with disabilities are expected to take the regular districtwide or statewide tests; some who take these tests receive some type of accommodation or modification. In the U.S. Department of Education (2014) report, for example, data indicated that a range of 38.9% to 45.8% of all students with disabilities (grades 3 to 8) participated in regular assessments based on grade-level academic standards with accommodations, while an additional 29.9% to 39.3% participated without accommodations. The comparable numbers in reading with accommodations was 37.4% to 41.5% and without accommodations 33.1% to 41.5%.

Some students with more significant needs will be exempt from taking a regular standards-based test and will be administered an alternative assessment. According to the U.S. Department of Education (2014), the percentage of students with disabilities who participated in assessments with modified standards (i.e., assessments that measure the achievement of students who access the grade-level curriculum but whose disabilities preclude

them from achieving grade-level proficiency) across the above curricular areas and grade levels ranged from 5.2% to 15.1%, and those who participated in assessments with alternate standards (i.e., assessments designed to measure the achievement of students with significant cognitive disabilities) ranged from 9.0% to 10.0%.

The major challenge is to determine appropriate ways for students with diverse needs to access the general curriculum. For most students at this time, instruction will occur increasingly within the context of inclusive classrooms.

Universal Design. In order to facilitate successful programs for students with special needs in the general education classroom, these programs should reflect features commonly associated with the concept of universal design for learning, which is built on classrooms that welcome all students, promote positive interactions, provide opportunities for students to demonstrate knowledge and skills through multiple means, provide flexibility in the presentation of information as well as in the ways in which students may demonstrate their skills or knowledge, accommodate learning differences with supports, and use technology (King-Sears, 2015; Rao, Wook & Bryant, 2014). Universal design for learning is discussed in greater detail in Chapter 3.

Evidence-Based Practices

The principles of science have been incorporated into general and special education through teachers using interventions that have empirical support indicating that that they work with the populations of students with whom they are being used. The genesis for the concept of **evidence-based practice** in special education comes from the assumption that education should be scientifically based. Appropriate educational programs are to be based on empirical assessments on the use of particular practices with students.

Cook, Tankersley, and Landrum (2009) defined an educational intervention as evidence-based practice (EBP) "when a sufficient quantity of high-quality research studies that demonstrate experimental content have been conducted and show that student outcomes are improved as a result of using the practice" (p. 70). Zirkel (2008) broadened the definition to include interventions validated by empirical research complemented by "documented

results of continuous progress monitoring, teacher or other professional reports, and professional testimony" (p. 2). Given the fact that the latter definition might invite non-validated practices under the evidence-based practice umbrella, the central, most relevant concept is that evidence-based practices are those "shown to be effective by credible research" (Cook et al., 2009, p. 70).

Cook et al. (2015) further defined evidence-based practices as interventions that were supported, for example, by at least "two methodologically sound group comparison studies with random assignments to groups, with positive effects, and at least 60 participants across studies; four methodologically sound group comparison studies with non-random assignments and at least 120 participants across studies; or five methodologically sound single-subject studies with positive effects and at least 20 total participants across studies" (p. 230). They also offered further qualifiers for evidence-based practice and potential evidence-based practice.

Historically, translating research into practice in education has lagged. As a result, difficulty exists in separating validated from non-validated interventions. To illustrate the concept, specific examples of evidence-based practices that are discussed in subsequent chapters include using data-based decision making; direct instruction of basic skills, such as in terms of instruction in decoding in reading; teaching to mastery in the development of automaticity; using mnemonic strategies; assisting students in acquiring cognitive strategies to enhance independence in the learning process; using reading comprehension strategies; and implementing the concrete, semi-concrete, and abstract (CSA) model in mathematics.

Periodic reviews of instructional practices used by special education teachers show mixed results in terms of teachers relying on interventions that have empirical support. For example, Burns and Ysseldyke (2009) reported high levels of reliance on direct instruction (evidence-based practice is discussed further below) while also finding a significant number of teachers indicating regular reliance on modality instruction and perceptual motor training, both of which lack empirical support.

Effective Instruction. An overriding consideration regarding evidence-based practice for students with special needs is that effective instruction for students with disabilities consistently is found

to be systematic and explicit. *Systematic instruction* requires that teachers focus on instruction of a carefully selected and useful set of skills and that those skills are organized into a logical sequence for instruction. Students consequently know what is expected and why it is important. It requires a planned and ordered process to be followed.

Explicit instruction provides a clear purpose for learning accompanied by clear and understandable directions and explanations. Explicit instruction focuses on the skills and strategies that are needed by students. Further, it includes a process that addresses the importance of modeling and demonstration, guided practice, independent practice, maintenance activities, and provisions for generalization.

Explicit and systematic instruction includes direct teacher modeling or explanation, frequent student responding reflective of high engagement and verified learning, direct and immediate feedback to student responses, and precise sequencing of content to be presented. Little and Delisio (2015) noted that "explicit instruction . . . refer(s) to instruction that incorporates the following teaching behaviors: logical sequencing (i.e., lessons build on one another), review of previous content, teacher-directed presentation and modeling, guided and repeated practice with specific feedback, independent practice by learners, curriculum-based assessments, and periodic review" (p. 1).

> ▶ **ENHANCEDetext**
> **video example 1.2**
> Watch this video to learn more about explicit instruction.

A third concept of importance is *intensive instruction*, which suggests that sufficient time is allocated to comprehension. Moreover, intensive instruction includes a broad scope and sequence, incorporating the active participation of the student in the lessons. Lessons should include many opportunities for the students to try out what they have learned and should also include ample feedback for the students.

In sum, teachers should anticipate the need to provide complete explicit, systematic, intensive instruction to increase the likelihood that skills and strategies will be acquired.

Cautions. There are several cautions concerning adopting appropriate educational practices. First, evidence-based research requires a quantity of research studies across settings and teachers with replication. Relatively few educational interventions have received the degree of research attention and validation to fully achieve the gold standard as discussed above. Given the challenges in achieving such a goal, the teacher should integrate the best available body of research evidence complemented by professional expertise. In this regard, one might consider "levels of assurance" in terms of the validity of specific strategies for teaching with a continuum that would range from intuition, observation, and expert endorsements to research based and evidence based or scientifically validated.

Second, it is important to consider the observations of Fuchs and Deshler (2007), who noted, "When we say an instructional approach is 'scientifically validated,' we mean it's a 'good bet' for many. It should be considered seriously for adoption, but it comes with no guarantees. No program is valid for all students or for all time. The [programs] must be implemented and evaluated by practitioners" (p. 132).

Third, in a field traditionally beset with new and too often unproven ideas, teachers must also be cautious in adopting treatments that, at a minimum, threaten the availability of precious instructional time or financial resources. For example, Worrall (1990), in a classic treatise on health care interventions, provided a series of helpful suggestions that also are relevant to special education interventions:

- If it sounds too good to be true, it probably is.
- Be wary of any treatment or product offering a "cure." . . . Cures are actually few and far between.
- Be cautious when "complete," "immediate," "effortless," "safe," or "guaranteed" results are promised.
- Legitimate . . . researchers do not use words such as "amazing," "secret," "exclusive," "miracle," and "special" in describing treatments. (p. 212)

The clear call, both professionally and in legislation, is for reliance on instructional practices that have a research base if they are to be used with students with special needs. The use of evidence-based practices in instructional programs will

subsequently provide a strong foundation for successful school and life transitions that are critical for students with special needs. Effective instruction is discussed in greater detail in Chapter 2.

Partnerships with Families

Since the advent of P.L. 94-142 in 1975, parents have always been encouraged to participate in the special education process. However, the amount and quality of this participation has varied greatly. Parents must consent to the evaluation of a student's educational abilities and needs, the determination of necessary services, and the actual placement of a child in any type of special program. Parents have the right to obtain an independent educational evaluation of their child. Some parents engage the process fully, whereas others participate minimally for a variety of reasons. Parental partnerships are detailed in Chapter 3.

Transitions

Research consistently has illustrated the challenges faced by students with disabilities after the completion of secondary school (e.g., National Longitudinal Transition Study-2; Newman, Wagner, Cameto, & Knokey, 2009). Therefore, programs, services, and supports for individual children and youth cannot be focused solely on their needs at the present time. Rather, an attitude typified by concurrent concern for students' success in the future must be adopted. Regardless of the population being served or the setting in which services are being delivered, teachers must be cognizant of how their current instructional and curricular efforts ultimately will impact students' transitions into the school and community environments that lie ahead; such outcomes-focused and results-oriented thinking should be at the core of educational efforts for students with disabilities. Because students are guaranteed the right to an appropriate education, they should also be assisted in benefiting from it—both during their school years and on completion of K–12 education. This commitment is a major tenet of this text.

Students face a number of significant transitions: those from early intervention (Part C of IDEA) to early childhood programs (Part B, for young children who are eligible for early childhood special education programs), from preschool
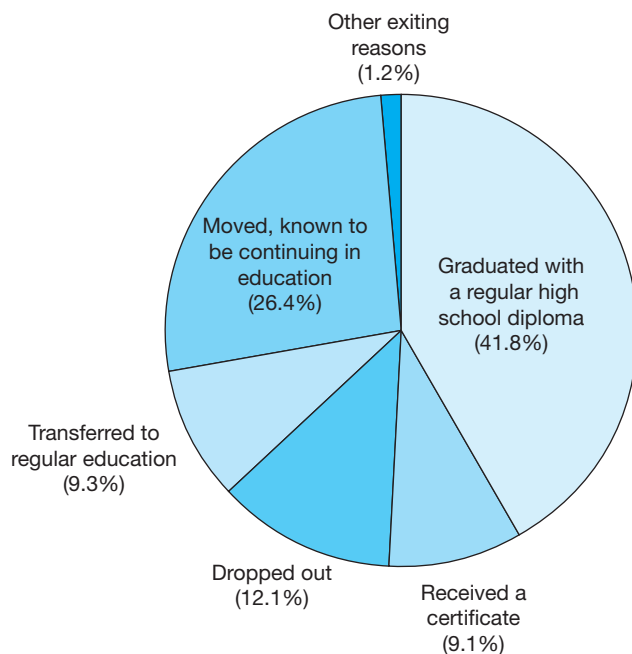

FIGURE 1–3 Percentage of Students Ages 14 to 21 by Reason of Exit from School

Source: Adapted from *38th annual report to Congress on the implementation of IDEA* (p. 38), by the U.S. Department of Education, 2016, Washington, DC: Author. (Note: Data from 2012–2013)

to kindergarten, from elementary to middle school, from middle school to secondary school, and from high school to post-school settings, including postsecondary education and independent living in the community. Each of these transitions can be crucial to an individual's positive quality of life. The specific transition that has received the most attention has been that from school to post-school settings, certainly in large part because young adults with disabilities are disproportionately underrepresented in the nation's workforce as well as in many educational, training, and employment programs.

An initial key consideration that impacts successful transition is school completion. Students with disabilities are overrepresented in the ranks of school dropouts and underrepresented among those receiving diplomas (see Figure 1-3) (U.S. Department of Education, 2015).

Table 1-3 provides data specifically on graduation and dropout rates for selected disability groups. As reflected in this table, the trend data are increasingly positive for each disability group and for students with special needs overall, with a significant increase in the percentage of students receiving high school diplomas and a parallel