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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

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 IITH 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 text-book supplement files directly to your computer.

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

ACKNOWLEDGMENTS

We recognize the great contributions of several key persons to the development of the 11 editions of this text. Of particular note are the multiple-edition contributions of chapters by Rosel Schewel, Glenn Buck, Lynda Miller, John Hoover, and Ginger Blalock. John's and Lynda's contributions continue in the Study Skills and Spoken Language chapters, respectively, within this edition. Special thanks go to Jacqueline Lubin and Andrew Bruce for their new contributions to the Reading: Word Recognition and Mathematics chapters, respectively. Special thanks also to Jacqueline Lubin for serving as author of the embedded student assessment protocols. Thank you also to the various professionals cited within the book for their contributions of diversity boxes and teacher tips.

In addition, a number of other persons helped with the book or with individual chapters; we have recognized their contributions throughout previous editions and regret that they are too numerous to note here. At Pearson, we have been assisted greatly by Kevin Davis, Janelle Rogers, Jill Ross and Anne McAlpine, who have provided everything we have needed and coaxed us along, by Ann Davis who has been our editor on multiple editions of the book and Julie Peters on the 11th edition, and by Kathy Smith at Cenveo. Also, we appreciate the support at Lynchburg College of Maryleen Auguste, Antonia Charles, and Delia Peters for assistance across multiple phases of the production of this book. We also appreciate the resources from the IRIS Center/Vanderbilt University that have enhanced this edition of the book.

We also thank Nicole Dobbins, University of North Carolina–Greensboro; Elizabeth M. French, Lebanon Valley College; Heather Garrison, East Stroudsburg University of Pennsylvania; Maryann Gromoll, Daytona State College; and Lisa Tritschler, Northeastern State University for their most helpful reviews that guided the revision of the 11th edition.

EAP for JRP, LS, & JWB-J

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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.

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1

Special Education: An Introduction to Teaching Students with Special Needs

LEARNING OUTCOMES

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

- I.I 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.

pecial 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

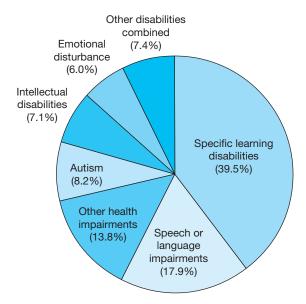


FIGURE I-I Percentages of Students Ages 6 to 21 by Disability Category

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 I–I 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 attentiondeficit/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.

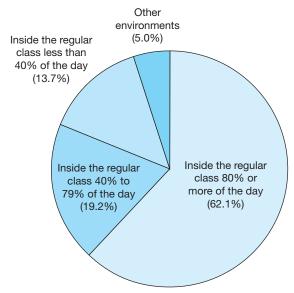


FIGURE I-2 Percentage of Students Served under IDEA by Educational Environment

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 highstakes 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 gradelevel 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 highquality 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 databased 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

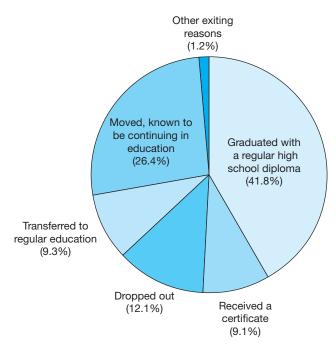


FIGURE I-3 Percentage of Students Ages 14 to 21 by Reason of Exit from School

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 post-secondary 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

TABLE 1-3 Percentage of students graduating with a regular high school diploma and dropping out of school for selected disability groups (across respective annual idea reports)

Disability Area	% Received High School Diploma (2016)	% Received High School Diploma (2003)	% Dropped Out (2016)	% Dropped Out (2003)
Specific learning disabilities	70.8%	57.7%	18.1%	31.4%
Intellectual disabilities	40.8%	37.8%	16.8%	29.3%
Emotional disturbance	54.7%	35.6%	35.2%	55.9%
All disabilities	66.1%	52.5%	18.5%	33.6%

Source: Adapted from 38th annual report to Congress on the implementation of IDEA (p. 63, 65), by the U.S. Department of Education, 2016, Washington, DC: Author.

decrease in the dropout rates noted between the most recent data from the U.S. Department of Education as contrasted to those data for 2002–2003.

As was noted for prior tables in the chapter, there is also significant state variance in terms of graduation rates and dropout rates. For example, in terms of all students with disabilities graduating with a high school diploma, the range across states is from 88.3% in Minnesota to 27.8% in Mississippi. For dropout rates for all students with disabilities, the range is from a high of 46.2% in South Carolina to a low of 7.3% in Tennessee.

IDEA reflects a commitment to transition planning for students. The transition process involves the efforts of students, their families, school personnel, and potentially an array of adult service providers. Transition services are intended to reflect a coordinated set of activities for students. promoting movement from school to post-school activities, including postsecondary education, vocational training, integrated employment, continuing and adult education, adult services, independent living, or community participation. These activities should be based on the individual student's needs, taking into account the student's preferences and interests, and should include instruction, community experiences, the development of employment and other post-school adult living objectives, and, as appropriate, acquisition of daily living skills and functional vocational evaluation. Consistent with federal law, transition planning and services must begin prior to a student reaching age 16. Transition is discussed in detail in Chapter 15.



Check Your Understanding 1.2 Click here to gauge your understanding of the concepts in this section.

PROFESSIONALISM

Beyond the demands of a teacher's role as discussed throughout this section, effective special educators also must display a high degree of personal determination to positively influence the education and acceptance of persons with special needs. Bateman's (1971) historical challenge half a century ago still has significant merit: Teachers must have a personal philosophy of education, have a willingness to be agents of social change, be accountable for services provided, possess and continue to develop personal and professional competencies and a comprehensive knowledge base, and care deeply about all human beings, including themselves. These professional attributes serve as the foundation for advocacy crucial to the welfare of students.

The role of special educators as change agents requires them to question whether their own and others' actions best benefit students. Accepting minimal levels of professional conduct or acquiescing to administrative practices contrary to students' basic interests threatens those core aspects of special education for all students with unique learning needs. Assuming a professional role thus requires the commitment of an advocate as well as effectiveness in instruction.

In addition to the importance of using teaching strategies that are empirically supported, it is also important to consider the qualitative aspects of teaching. Effective teachers develop positive relationships with students that become critical contributors to achievement and to retention in school, particularly for those students experiencing difficulties. The above admonitions certainly hold for teachers in general given the significant trend toward including students with disabilities and regular classrooms. Successful education for

all students requires a professional commitment to collaboration.

Professionalism also requires teachers to commit to continuing development (e.g., credit courses, workshops, conferences, and regular reviews of professional research). Unlike some professions (e.g., speech and language pathology) that have comprehensive and regulated requirements for continuing education, teaching (and special education) unfortunately is far less prescriptive and consequently may in practice be much looser concerning this important area. Nevertheless, all teachers—and certainly those who work with the most challenging students in education—need to remain current of new developments and practices in the field.

Good teachers are, above all, effective; they nurture learning and their students, use evidence-based practices, and constantly evaluate their teaching programs. A teacher who remains energetic, enthusiastic, and positive and who works hard, embraces effective teaching competencies, remains committed to further professional development, and develops a broad repertoire of skills, ideas, and instructional activities can achieve teaching excellence.



Check Your Understanding 1.3 Click here to gauge your understanding of the concepts in this section.

ORGANIZATION OF THE TEXT

The chapters in this book address a range of instructional strategies associated with teaching students with disabilities. Chapters 2 and 3 focus on the curricular and instructional aspects that constitute the foundation of specialized education. The organization and management of a classroom is initially discussed in Chapter 4. Topics include various classroom arrangements, behavior change, grouping, scheduling, homework materials selection, grading, and record keeping.

Chapters 5 to 11 present strategies for instruction within seven core curricular areas: oral language/reading, word recognition, reading comprehension, written language, mathematics, science, and social studies, respectively. Each chapter includes information on assessment, general and specific approaches to instruction, and suggested teaching activities.

Additional important topical areas for students with special learning needs are covered in the final four chapters. Chapter 12 discusses the critical area of study skills. Chapter 13 focuses on social competence and self-determination, both frequently overlooked within the general education curriculum. Chapter 14 discusses functional academics. Chapter 15 focuses on career development and transition.

2

Foundations of Effective Instruction

LEARNING OUTCOMES

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

- **2.1** Discuss the basic concepts and model for delivering effective instruction.
- **2.2** Design instructionally meaningful IEPs.
- **2.3** Understand various issues related to curriculum.
- **2.4** Discuss and apply effective instructional practices.

ritical issues and questions have in the past pervaded education and continue to do so. Two of the most significant questions facing school personnel are the question of curriculum (what to teach) and instruction (how to teach). Effective school programs begin with considerations of what information students need to learn (typically decided by state agencies and local school boards), how best to teach that information deemed necessary, and, ultimately, how student learning can be measured accurately, effectively, and reasonably (i.e., high-stakes testing).

In addition to the topics noted above, it is also important to recognize that teachers who will be working with students with special learning needs must be highly knowledgeable about and competent in developing appropriate individualized education programs (IEPs) for students who have qualified for special education under the Individuals with Disabilities Education Act (IDEA).

This chapter introduces a general model for conceptualizing the key components of effective instruction. Furthermore, the chapter provides an overview of the topics just mentioned, as they are critical issues in providing appropriate education to students with special needs and are referred to in other chapters throughout the book.

MODEL FOR DELIVERING EFFECTIVE INSTRUCTION

Teacher effectiveness is a function of two dimensions: the learning the student achieves and the instructionally relevant behaviors that contribute to this learning (e.g., time and effort). It is often the case that the more a student learns, the more effective the teacher or the learning climate is likely to have been. If students learn more quickly from one teacher than from another, the more efficient teacher logically also will be judged to be the more effective.

Rosenshine and Stevens (1986) developed a general model of effective instruction highlighting six specific teaching activities validated from research as associated with student achievement. These principles remain relevant today:

- A review or check of the previous day's work (re-teaching if necessary)
- Presentation of new content or skills
- Guided student practice (with verification for understanding)
- Feedback and correction (re-teaching if necessary)
- Independent student practice
- Weekly and monthly reviews

Englert (1983) contributed to the thinking on effective instruction by identifying four teacher behaviors that are associated with direct instruction and are linked to achievement: maintaining a high level of content coverage, providing successful practice activities for students, providing feedback to signal the beginning and the conclusion of individual learning trials, and maintaining a high level of student task involvement.

Englert and her colleagues (Englert, Mariage, Garmon, & Tarrant, 1998; Englert, Tarrant, & Mariage, 1992) identified four complementary elements that derive from a constructivist approach to teaching: embedding instruction in meaningful activities, promoting dialogue for self-regulated learning, demonstrating instructional responsiveness, and establishing classroom learning communities.

Marzano, Pickering, and Pollock (2001) identified nine research-based strategies that led to increased levels of student achievement. These strategies relate closely to those that were identified previously. The nine areas are identifying similarities and differences, summarizing and note taking, reinforcing effort in providing recognition, homework and practice, cooperative learning, non-linguistic representations (graphic representations), setting objectives and providing feedback, generating and testing hypotheses, and cues, questions, and advanced organizers.

Mastropieri and Scruggs (2002) introduced the idea of SCREAM variables as a way to guide effective instruction. These variables are described below:

Structure

Clarity

Redundancy (i.e., review)

Enthusiasm

Appropriate rate

Maximized engagement

The What Works Clearinghouse (http://ies.ed.gov/ncee/wwc) identifies resources that have been proven to be effective with various populations. Online sources such as this website now offer teachers a convenient way to verify the appropriateness of various instructional strategies.

A substantial database exists indicating what elements of teaching constitute effective instructional practice. Figure 2-1 presents a model of effective educational practice. The model is predicated on a division of key elements of the instructional process into a focus on three major time-related aspects: (a) activities and events that precede teaching, (b) various activities associated with the actual instructional process, and (c) actions that are performed subsequent to instruction. Furthermore, the model reflects interactivity across the three areas. For example, various evaluative activities will have an effect on management dimensions or instructional practices. The comprehensive nature of delivering effective instruction is evident from examination of the entries in the model. Consistent with the purposes of this book, the elements of this model are discussed throughout the book.



Check Your Understanding 2.1 Click here to gauge your understanding of the concepts in this section.

PLANNING CONSIDERATIONS: DEVELOPING AN INSTRUCTIONALLY MEANINGFUL IEP

The passage of P.L. 94-142 in 1975 incorporated the IEP into routine pedagogical practice. Reauthorization of this law in 1990 (P.L. 101-476) and in 1997 (P.L. 105-17), along with the 2004 amendments to IDEA (IDEIA), added many new features to the law. Some of the most noteworthy changes that resulted from amendments to the original legislation include the requirement that plans for transition services be part of the IEP for all students no later than age 16 and the requirement of functional behavioral assessment/behavior intervention plans for certain students.

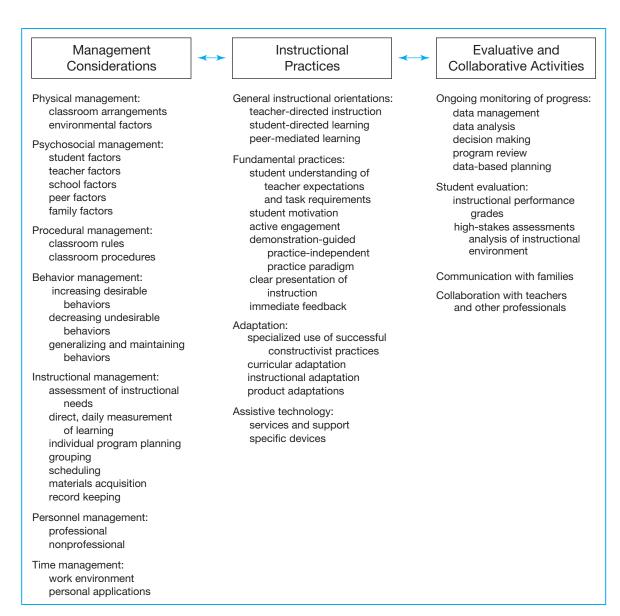


FIGURE 2-1 Dimensions of Effective Educational Practice

The IEP is the primary document that outlines specific plans for services, placement, transitional planning, and now other assurances. This document serves as the driving force in the delivery of an appropriate education for students who qualify for special education. This document should be a valuable asset for all students.

Initially, a student is determined eligible for special education if he or she meets various eligibility criteria. This process is based on a comprehensive assessment. The data gathered for the eligibility

process and any further information collected by multidisciplinary specialists and by both special and general education teachers can assist with the development of the IEP. However, in almost all situations, special education teachers will have to conduct further curriculum-related assessments to gather the type of instructionally useful data to be able to develop appropriate annual goals and to know where to begin instruction.

Although IEPs can serve a number of purposes, three stand out from the rest. First, IEPs should

provide instructional direction. Effective written goal setting can help remedy a so-called cookbook approach (i.e., pulling together isolated or marginally related instructional exercises in the name of good teaching). Second, IEPs function as the basis for evaluation. Formally established annual goals that are measurable for students help determine the effectiveness and efficiency of instruction, although this form of accountability is not intended to become the basis for evaluating teacher effectiveness per se. A third use of IEPs is improved communication. IEPs can facilitate contact across teachers and parents and ideally between teachers and students. Parental involvement, in particular, has resulted in increased mutual support and cooperation between home and school.

IEP Team

The identified members of the IEP team, as specified in the most recent reauthorization of IDEA, reflect key emphases of the new law: parent involvement, coordination with the general education curriculum, and involvement in the general education settings. The members include parents of the student; special education teacher; one or more general education teachers; local education agency representative (i.e., a person with authority to commit necessary resources); a person who can interpret the evaluation results; the student, when appropriate; and other knowledgeable persons whom the parents or school may choose to invite.

The team needs to function with the best interests of the student in mind during all meetings and other actions. It is also critical to remember that the parents are equal members of the team, a fact that is sometimes overlooked.



Watch this video to learn more about related parent rights and due process.



Key Elements of the IEP

Individualized education programs are intended to serve as the guiding document for the provision of an appropriate education. Moreover, IEPs function as an integral link between assessment and instruction; thus, the development of the IEP follows from the initial and ongoing collection of assessment data. The IEP also details the least restrictive, most appropriate placement and outlines the instructional program. The IEP must be evaluated and then rewritten annually as long as services are still necessary.

IDEA requires that each IEP that is developed contain certain components. These mandated components include the following:

- Statement of the child's present level of academic achievement and functional performance
- Statement of measurable annual goals, including benchmarks, or short-term objectives when applicable
- Statement of the special education and related services and supplementary aids and services to be provided to the child
- Statement of the program modifications or supports for school personnel that will be provided to the child
- Explanation of the extent, if any, to which the child will not participate with non-disabled children in the regular class
- Statement of any individual modifications in the administration of statewide or districtwide assessments of student achievement
- Projected date for the beginning of the services and modifications
- Anticipated frequency, location, and duration of those services and modifications
- Statement of how the child's progress toward the annual goals will be measured
- Statement of how the child's parents will be regularly informed of their child's progress toward the annual goals

Two other components of the IEP will be necessary for older students:

- By age 16, appropriate measurable postsecondary goals must be set and a statement of transition services (including courses of study) determined.
- Beginning at least 1 year before a student reaches the age of majority under state law, the IEP must include a statement that the student has been informed of his or her rights that will transfer on reaching the age of majority.



ENHANCEDetext

video example 2.2

Watch this video to learn more about the components of an IEP.



Focus on Key Instructional Components of the IEP

From an instructional perspective, certain components of the IEP are particularly noteworthy. These components, if developed appropriately and thoroughly, provide a picture of the critical areas that need attention and how to address them. These areas are the parts of the IEP that general education teachers need to review if the student with an IEP is in their classrooms.

Present Levels of Academic Achievement and Functional Performance. A summary of a student's current functioning provides a basis for subsequent goal setting. Performance levels should be determined for all areas needing special instruction—in both academic and functional areas. Depending on the individual, relevant information could be gathered for academic skills, behavioral patterns, self-help skills, vocational talents, or communication abilities.

Performance levels should be viewed as summaries of an individual's strengths and weaknesses. We suggest that these statements emphasize the positive aspects of the student (i.e., what the student can do) while clearly indicating what needs to be addressed.

Although performance statements can take a variety of forms, including formal test scores, informal test results, behavioral descriptions, a listing of specific abilities relative to a sequence of skills in a given area, and self-report data obtained from the student, descriptions that are instructionally relevant are warranted. Gibb and Dyches (2016) recommended that present levels of educational performance include the following three elements:

- Statement of how the disability affects the student's involvement and progress in the general curriculum
- Description of the student's performance levels in the skill areas affected by the disability
- Logical cues for writing the accompanying goals for improvement

Hoover and Patton (in press) recommend that teachers use the acronym SCIN when developing present levels of performance. SCIN involves the following:

Sufficient detail

Current data/information

Informal assessment techniques

Needs and accomplishments

These four guidelines will contribute to the generation of useful present levels on which appropriate measurable annual goals can be identified.

Measurable Annual Goals. The next key instructional-related component of an IEP is listing measurable annual goals. As the name implies, these goals predict long-term gains that can be evaluated clearly during the school year. The annual goals should reflect the educator's (and the parents') best guess of what the student can reasonably achieve within the school year. The following features can help determine realistic expectations: chronological age, past learning profile, and recent learning history and response to instruction. Teachers can conceptualize annual goals, which may range from outcomes that might be considered the most optimistic to the most pessimistic. Against these parameters, reasonable estimates can be derived.

Annual goals should include four major elements. IDEA 1997 lists four characteristics of an annual goal:

- It must be measurable.
- It must tell what the student can reasonably accomplish in a year.
- It must relate to helping the student be successful in the general education curriculum or address other educational needs resulting from the disability.
- It must be accompanied by benchmarks or short-term objectives. (Gibb & Dyches, 2014)

Betty (in press) recommends the use of the SMART acronym for developing appropriate goals. The key features of a SMART goal include the following:

Specific

Measurable

Attainable

Relevant

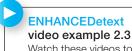
Time limited

The SMART guidelines highlight the essential elements of appropriate goals and provide a basis for being able to evaluate a student. Statements should use precise behavioral terms that denote action and can therefore be operationally defined (e.g., pronounce, write, or identify motorically) rather than vague, general language that confounds evaluation and observer agreement (e.g., know, understand, improve, or appreciate). For example, "will correctly identify all initial consonant sounds" is more appropriate than the unmeasurable "will improve reading skills."

Goals that are positive provide an appropriate direction for instruction. Avoiding negative goals creates an atmosphere that is helpful in communicating with parents as well as in charting student progress. The goal "will respond verbally to teacher questions" gives the student something to strive for, as opposed to "will learn to keep mouth closed," which negatively emphasizes something to avoid.

Goals should also be oriented to the student. Developing students' skills is the intent, and the only measure of effectiveness should be what is learned, not what is taught. Thus, "will verbally respond to questions with two-word phrases" is preferable to "will be given oral language readiness materials."

Finally, goals must be relevant to the individual student's current and future needs across a range of academic, personal/social, and daily living domains. Unfortunately, research indicates that IEPs frequently do not meet this criterion.



Watch these videos to learn more about IEP Goals Parts 1 and 2.



Supplemental Aids and Services. These aids and services are intended to assist the student with disabilities in successfully performing in the general education setting. According to Gibb and Dyches (2014), these aids, services, and other supports are "provided in regular education classes or other educational-related settings to enable students with disabilities to be educated with non-disabled students to the maximum extent appropriate" (p. 70).

The IEP team may recommend that adjustments be made in one or more of the following areas:

- The way teachers present information
- The ways students complete tasks
- The ways teachers assess student learning
- The ways teachers structure the environment

Many suggestions for supporting a student in general education settings are discussed in detail in the next chapter when the topic of differentiating instruction is covered. In addition to specific techniques that are student focused, this IEP requirement also may require that teachers, parents, and other school personnel receive specific training on various topics that are related to the student in question.



Check Your Understanding 2.2 Click here to gauge your understanding of the concepts in this section.

CURRICULAR CONSIDERATIONS

The core component of educational programs for individuals with disabilities is the curriculum. Regardless of teaching effectiveness and efficiency, questions related to the value of education must properly address the issue of what is taught. This section addresses four topics related to curricular issues: access to the general education curriculum, the relationship of standards to what is taught to students with special needs, types of curricula, and the concept of a comprehensive curriculum.

Access to the General Education Curriculum

The reauthorization of IDEA (2004) clearly emphasized that all students with disabilities must have access to the general education curriculum. This feature of the law, bolstered by a strong movement toward standards-based education, now ensures that these students are being given more access to the general education curriculum. Nearly all states have instituted standards to ensure that students develop a common set of knowledge and skills during their school experience. With such changes come a host of issues that have to be recognized and addressed.

It is helpful to begin by considering the various applications of the term *curriculum*. This term can refer strictly to the courses taught in school or, more literally, to a document that includes a design that others have developed and that teachers implement in the classroom. Using a broader conceptualization of "curriculum," Hoover and Patton (2004a) referred to curriculum as planned and guided learning experiences under the direction of the school with intended educational outcomes.

One of the primary concerns of the curriculum is its "functionality" in meeting the needs of the individual student. For our purposes, curriculum functionality is defined as the degree to which the curriculum prepares students for the environments in which they will live, work, play, and learn when formal schooling ends. At the same time, careful attention must be given to how students' needs can be met within the context of the general education curriculum while placed in inclusive settings.

Relationship of Standards to Curriculum Taught to Students with Special Needs

It is important for teachers who work with students with special learning needs to be able to relate what they are teaching to standards and conversely be able to interpret the functionality of grade-level standards. At face value, many content and performance standards (i.e., Common Core) do not seem to be functionally relevant to many students with special needs. However, on the contrary, most standards have functional value and can be interpreted in functionally relevant ways.

An example of how a standard can be made functionally significant would be within a secondary level standard that may include a focus on vocabulary development. For such an example, a teacher could choose to focus on "occupational" vocabulary or perhaps some other type of functional vocabulary that will be needed in life, thus addressing a vocabulary standard with a functional focus. Patton and Trainor (2002) have provided an extensive analysis of the relationship between functional content and standards along with a number of examples; this source can be consulted for additional examples.

Curriculum Types

Hoover and Patton (2004a) pointed out that curriculum needs to be conceptualized on the basis of

what is taught and what is not taught but should be. The three types of curricula that are frequently mentioned are explicit, hidden, and absent (e.g., Schubert, 1993). These are defined as follows:

- Explicit curriculum—the formal and stated curriculum that teachers and students are expected to follow
- Hidden curriculum—the actual curriculum implemented in the classroom
- Absent curriculum—the curriculum that, for whatever reason, is not included in school

Other terminology is also used to describe types of curricula. In general, the various perspectives highlight the same points; however, some subtle differences exist. As Hoover and Patton (2004a) stressed, elements from all three types of curricula operate continually in classrooms, sometimes in complementary ways and other times in a conflicting fashion.

The *explicit curriculum* (intended curriculum) can be found in a state's standards and thus is typically reflected in a school district's curriculum guides. This type of curriculum includes the specific goals and objectives for subject areas across grade levels that articulate with a state's content and performance standards. With the increased attention to and pressure of these standards and school accountability, a heightened interest in ensuring that this content is covered pervades instruction today.

The hidden curriculum (taught curriculum) is what students are exposed to on a daily basis. It will include much of the explicit curriculum as well as lessons on topics other than those stated in curriculum guides. The hidden curriculum includes interpretations of the explicit curricula related to implementation procedures and the emphasis that different explicit curriculum aspects receive. It also includes the insertion of content that the teacher chooses to cover, either by necessity based on student needs (e.g., study skills instructions) or by personal interest (enrichment). It should be pointed out that often teachers may have to teach skills and content that they were not expecting to teach. For example, if two students are not interacting appropriately in a small-group setting, the teacher may have to teach certain interpersonal skills (i.e., social skills) to one or more of the students.

The *absent curriculum* represents content that is not covered. Sometimes, this is because certain

content is not part of the explicit curriculum. Other times, it is a choice made by teachers. Examples of topics that are important for students with special needs but often absent from the curriculum are social skills instruction and the development of self-determination skills (see Chapter 13) or study skills (see Chapter 12).

Comprehensive Curriculum

When educational programs are designed for students who have various types of disabilities, the importance of a comprehensive curriculum should be apparent because the primary goal is to develop an outcome focus consistent with their diverse yet specific needs. A comprehensive curriculum refers to a program of study guided by the reality that each student is in school on a time-limited basis. Moreover, the real test of the value of the curriculum is how students fare once they exit the program (i.e., how what was taught affects adult outcomes).

Thus, educators must consider what lies ahead for their students; this requires a perspective that is sensitive to the environments in which students will need to adapt and function in the future. Hence, curriculum design should be influenced not only by the stated standards and individual needs of the students but also by a "subsequent environments" (Polloway, Patton, Smith, & Roderique, 1992). A subsequent environment perspective requires school personnel to consider the demands of the likely settings to which an individual will be moving in the near and more distant future. The central attributes of a comprehensive curriculum include the following:

- Responding to the needs of an individual at the current time
- Accommodating the concurrent needs so that students can truly have access to the general education curriculum in a meaningful and effective way
- Attending to crucial needs that are absent from the general education curriculum
- Striving for maximum interaction with peers
- Developing curriculum from a realistic appraisal of potential adult outcomes of individuals
- Ensuring consistency with each individual's transitional needs across levels of schooling and life span

 Remaining sensitive to graduation goals and specific diploma track requirements

The importance of comprehensive curriculum at the secondary level relates closely to the basic elements of the transition process that will be covered in Chapter 15. The value of a comprehensive curriculum for students with special needs is further warranted based on the following realities:

- Many individuals are not being prepared for the complex demands of adulthood that they will face on a daily basis.
- Many students who have special needs do not find the school experience valuable and may drop out.
- The educational programs of many students with special needs do not meet their current academic, social, and emotional needs.
- The opportunities for continuing educational options for adults with special needs on their exiting of high school are limited but nonetheless critical.

The recurring need is for relevant curricula that address these concerns and features. However, although a careful analysis of secondary programs is essential, consideration of curricular design must begin at the elementary level to overcome the problems that otherwise may be recognized at the secondary or postsecondary level.



Check Your Understanding 2.3 Click here to gauge your understanding of the concepts in this section.

EFFECTIVE INSTRUCTIONAL PRACTICES

Classrooms in most public schools today are comprised of a diverse group of students, and, as a result, the challenges for teaching are significant. Students represent diverse cultural backgrounds or may be learning English. In many inclusive classrooms, special education supports are provided to an increased number of students. Students at varying academic levels are being served by one teacher. Consequently, there has not been a time when the use of effective instructional and differentiated methodologies has been of greater significance. Consistent with IDEA (2004), effective instruction has been defined as those practices

that are research based and empirically validated (Boardman, Arguelles, Vaughn, Hughes, & Klingnerr, 2005; Cook et al., 2015; Stanovich & Stanovich, 2003).

Special education brings to the challenge of inclusion a wealth of instructional strategies that will be discussed throughout this text. As Lloyd and Hallahan (2005) noted, the field of learning disabilities in particular has been one of the "foremost sources for empirically founded practices—practices that are proven valuable for a wide spectrum of students, not just those with learning disabilities. Reasonably informed people interested in learning disabilities . . . argue strongly for explicit, systematic instruction that focuses on teaching students strategies for completing academic tasks and that includes monitoring of progress so instruction can be adjusted to maximize progress" (p. 135).

In an important article focused on effectiveness in special education, Heward (2003) identified six dimensions of practice that characterize positive features of instruction. These dimensions and features are provided in Table 2-1. The dimensions provide a strong foundation for the focus of effective teaching of students with special needs.

This section describes teaching approaches consistent with the effective instruction model presented in Figure 2-1 and the ideas featured in Table 2-1. An overview and description of the following effective teaching practices is presented: culturally responsive instruction, teacher-directed instruction, cooperative teaching, grouping for instruction, scaffolding, student-directed and self-regulated learning, peer-mediated instruction, the use of technology, and the concept of universal design for learning.

TABLE 2-I Dimensions and defining features of special education instruction

Dimension	Defining Features
Individually planned	 Learning goals and objectives selected for each student based on assessment results and input from parents and student
	Teaching methods and instructional materials selected and/or adapted for each student
	 Setting(s) where instruction will occur determined relative to opportunities for student to learn and use targeted skills
Specialized	 Sometimes involves unique or adapted teaching procedures seldom used in general education (e.g., constant time delay, token reinforcement, self-monitoring)
	 Incorporates a variety of instructional materials and support—both natural and contrived— to help student acquire and use targeted learning objectives
	 Related services (e.g., audiology, physical therapy) provided as needed
	 Assistive technology (e.g., adapted cup holder, head-operated switch to select communication symbols) provided as needed
Intensive	 Instruction presented with attention to detail, precision, structure, clarity, and repeated practice
	"Relentless, urgent" instruction (Zigmond & Baker, 1995)
	 Efforts made to provide incidental, naturalistic opportunities for student to use targeted knowledge and skills
Goal-directed	 Purposeful instruction intended to help student achieve the greatest possible personal self- sufficiency and success in present and future environments
	Value/goodness of instruction determined by student's attainment of learning outcomes
Research-based methods	Recognition that not all teaching approaches are equally effective
	 Instructional programs and teaching procedures selected on basis of research support
Guided by student performance	Systematic, ongoing monitoring of student progress
	 Results of frequent and direct measures of student learning used to inform modifications in instruction

Source: Adapted from Heward, William L., Exceptional Children: An Introduction to Special Education (7th ed.) © 2003, pp. 40–41. Reprinted by permission of Pearson Education, Inc., Upper Saddle River, NJ.

Culturally Responsive Instruction

Given the diversity present in classrooms, it is essential that teachers adopt a philosophy and modus of operandi that reflects an attitude of openness, sensitivity, and responsiveness to the particular needs and backgrounds of the students with whom they work. To do this, teachers must become culturally knowledgeable and provide instruction that is culturally responsive. Smith and Tyler (2014) defined culturally responsive instruction (CRI) as instruction that "teaches to the strengths of each student while validating and affirming their cultures" (p. 66). They stated that CRI

- acknowledges and legitimizes different cultural heritages;
- connects the meaning between home and school experiences;
- uses a wide variety of instructional techniques that account for varied learning needs, preferences, and communication styles;
- teaches students to understand and appreciate their own and others' cultural heritages; and
- incorporates multicultural knowledge, resources, and materials in all new subjects. (p. 66)



ENHANCEDetext video example 2.4 Watch this video to learn more about cultural considerations.



Teacher-Directed Instruction

With teacher-directed instruction, the teacher plays a direct and active role in the teaching process. This role varies depending on the objectives of the lesson or subject area. Students with learning problems often require special services and instructional supports because they are not dealing well with traditional methods and materials. These students must be provided with lessons in which teachers proceed systematically, sequence within and between lessons, pace instruction appropriately, question students differentially, and involve them actively.

A key aspect of successful instruction is the intensity of the instruction provided. As Deshler (2005) noted, to be effective for students with special needs, instruction must be highly intensive:

Intensive instruction involves helping students maintain a high degree of attention and response during instructional sessions that are scheduled as frequently and consistently as possible. In other words, a key factor affecting learning is both the amount of time and instruction and how effectively each instructional moment is used to engage students in activities that contribute to their learning. Intensity during instruction is achieved by progressive pacing, frequent question-answer interactions, and frequent activities that require a physical response (e.g., pointing, writing, raising hands, repeating). Intensity can also be achieved through reflective or open-ended questions if the activities are focused on a process that engages interest and maintains the student's attention. For adolescents who are far behind, all of these elements must define the instructional dynamic. (pp. 123–124)

One of the most widely used instructional methods is the use of **direct instruction**. Although there are many versions of direct instruction, it typically includes the essential elements of explaining the skill, modeling the skill, practicing the skill, and giving feedback on the skill performance.

Teachers engaging in direct instruction present lessons that provide students with opportunities to respond and receive feedback on how they respond to the lesson that is being presented. They are shown how a skill is performed and are then given ample time to perform the new skill in a guided practice situation. Teachers engage all students by providing positive as well as constructive feedback while they are practicing, the ultimate goal being mastery of the skill. Typically, such lessons follow a pattern so that students can predict the structure of the lesson and the learning environment.

Kauffman (2002) stressed the importance of direct instruction in stating:

Nothing is gained by keeping students guessing about what it is they are supposed to learn. In all or nearly all of the education programs in which the majority of students can be demonstrated to be highly successful in learning the facts and skills they need, these . . . are taught directly rather than indirectly. That is, the teacher is in control of instruction, not the student, and information is given to students. Giving information doesn't mean that the instruction is dull, and it doesn't mean that students don't learn to apply their knowledge and skills to everyday problems. Neither does it mean that students have nothing to say about their education. But it does mean that students don't waste

time and effort trying to figure out what they're to learn. It also means that students aren't allowed to learn misrules—learn the wrong thing or a faulty application so that their learning can be described as false, misleading, or useless. (p. 236)

An example of a systematic instructional approach, referred to as PURPOSE, provides teachers with a way to remember direct instruction procedures as well as to employ generalization procedures so that students can perform the skill in other settings outside of the classroom where the skill is learned initially. The procedure is divided into seven steps. The following discussion describes how this teaching format can be implemented during instructional periods.

Prepare the student to learn the skill—The step requires that the teacher prepare the students to learn the skill and know why it is important to learn. The teacher asks the students to (a) define the skill to be learned, (b) state why it is an important skill, and (c) explain where they can use this skill once learned. It is important that the teacher incorporate an interactive dialogue with the students and listen to their answers.

Understand the skill steps—The second step requires the teacher to help the student understand the skill components to be learned. The teacher reviews each component of the skill's task analysis by presenting each skill component individually, asking students to state what it is and why it is needed to execute the skill. If the students are unable to do this, the teacher should explain the skill component, give an example of it, and state why it is an essential component of the skill. Again, the teacher should involve the students in the discussion.

This step also builds on task analysis of the skill so that each step is easy to grasp. Task analysis allows the teacher to determine whether the skill is too difficult for a student and at what point the student is having trouble. By analyzing the steps associated with each skill, teachers are able to modify the skill to best meet the needs of the students.

Rehearse the skill—Once students have a clear understanding of each skill component, teachers rehearse the skill for and with the students. The teacher begins by modeling the skill as it should be performed. If the skill is interactive, the teacher can model the skill through a role-play

situation, and the students then perform the skill exactly as the teacher modeled it.

If the skill is cognitive, the teacher can model it by "talking through" each step of the skill. The importance of having the students hear and see what the teacher is thinking is also underscored. Students will see and hear how a person thinks through a cognitive problem and can perform the skill.

After the modeling, the teacher should seek feedback by asking the students about each skill step and requiring them to provide some details about the skill component that was just modeled. The teacher should praise the students for their correct answers and refresh their memories when they cannot remember what happened during the performance of a skill step.

The teacher then should require the students to learn each of the skill components before they are asked to perform the skill. This task can be accomplished through strategies dependent on the age and cognitive ability of the student, such as (a) memorization of the skill steps through verbal rehearsal, (b) development and utilization of a mnemonic, or (c) use of flash cards or pictures. When the students are able to verbally state each step of the skill, they should try to perform the skill under guided practice. Mastery of the skill should be achieved during this step.

Rehearsal focuses on the importance of developing proficiency in a particular skill and then maintaining it once mastered. To provide further elaboration on concepts related to rehearsal and practice, Hardman and Drew (2005) identified the following types of practice that result in enhanced learning: massed practice (e.g., cramming before an examination), distributed practice (holding daily practice sessions that may be shorter in duration but regularly occurring and may reflect varied context), and naturally distributed practice (e.g., practicing the skills in the context of where that skill will be most importantly used; naturally distributed practice relates directly to the importance of generalization, which is discussed in the following text).

Perform a skill check—After a mastery rehearsal, the teacher and student perform a self-check of the skill performance. It involves an evaluation of each skill component. When the

student thinks that mastery of the skill has been accomplished, he or she should ask the teacher to evaluate the performance for accuracy. This outside check will confirm the students' perceptions of their own performance.

Overcome any performance barrier—As with the acquisition of any skill, there may be difficulties in obtaining performance at targeted levels, and thus teachers will need to help students overcome any performance problems.

When these situations occur, the teacher must pinpoint where the problem lies in order to help the student overcome the problem and to develop an appropriate instructional intervention. The teacher may need to develop supplemental materials or provide extra practice to accomplish the desired goal of learning the skill to mastery.

Select other situations where the skill can be performed—As the student achieves mastery over the skill, the teacher and student must select other situations where the skill can be used. During this step, the teacher focuses on generalizing a skill mastered in the classroom to other situations. This emphasis on generalization provides a foundation for showing students how they can apply knowledge or skills to new tasks, problems, or situations and acquire a set of rules to solve problems of a similar nature in the future (Smith, Polloway, Doughty, Patton, & Dowdy, 2016).

Together, the student and teacher decide where or with whom the skill can be used and determine when the student will use the skill. They might talk about how the skill will be performed and the importance of using the skill in the selected situation. Once a specific situation is selected, the student and teacher agree that the student will perform the skill as soon as the occasion arises and that the student will report the outcome of the performance as soon as possible. This generalization step requires students to use the skill where it is most meaningful to them. Further, generalization can be promoted by teaching the skill in multiple contexts, providing reinforcement for the successful generalization of the skill behavior, and reminding students when it is appropriate to apply the skill that they have learned in a new situation (Smith, Polloway, Patton, & Dowdy, 2008).

Evaluate skill performance—The last component is to evaluate the skill performance in the generalized situation. Once the situation has occurred, students must assess the effectiveness of their performance and determine the outcome. If possible, students should be encouraged to use a checklist to evaluate how well each skill component was executed. If all the skill components were executed successfully, the student must then determine whether the performance of the skill accomplished the desired goal. If the student did not perform the skill correctly, the teacher and the student should determine why it was not performed correctly and develop a procedure that would help the student the next time the performance of the skill is necessary. If problems persist, the teacher engages in additional practice of the skill with the student or problem solves with the child to ensure that a similar situation outside the classroom might be met with more favorable results in the future.

Instructional Collaboration: Co-Teaching

Co-teaching (or cooperative teaching) represents an attractive way of providing general education class support not only for students with disabilities but also for other students who are experiencing learning difficulties in the class. Hourcade and Bauwens (2003) described cooperative teaching as occurring when "two educators combine their complementary sets of professional knowledge and skills and work simultaneously in general education classrooms" (p. xiii).

It is sufficient to note here that cooperative teaching involves a team approach to supporting students within the general education classroom, combining the content expertise of the classroom teacher with the pedagogical skills of the special education teacher (Smith et al., 2016). It is a logical outgrowth of collaboration between teachers that includes consultative arrangements, additional help given by special educators to students not identified as eligible for special services, and the sharing of teaching assistants, especially to accompany students who require certain supports in the general education classroom.

Thousand, Villa, and Nevin (2007) have identified four different approaches to the delivery of

co-teaching: supported teaching, parallel teaching, complementary teaching, and team teaching. The supported teaching approach is where one coteacher is the lead teacher and the other teacher circulates around the room during instruction. The parallel teaching approach is best explained as a situation where both co-teachers are leading separate groups. The complementary teaching approach is where one co-teacher typically has expertise and the other co-teacher complements the instruction of the lead teacher. The team teaching approach is best characterized as a situation where both co-teachers are equally engaged in the delivery of instruction.



ENHANCEDetext video example 2.5 Watch this video to learn more about team teaching.



Hourcade and Bauwens (2003) noted that the essential philosophy of cooperative teaching is a simple one: *sharing*, especially of responsibilities and accountability. They suggested that true cooperative teaching emerges when five key elements are operative:

- Cooperative presence—initial stage is related to mere proximity.
- Cooperative planning—regular meetings occur where various planning-related activities are done collaboratively; as a way to facilitate effecting cooperative, joint lesson planning is useful.
- Cooperative presenting—teachers present simultaneously and are actively involved for a sustained period of time.
- Cooperative processing—teachers determine how monitoring and evaluation will occur.
- Cooperative problem solving—teachers devote time to solving inevitable problems that arise when implementing a cooperative teaching arrangement.

Hoover and Patton (in press) describe five coteaching principles. The first principle is that teachers are teaching together in a co-working climate. The second principle is that implementation occurs in the classroom at the same time with all students.

The third principle is that planning and implementation occur collaboratively with both teachers actively engaged. The fourth principle is that assessment of student learning is conducted by both co-teachers. The last principle is that co-teachers provide each other with constructive feedback and support and decide about future adjustments together.



LEARNING MODULE 2.1 Click here to learn more about co-teaching.

The trend toward co-teaching warrants careful attention. The existing studies reflected a moderate level of success for co-teaching. Mastropieri et al. (2005) reported that success was influenced in particular by the compatibility of the two teachers based on mutual trust and respect and on shared commitment to effective teaching behaviors (i.e., "structure, clarity, enthusiasm, maximizing student engagement, and motivational strategies" [p. 269]).

Instructional Grouping

A key consideration that is integral to the planning and instructional process is how students are grouped for instruction. Vaughn and Schumm (1997) provided a detailed analysis of the grouping practices typically used by general and special education teachers. For the former, the most commonly used strategy was whole-class grouping with students of mixed ability combined within the group. General educators tend to use smaller groups for practice and reinforcement activities but not for teacher-led instruction.

On the other hand, special educators reported that they were much more likely to use groups of similar ability. Further, they reported that they had greater autonomy in making decisions about how students were grouped. Consequently, the traditional pattern of homogeneously set-up groupings appeared more common with this group of teachers. To the extent that students need work on specific skills, large-group instruction with mixedability groups would likely not be an effective instructional practice.

Although there is much benefit in the use of skillsbased grouping for students with special needs, too often such groups have remained static. Student grouping tends to remain the same due to an emphasis on achievement level being the primary determinant of group placement. Teachers are encouraged to consider options that periodically introduce change and flexibility into grouping procedures.

Grouping that is based on various interests and non-academic factors should be considered and implemented on a regular basis. Interest groups can be formed around a common theme (e.g., sports) regardless of achievement level. The teacher can assign trade book material at levels appropriate for each student, with questions and activities suitable for the group. In skill groups, students periodically meet with the teacher to work on a specific skill deficit. Here again, students of varying levels of achievement work together on a common problem.

Scaffolding

The concept of **scaffolding** describes interactions between teachers and students that facilitate the learning process. Stone (1998) described the scaffolding metaphor as follows:

In providing temporary assistance to children as they strive to accomplish a task just out of their competency, adults are said to be providing a scaffold, much like that used by builders in erecting a building. [Scaffolding] connotes a custom-made support for the "construction" of new skills, a support that can be easily disassembled when no longer needed. It also connotes a structure that allows for accomplishment of some goal that would otherwise be either unattainable or quite cumbersome to complete. (p. 344)

In scaffolding instruction, teachers model a learning-related process by thinking aloud or talking through the steps they follow to reach a specific conclusion. As students begin to understand the process, they gradually take over this talking-through procedure, and the teacher acts as a coach, providing prompts when needed.

An example of a scaffolding procedure is seen in this exercise, which focuses student attention on story grammar. The teacher begins by modeling the scaffolding steps, thinking aloud by saying to the students after they have read to a designated point in the story, "I see a problem." The teacher states the problem and writes it on a note sheet for students. The teacher then describes the attempts in the story to solve the problem or conflict and gives an analysis of the events that led to the

solution of the problem. After the teacher models these steps, the students begin to talk themselves through a story following the same steps (Gersten & Dimino, 1990). This strategy leads students into being active participants in the reading process, and, when used, students' responses to both lowerand higher-level questions are likely to improve.

Student-Directed Learning

A major goal of education is to develop students so that they become independent learners, able to direct their own behavior in ways that assist in maximizing the amount of time engaged in learning (i.e., student-directed learning) or displaying appropriate behaviors. Many students with special needs have significant difficulty in this area, which can limit their success in general education where self-regulated actions are expected—but often not directly taught (Marzano, 2003). This relates to the notion of hidden curriculum that was discussed earlier in the chapter where some skills/behaviors may have to be taught in addition to the explicit curriculum.

Teachers need to assist students in becoming independent learners and to be in control of their behaviors. To accomplish this goal, teachers need to structure the classroom environment in ways that assist students in developing self-regulation strategies. Self-directed learners typically demonstrate competence in a range of skills associated with self-regulation, as shown in Figure 2-2. When students become competent in using these skills, they will be able to navigate their current learning environment—both academically and behaviorally. Moreover, these skills will contribute to success in areas such as action planning and goal setting and planning now and in the future.

Key Components of Self-Regulation. Special attention needs to be given to students to not display self-directed behaviors. Initially taught by teachers, these skill sets must be learned and eventually used by students without much effort. Figure 2-2 identified the four subcomponents of self-regulation: self-monitoring, self-instruction, self-evaluation, and self-reinforcement. Each of these skill areas must be evaluated and taught when students show deficiencies in these areas. These four areas are described as follows:

Self-monitoring—skills associated with monitoring one's own behavior

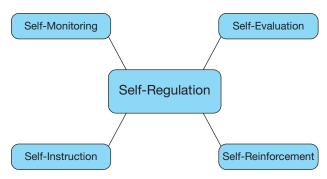


FIGURE 2-2 Self-Regulation

- Self-instruction—skills associated with talking oneself through a task using overt or covert verbalizations
- Self-evaluation—skills associated with the ability to analyze one's performance and make necessary corrections
- Self-reinforcement—skills associated with rewarding oneself for correct behavior or successfully accomplishing a task

Problem-Based Learning. Problem-based learning consists of a series of stages in which the students become investigators of a real problem or topic. First, students are guided, through different activities, to *explore many topics, issues, and areas* into which they may delve more deeply. Teachers must assess the interests of the student and explore several avenues, as students may not know what they would like to learn about.

The second major stage is *choosing a topic* and determining certain goals and objectives that are to be accomplished to develop the chosen content into an interesting project. Teachers can help students determine these goals and objectives by working with them to decide what is to be accomplished.

The third stage is *developing a project management plan*. This plan includes creating timelines, getting started, and finalizing product ideas. After the plan is outlined, the student begins to research the ideas and produce the products based on research and guidance from the teacher.

The final stage of this process is guiding students through the process of independent or small-group study to help them evaluate what they have accomplished. Students and teachers can develop evaluation plans that best suit their needs.

Peer-Mediated Instruction

The primary purpose for using peer-mediated strategies is to promote learning within the context of collaborative interactions among students. Although the development of *self-directed* learners is desirable, students also need to be able to work *interdependently* with other students in their classes and ultimately with co-workers in the future. Students benefit not only from being able to direct their own learning activities but also from knowing how to work with others in joint talks or how to seek assistance from others when needed. This section discusses ways in which students with learning-related problems can engage along with their fellow students. The primary focus is on peer tutoring and cooperative learning.

Peer Tutoring. Peer tutoring typically but not always involves the pairing of a more skilled student with a student who is less proficient in a particular behavioral or academic area. Peer tutoring procedures have been used to teach academic skills and develop social behaviors with regard to classroom discipline, peer relations, and appropriate interaction behaviors. The effectiveness of peer tutoring has been demonstrated across ages, settings, and types of students.

Cooke, Heron, and Heward (1983) summarized the advantages of peer tutoring as follows: (a) children can effectively teach each other skills when tutors emphasize repetition, mastery, and a review system; (b) tutors are able to learn from teaching others; (c) tutors can individualize content material to meet the needs of each student; (d) students can engage in one-to-one instruction without requiring a full class lesson; (e) one-to-one teaching greatly increases the opportunity for correct responses by the tutee; and (f) tutors and tutees gain in self-esteem, self-respect, and ability to interact with each other on a constructive and appropriate basis.

When selecting tutors, teachers must ensure that the students are individuals who can help in the teaching process. These students should be enthusiastic about being peer tutors and willing to learn the procedures necessary to work with another student. Figure 2-3 outlines a direct instructional procedure using the PURPOSE format, described earlier in the chapter, that a teacher can use when preparing students to become peer tutors.

A Systematic Procedure for Teaching Peers to Be Tutors • Prepare the students to learn about peer tutoring: Ask the students if they know the definition of a "tutor." Ask the students why it is important to be a tutor. Ask the students for examples of what subjects they might tutor. • Help the student to **U**nderstand and learn the steps to being a tutor. Outline the steps tutors must exhibit in order to tutor a peer in a designated subject area. Explain each step to the tutors and ask them to tell you why that step is important. • Rehearse the skill by watching a model and then practicing the lesson with someone else. Show or model how you would like the tutors to execute the lesson when tutoring another student in a particular subject area. Have the students rehearse the lesson with you role-playing the tutee. Give feedback to the tutors after each role-play situation. • Perform a self-check to ensure that the lesson was performed correctly. Once the tutors have role-played the lesson, have them evaluate whether they performed each step needed to teach the lesson. • Overcome any performance problems to produce the desired outcomes. If a tutor is not exhibiting all of the steps needed to correctly teach the lesson, work with the tutor until he/she is able to execute it appropriately. • Select or recognize other situations where the skill can be performed. Pair the tutors with other students and have them begin tutoring the students. • Evaluate the performances of the tutor and the tutee during the lesson. Evaluate whether the tutor executed the lesson appropriately and if the tutee's skill level improved.

FIGURE 2-3 Teaching Peers How to Be Tutors

An example of a successful peer tutoring approach is Peer-Assisted Learning Strategies (PALS; see also Chapter 6). With PALS, groups as varied as beginning readers or middle school math students (Kroeger & Kouche, 2006) are assisted in learning through paired instruction. Each member of the pair takes turns serving as a coach and a reader with the first coach being the reader at a higher achievement level who listens to, comments on, and reinforces the other student before the roles are reversed. Mathes and Torgesen (1998) reported that PALS enhanced students' learning by promoting careful attention to saying and hearing sounds, sounding out words, and reading stories. They recommended using the approach three times a week for approximately 16 weeks with each session lasting 35 minutes. In addition, Fuchs, Fuchs,

Mathes, and Martinez (2002) reported that participation in PALS resulted in enhanced social acceptance for students with learning disabilities and that these students had similar social standing when compared to their peers who were not disabled.

Kroeger and Kouche (2006) similarly provided an example of a successful application of PALS to middle school students in math. As they noted, the benefits reflected in "a world of students discussing and talking through math problems, regardless of ability levels or past experiences in math classes. . . . PALS is an effective intervention to increase engagement and opportunities to respond for all students" (p. 12).

Another approach for using students as instructors is classwide peer tutoring (CWPT). Maheady,

Harper, and Mallette (2001) identified the four primary components of CWPT as follows: "competing teams; a highly structured tutoring procedure; daily point earning and public posting of people performance; and direct practice in the implementation of instructional activities. In using CWPT, the teacher's role changes from primary 'deliverer' of instruction to facilitator and monitor of peerteaching activities" (p. 1).

CWPT is intended to be a reciprocal tutoring approach. That is, students assume roles as both tutors and tutees during individual instructional sessions. Further, the sessions are highly structured by the teacher to ensure that students are on task and focused on key instructional content.

To enhance the impact of any peer tutoring program, students can be taught to enlist the help of their peers by teaching them strategies to get assistance. Wolford, Heward, and Alber (2001) demonstrated that teaching simple phrases (e.g., "Can you help me?" or "How am I doing so far?") had a positive impact on the rate at which feedback was received or students' accuracy and productivity on classroom tasks.

Cooperative Learning. Cooperative learning (CL) also can be employed to enlist the support of students while simultaneously promoting the learning of academic and behavioral skills. According to Schniedewind and Salend (1987), teachers can structure their class lessons so that students work together to achieve a shared academic goal. They stated, "Cooperative learning is especially worthwhile for a heterogeneous student population, because it encourages liking and learning among students of various academic abilities, [disabilities], and racial and ethnic backgrounds" (p. 22).

When planning a CL lesson, teachers should consider four elements: (a) positive interdependence, (b) individual accountability, (c) collaborative skills, and (d) processing. Within a lesson, positive interdependence is structured by having each student group agree on the answer to the task and the process for solving each problem.

Individual accountability is determined if group members have mastered the process of solving the problem or demonstrate the skills necessary for accomplishing the task. The element of individual accountability is structured by having the teacher randomly score a group's work and determine whether the correct answer has been written on their answer sheet. If the answer is correct, the teacher then asks a student to explain how to solve each problem.

Collaborative skills emphasize student support for one another (e.g., praising and offering help), enthusiasm for group work, and contributions to the group's efforts. These collaborative skills are necessary for the appropriate behaviors to occur within a group.

Finally, *problem-solving processing* requires that the group members evaluate how well they worked together and what they could do in the future to be an even more effective group member or group. This type of evaluation requires that the group function as a whole as well as that individual group members engage in self-evaluation for personal improvement in the classwork.

McMaster and Fuchs (2002) reviewed cooperative learning research from 1990 to 2000. They concluded that the effectiveness of the approach continues to need further research but that strategies that incorporate individual accountability and group rewards are particularly promising. They noted that

in light of inconclusive findings in the literature regarding the efficacy of using CL with students with LD, teachers may wish to use caution in deciding whether to use CL to improve these students' academic performance. Research that reveals which features are most essential to CL's effectiveness, when and where it is most successful, and whether it results in sufficient academic gains for students with LD should help to better inform teachers of its utility in the classroom. Teachers who choose to implement CL might also systematically evaluate whether it is indeed benefiting their students, and explore the use of other empirically validated teaching methods when CL does not elicit desired academic gains. (p. 116)

Universal Design for Learning

The concept of universal design emerged out of the field of architecture and then was applied to education. The general meaning of *universal design*, from an architectural perspective, is "the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design" (Mace, 1997, p. 2).

Applying this concept to education, Pisha and Coyne (2001) described universal design as "the

development of educational curricula and materials that include potent supports for access and learning from the start, rendering them effective for a far wider range of students than traditional materials" (p. 197). The term that has emerged to describe the application of these principles to educational situations is universal design for learning (UDL).

Universal design as applied to education suggests that various aspects of the classroom and the instructional dynamics can be adjusted in such a way that certain students who need these adjustments can benefit within a system that offers the adjustments to all students. As Thoma, Bartholomew, and Scott (2009) note, "UDL is not a set method for instruction, but rather a framework for instructional design that is built on the principle that all students can learn; multiple means of content delivery and student assessment should be part of daily lessons and planning to enhance this learning process" (p. 9).

In practical terms, UDL provides learners with various ways to acquire information/knowledge, alternative ways of demonstrating what they know, and various features that support their participation in ongoing instructional activities. Examples of UDL at the secondary level might include such options as note-taking supports, alternative formats for taking tests, and extended time for taking tests that is made available to all students.

The main attractions of UDL include the following:

- It attends to individual needs in a general fashion that does not draw attention to any one individual.
- This approach is *proactive* rather than reactive—that is, it avoids "retrofitted changes and accommodations to classroom instruction" (Scott, McGuire, & Shaw, 2003).
- Developing curricula and materials that attend to the needs of students with special needs increases their utility for all students (Meyer & Rose, 2000).
- UDL capitalizes on accessible technologies and electronic resources.

Technology Applications

The use of technology in classrooms is very common in schools throughout the country. The revolution in technology for persons with disabilities

received significant support with the Technology-Related Assistance for Individuals with Disabilities Act of 1988. Although subsequent legislation has reinforced educational programs, this act provided a foundation for assisting persons with disabilities to exercise greater control over their own personal lives, increase participation and contribution to activities in their communities (including home, school, and workplace), increase interaction with individuals who are non-disabled, and take advantage of opportunities that exist and that are taken for granted by individuals who are not disabled.

The proliferation of technology in classrooms in today's schools is astounding. The introduction of tablets and other mobile devices as part of ongoing instruction is changing the way many teachers design and implement lessons, manage their classrooms, and communicate with others. Certain kinds of technology are particularly useful for certain students such as those with autism and other communication-related disabilities. IDEA requires that assistive technology be considered for students who might need various devices or services. A significant number of students who qualify under IDEA will benefit from technology that assists them in their routine classroom activities. All students, however, are likely to benefit from the use of instructional technology that enhances the way instruction is provided.

Instructional Technology. Instructional technology refers to the use of hardware and software that assists teachers in the planning, delivery, and evaluation of instruction. This type of technology is not restricted to use with students with disabilities; it is useful and applicable for instructional purposes with all students in a classroom. Examples of instructional technology would include software that allows teachers to generate instructional materials, techniques for polling students during instruction, and systems for collecting, charting, and interpreting data on the progress of students. A vast array of instructional technology is now available to teachers. A growing amount of this technology is being developed and shared by teachers themselves.

Assistive Technology. Assistive technology (AT) provides an important vehicle for instruction and a complementary source of learning adaptations for learners. "Assistive technology devices include

any item, piece of equipment or product system, whether acquired commercially, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of individuals with disabilities" (Beirne-Smith, Patton, & Kim, 2006, p. 436).

The potential outcomes of the use of AT devices include the following:

- Helping students meet the challenges of daily life
- Providing vehicles to help overcome barriers to inclusion and independence
- Compensating for an individual's functional limitations
- Fostering social interactions with peers (Beirne-Smith et al., 2006)

AT options vary from low-tech applications (e.g., pencil grips, currency recognition apps on a smartphone) to high-tech ones (e.g., voice synthesizers, print reading software). The advent of the

iPad opened up a range of relatively inexpensive AT options for many students. Without question, the use of AT with students with special learning needs may make a substantial difference in their academic progress or ability to communicate with others. In addition, there are numerous devices to enable people with challenges to access computers (e.g., voice recognition software, word prediction software, switches, eye gaze, screen readers, refreshable Braille screen, Touch Windows). Teachers should become familiar with a range of devices that are often used in educational settings, how the AT needs of students can be evaluated, and, if AT devices are used, how they work.



Check Your Understanding 2.4 Click here to gauge your understanding of the concepts in this section.

3

Teaching and Differentiating Instruction in a Multi-Tiered System of Education

LEARNING OUTCOMES

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

- **3.1** Identify and describe the major components of multi-tiered systems of education operating in schools today.
- **3.2** Recognize the key roles and skill sets that special education teachers need to possess in the contemporary context of schools.
- **3.3** Articulate a comprehensive model for differentiating instruction within both general education and special education settings.
- **3.4** Describe the major collaborative arrangements that special education teachers will encounter in their roles within schools.

chools continue to experience significant changes in recent times. One of the most notable changes is the implementation of new models for addressing students who are struggling in school. The most prominent model that has evolved in recent years involves a multi-tier system that is predicated on how well students who have been identified as having some problems respond to the interventions that are provided. This system that is being used in many schools throughout the country places a heavy emphasis on the involvement of general education teachers in the initial efforts to address student needs and implies that the roles of special education teachers continue to change.

This chapter covers four major topics. First of all, a thorough description of what a multi-tiered system of education looks like is provided. Second, the changing rules that both general education and special education teachers are experiencing are explored, with an emphasis on the role of special education teachers. Third, an overview of how to differentiate instruction for students who might be in a variety of educational environments, particularly general education, is presented. Finally, different collaborative arrangements, now more important than ever, are reviewed.

MULTI-TIERED SYSTEM TO EDUCATION AND RESPONSE TO INTERVENTION

Multi-tiered instructional models have emerged for at-risk and special learners in a majority of schools throughout the country. Balu et al. (2015), in their study of response to intervention (RtI) practices (reading) at the elementary level, found that schools that had been implementing these practices for three or more years reported an 86% full implementation rate. It should be noted that a range of terms, such as *multilevel*, *tri-level*, *three-tiered*, and *four-tiered*, may be used to describe this multitiered system, and, as a result, the way a system is implemented varies from school to school.

In general, tiered instruction provides layers or levels of intervention to meet student needs, increasing in intensity as a student progresses through different tiers over time (see Figure 3-1), and predicated on how the student responds to evidence-based practices at the various levels of intervention.

Hoover and Patton (2007) defined the three tiers in the following way:

Tier 1: High-quality core instruction: "High-quality, research-based, and systematic instruction in a challenging curriculum in general education" (p. 9). The anticipated outcome is that all students initially receive quality instruction and achieve expected academic and behavioral goals in the general education setting. Approximately 80% to 85% of all students would be anticipated to receive tier 1 instruction—that is, universal supports (McLeskey & Waldron, 2011).

Tier 2: High-quality targeted supplemental instruction: "Targeted and focused interventions to supplement core instruction" (Hoover & Patton, 2007, p. 9). The anticipated outcome is that students who do not meet general class expectations and exhibit need for supplemental support will receive more targeted instruction. Learners may receive targeted, tier 2-type instruction within the general education classroom (e.g., separate grouping) or in some other setting (e.g., different location within the school). Regardless of location, students need to receive various types of assistance in terms of differentiations, instructional and curricular adaptations, more specialized equipment, and technology in order to target

Instructional Levels in a Multi-Tiered System

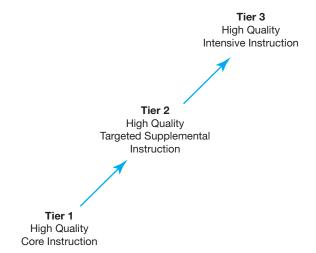


FIGURE 3-I Three-Tier Instruction for At-Risk and Special Learners

instructional-related needs. Critical within tier 2 is the documentation of students' responses to the interventions used, which serves as important pre-referral data should more formal special education assessment be determined necessary. Approximately 10% to 15% of students would be anticipated to receive tier 2 instruction or targeted supports (McLeskey & Waldron, 2011). Students who make insufficient progress in tier 2 are likely to be considered for more formal special education consideration.

Tier 3: High-quality intensive intervention:

"Specialized interventions to meet significant disabilities" (Hoover & Patton, 2007, p. 9). If individuals are found eligible for special education services, tier 3 provides students with more intensive, evidence-based interventions within a range of possible special education settings. Approximately 1% to 5% of students may require intensive or special services through high-quality intensive intervention or specialized supports (McLeskey & Waldron, 2011).

This process can be conceptualized as one of successive levels where students who are identified as struggling are provided high-quality core instruction within the general education classroom. This instruction is associated with "reasonable and

targeted" differentiated instruction that teachers provide to identified students (Hoover & Patton, 2007, p. 9). Those students who do not respond to this initial level of intervention over a reasonable amount of time will require additional high-quality targeted supplemental instruction. Some students who receive tier 2 instruction will benefit in ways that allow them to return to tier 1 status. However, some students will not respond favorably to supplemental instruction and will need more intensive instruction. Often, this next level implies consideration for special education services.

LEARNING MODULE 3.1 Click here to learn more about multi-tier systems of support.

As noted in the above description, an important element within a multi-tiered model is how a student "responds" to the evidenced-based practices that should be implemented at the various tiers in a well-designed and implemented system. Typically referred to as RtI, this key component of multi-tiered systems is predicated on the following notions:

- Teachers—specifically, general education teachers, are prepared properly to function within a multi-tiered system of instruction.
- Students who are truly struggling are identified appropriately.
- Teachers are using evidence-based practices.
- Student progress as a result of the prescribed intervention is monitored regularly and systematically.
- Decisions about how well a student is responding are based on data and not conjecture.

Response to intervention is considered so note-worthy that RtI is recommended under IDEA, although not required, as the method to be used for identifying students with learning disabilities. However, RtI is most relevant to this discussion because of the process by which students receive high-quality instruction, and their progress as a function of this intervention is monitored with quantifiable data to determine if they are making appropriate progress toward the successful achievement of specific benchmarks within the academic curriculum (Hoover & Love, 2011).

Special education teachers must understand the RtI process that is being implemented at the schools where they work. Most important, special education teachers need to understand what roles they need to fulfill at the various tiers within this process. Clearly, if and when a student moves to tier 3, the role of special education teachers becomes more evident. However, it is crucial to note that special education personnel can and should play important roles in tiers 1 and 2 as well. The next section of this chapter elaborates on this point.



Check Your Understanding 3.1 Click here to gauge your understanding of the concepts in this section.

THE CHANGING ROLE OF SPECIAL EDUCATION TEACHERS

The sophistication of what it takes to be an effective special education teacher is reflected in the ongoing documentation of professional standards and competencies that are needed. One of the best sources that chronicles the evolving demands of being a special education teacher is the set of professional competencies that the Council for Exceptional Children (CEC) publishes on a regular basis. The most recent version (CEC, 2015) highlights the range of knowledge and skills that teachers need to have. New areas, such as transition, have been added to this resource since its beginning in the 1960s.

Over the years, various emphases can be noted in regard to how special education was delivered and accordingly to the knowledge and skills that teachers needed. As Hoover and Patton (2008) have noted, the early days of special education were often characterized as focusing on selfcontained classroom settings. Following the focus on self-contained settings, the era of the "resource room" became a dominant theme. Over the years, as "mainstreaming"—now more properly referred to as inclusion—became more of the norm, the need for special education teachers to be proficient in working with general education teachers became a necessity. Today, given more recent changes to the way services are provided to struggling students, the role of special educators has morphed somewhat from earlier times.

Special education teachers have always had to be good at managing behavior and accommodating the needs of students—whether that was in special education settings or in general education settings. Competence in these areas remains; however, subtle changes have occurred. Moreover, other areas, which arguably have always been important, have emerged as being critical to the overall effectiveness of the special education teacher in today's schools, especially within multi-tier systems, in addressing the needs the students who are struggling in school.

Hoover and Patton (2008) identified five critical areas in which special educators must become highly proficient within the context of the demands of teaching in schools today: data-driven decision maker, implementer of evidence-based intervention, implementer of socioemotional/behavioral supports (i.e., manager of behavior), differentiator of instruction, and collaborator. Table 3-1, based in part on this model of Hoover and Patton (2008), provides a sample of some of the subskills that are associated with these various roles. It should be noted that the degree of "need" of these various skills will be a function of the type of students and the settings in which they are placed.

The point to be made is that, for those teachers who will be working in a multi-tier system that in large part involves students in general education settings, these roles/skills are unquestionably important. Put another way, preservice teacher training programs must ensure that these skills are covered in coursework, and in-service programs provided by schools must ensure that teachers are provided opportunities to enhance their current knowledge and skill levels in these areas. All five of these key roles, along with their associated subskills, are addressed in this book. The topics of evidence-based intervention and data-driven decision making are woven throughout Part 2 of this book. The topic of behavioral supports is covered in depth in the next chapter. The topics of differentiating instruction and collaboration are addressed in more detail in the next two sections of this chapter.



Check Your Understanding 3.2 Click here to gauge your understanding of the concepts in this section.

TABLE 3-I Special educator roles and selected subskills

1. Evidence-based intervention

- · Subject knowledge
- · Instructional strategies across subjects
- · Direct instruction
- · Proficiency and mastery

2. Differentiation

- Adaptations (accommodations, modifications)
- · Differentiation strategies
- · Cultural relevance
- · Learning strategies instruction
- · Peer-tutoring models
- · Academic engaged time

3. Behavioral supports

- · Behavior and classroom management
- Positive behavioral supports
- Self-management instruction
- · Cultural considerations
- Functional behavioral assessment
- Behavior intervention planning (BIP)

4. Data-based decisions

- Effective decision-making
- Data analysis
- · Skills assessment
- · Curriculum based assessment
- Eligibility for special education

5. Collaboration

- Professional communication
- Collaborative teaching
- Parent–school partnerships
- · Cultural and linguistic considerations
- · IDEA tenets and regulations
- State and district referral and assessment processes

DIFFERENTIATING INSTRUCTION

The concept of differentiated instruction, as advocated by Tomlinson (2014) and others (Patton, 2016; Smith, Polloway, Patton, & Dowdy, 2012), has become an important dimension of classroom instruction. To a certain extent, the term is a reformulation of the basic idea of "individualizing instruction" that has been espoused for many years within special education; however, the current term borrows from gifted education and has

been applied consistently to general education settings.

The essence of this concept is that a wide range of student needs can and must be accommodated within general education classrooms. This results from the reality that most public school classrooms have students displaying a wide variety of academic, social, behavioral, and personal needs. Both general education and special education teachers have to have the skill sets to deal with the challenges that confront them regardless of educational placement.

Tomlinson (2001) is often credited with the introduction of the term differentiating instruction as it applies to general education classrooms, although at its very essence, many of the ideas associated with differentiating instruction have been part of the special education experience for many years. The important change in recent years is the widespread consideration of this idea in general education settings. Tomlinson (2014) defines differentiating instruction as follows:

A teacher proactively plans various approaches to what students need to learn, how they will learn it, and/or how they can express what they've learned in order to increase the likelihood that each to learn as much as he or she can as efficiently as possible. (p. 170)

It is important to point out that various models of differentiation have emerged over the years. However, as Tomlinson (2015) notes, "There is no formula for differentiation—no single way to respond to student variance" (p. 179). The important point is that teachers can and should develop their own models as long as, whatever model is used, it is comprehensive in nature so that the needs of students who display a vast array of challenges are considered and addressed.

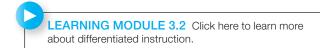
The integration of the principles of universal design for learning (UDL) and differentiated instruction provide a potentially powerful way to address the individual needs of a range of students within the general education classroom. This point is particularly noteworthy because more students who are at risk, who have special needs, or who have debilitating learning-related disabilities are in these settings.

Teachers seeking to educate all of their students are faced with the challenge of meeting the instructional needs of these students to prepare them for

a competitive world. Much of the information instructors must teach is complex and abstract. New vocabulary is necessary, and the applicability of new information to everyday life must be understood. As a result, being able to differentiate instruction requires skill sets that can be complex, with significant variance from the mindset that all students are alike (Tomlinson, 2014).

Unfortunately, many students have limited interest in learning things that they do not understand or that seem irrelevant to their immediate future. This lack of motivation among students is a formidable barrier. If teachers are unable to introduce new information in an understandable manner, students will become frustrated and will not persist on their own to learn the material. If teachers are unable to teach students how to acquire new concepts and to have them relate these concepts in a meaningful way, the students will not pursue the new content areas presented to them in their classes.

Teachers must focus on techniques and strategies that enable students to succeed in school while gaining access to the general education curriculum. Central to this success are classroom adjustments. Such efforts are critical to the success of students with disabilities in terms of their access to the general curriculum (Hedeen & Ayers, 2002). Further, "the need to adapt curricula increases as the variability of student abilities and learner characteristics increases" (Hoover & Patton, 2005, p. 43).



In this chapter, we use *adjustments* as a generic term to include both accommodations and modifications. Accommodations typically refer to changes in input and output processes in teaching and learning; they do not minimize course or task content itself. Some examples include extended testing time or a distraction-reduced testing setting. Modifications refer to changes in content or standards; they change the task or course content itself (Polloway, Epstein, & Bursuck, 2003). Examples in a college-level course in foreign language might include the substitution of the study of culture for the language instruction requirement.



Watch this video to learn more about providing accommodations and modifications (Parts 1, 2, and 3).



Key Elements of Differentiating Instruction

Differentiating instruction can be conceptualized on two different levels. On a more global level, various adjustments can be made within a curriculum or in a classroom that are designed so that all students can benefit from the features. To a great extent, this macro level of differentiation is akin to the idea of universal design for learning noted previously.

When adjustments are made on a more individual level, differentiating instruction reflects a micro level of attending to individual student needs. At this level, attention is given to the unique challenges that a specific student presents in the classroom. In this case, the changes made for a certain student may not need to be made for other students in the class. In some instances, the adjustment cannot be made for logistical reasons. For instance, only a limited number of students can actually be given preferential seating.

The model of differentiating instruction described below is based on a model that covers a range of areas for which either macro-level or micro-level adjustments can be implemented. This model, depicted in Figure 3-2, is composed of six major areas (Smith et al., 2012): setting, content, materials, instruction/intervention, management/ behavior, and personal-emotional. All of these areas with the exception of the last two are discussed below. The others are covered in detail in the next chapter. It should be noted that in the following discussion, the area of instruction is broken down into more specific topics.

Setting Differentiation

The setting dimension refers to the way a classroom is set up, organized, and utilized. This dimension includes considerations such as the way desks are arranged in the class, where students are seated, specialized equipment that might be needed (e.g., adaptive equipment, chairs, desks), and accessibility

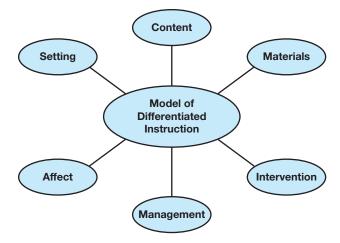


FIGURE 3-2 Model of Differentiated Instruction

issues. Perhaps the most common adjustment that is made in this area is preferential seating.

Content Differentiation

Adjustments made in this area involve reducing the amount of content that is covered, altering the content that is covered, or adding additional content that needs to be covered. In some cases, it may be necessary to make the decision not to cover some material. This decision may be made based on any number of factors—most often related to a student's inability to understand various topics. Teachers need to be cautious about modifying content because students with special needs, according to IDEA, must have access to the general education curriculum.

For many students with special needs, it may be very important to teach certain skills that are not part of the explicit curriculum. For example, it is quite likely that students may need additional time acquiring, developing, or refining skills, such as study skills and social skills. These two topics are so important that individual chapters have been devoted to covering them.

Materials Differentiation

A wide variety of materials are used in school settings, including print materials as well as non-print materials, such as maps, globes, models, photographs, and videos. More and more schools are also moving to the use of digital-only materials.

The key concerns that precipitate the need to make adjustments to instructional materials for the most part cut across the different types of materials. These concerns include the following:

- The student does not display the skills necessary to handle the material.
- The conceptual complexity of the material exceeds the level at which the student understands (i.e., insufficient background knowledge or experience).
- The linguistic complexity of the material is such that the student is unable to extract meaning from it. Primary sources of problems are vocabulary and syntactic factors.
- The amount of information presented to students is overwhelming. Typically, emphasis has been placed on breadth of rather than depth of coverage.
- The design or format features of materials (e.g., advanced organizers, layout, organization, graphics, cuing, clarity, use of examples, practice opportunities) are lacking or insufficient, thus making them difficult to use.

Textual materials refer to any type of material that requires reading as the primary means of obtaining information. Text-based materials typically used in classrooms include textbooks, workbooks, worksheets, literature, weekly periodicals, handouts, and increasingly more digital text.

Three general approaches can be implemented to address problems that arise with text-based materials: (a) substitution of an alternative material in place of the existing textual material, (b) content enhancement techniques that include strategies to increase comprehension and tactics for retaining information over time, and (c) use of supplemental materials to assist in the use of text material. The first technique aims to avoid the problems associated with existing textual material. The second and third options support the student primarily in using existing material, particularly when the student is in a general education setting.

One type of material adjustment warrants particular attention. *Graphic organizers*—graphically based materials that provide visual models for presenting curricular content—have been widely promoted as a particularly efficacious approach to content learning by students with special needs (Wehmeyer, 2002). As such, the widespread use of graphic organizers has become an important aspect

of the application of universal design for learning. While these materials can be extremely important for use with students who are struggling, they actually have value for all students in the classroom.

Graphic organizers can be developed for content in any instructional area. For example, graphic organizers can provide outlines for note taking from lectures, a template for organizing reports and speeches for oral presentation in class, a format for deriving key content information from reading assigned as homework, and a prompt to assist students in monitoring their own errors in writing as part of a proofreading strategy. The chapters in Part 2 of this text provide a wealth of examples of graphic organizers. Semantic maps in reading (Chapter 7) and paragraph development models for writing (Chapter 8) are particularly good examples.

The following discussion of various other techniques for adapting instructional materials with textual material is based in part on the recommendations of Schumm and Strickler (1991):

- Use an audio version of textual material—
- Although this technique can be viable and attractive at face value, its use is dependent on the availability of material in digital format, the amount of time it takes to listen to the material, and the interest of the student in using this alternative format. Ideally, the material being used is already available in an audio format. Otherwise, unless volunteers or other students are available to do the taping, taping may be difficult to do. It is also important to realize that this technique assumes that the student has good listening skills. Furthermore, it requires a significant amount of time to listen to the audio material.
- Read the material aloud—This suggestion has the same advantages and limitations as taping.
- Pair students—This technique has short-term and targeted usefulness and requires the availability of such supports whenever the textual material is being used.
- Use other ways to deliver the material—Other vehicles (direct experience and media) for delivering information are useful for presenting content-laden topics.
- Work with students individually or in small groups—This works when students can understand the textual material to some extent and time is available on a regular basis for this activity.

• Simplify existing material—The teacher can simplify vocabulary, terminology, and expressions that are difficult for students to understand. In place of rewriting complete textual passages, the teacher can place a transparency over a page of written material and, with a marker, cross out the more difficult words and write a more understandable equivalent in the margin (Hoover & Patton, 2005).

A variety of ways exist for enhancing content so that students are better able to understand what they read. The following recommendations focus on tactics for improving comprehension of textual, particularly grade-level, material:

- Preview the reading assignment to prepare the students for the specifics they will encounter. This pre-reading activity should introduce the students to new vocabulary and concepts that may pose problems. The use of a diagram or story frame may be helpful (see Chapter 7).
- Teach students how to use format features, including the ability to use headings, boldface type, visual aids, opening sections, and summaries of textual material, to gain additional meaning from the textual material.
- Use a study guide to support the students through the reading material by having them respond to questions or statements related to the passages they are reading or have read.
- Adjust the reading assignment to reduce the length of the assigned reading or to slow the pace at which content is being covered.
- Adapt text-based activities, such as reorganizing and rewriting the "end-of-chapter" questions that are often included with textbooks. For students experiencing reading problems, these types of questions can be frustrating.

Attention also needs to be given to any type of learning aid (e.g., outside readings, games, in-class projects) that might be part of the ongoing instructional program. Caution must be exercised to ensure that students know how to use these materials. If textual material (e.g., lab manuals) is part of the learning aid, the preceding specific suggestions may need to be implemented. In regard to the use of instructional games, students need to possess appropriate game-playing skills and behaviors—this is crucial if students play games in cooperative situations without teacher involvement or supervision.



ENHANCEDetext video example 3.2

Watch this video to learn more about differentiating instruction.



Instructional Differentiation

This particular dimension focuses on the basic elements of how a teacher provides instruction and what students have to do as a result of that instruction. An elaborate discussion of this particular dimension is provided elsewhere (Smith et al., 2012); however, five areas of adjustment are covered in the section of the chapter: instructional delivery, products/assignments, homework, testing, and grading. All of these topics have relevance for both general education and special education settings.

Instructional Delivery Adjustments. The way a teacher delivers instruction is critically important. The following adjustments may be helpful to students in classroom situations:

- Location—Proximity to students who are experiencing learning-related problems can help students attend to the important dimensions of what is occurring in the classroom, give them easier access to support, and minimize behavioral problems that might arise.
- Multisensory experiences—Multisensory activities can have a positive impact and thus can be instructionally useful.
- Lecture-related tactics—Teacher-controlled adaptations include scheduling the session so that more breaks are possible, organizing the lecture so that a variety of instructional methods (e.g., discussion, media) are utilized, moving around the room, being responsive to the audience and to specific students, highlighting important points, and providing advanced organizers. In addition, note-taking skills and listening strategies may need to be taught. If the lecture format allows for discussion, then the students may also need to develop question-asking skills.
- Instructional variation—Consideration of how a teacher can present information and how a student responds to that information can lead to a more expansive way of looking at instruction. Based on earlier work of Cawley, Fitzmaurice-Hayes, and Shaw (1988) instructional variation

can be accomplished by altering input and output options, as noted below:

Student input (instructional delivery) options: Read, listen, watch.

Student response options: Write, speak, identify (i.e., point to or choose from options), do something.

Based on these options, a teacher theoretically would have 12 ways to design a lesson or activity. It should be noted that the combination of read (input) and write (output) is often the most used option.

Product and Assignment Adjustments. A key consideration is using a variety of work product options. To provide some choice about options is desirable and is supported by the emerging emphasis on self-determination (see Chapter 13). Too often, teachers tend to make the same assignments, as noted above. For students with special needs who have strengths in areas in which they are seldom allowed to show their ability, having alternative products might be just what they need (Smith et al., 2012).

Another key area relates to the need to adapt in-class and out-of-class (see the homework discussion that follows) assignments given to learners with special needs. Teachers can alter assignments in the following ways: shorten assignments (i.e., break them into smaller versions), change the criterion that has been established that designates successful completion of the assignment, allow more time to complete the assignment, reduce the difficulty of the content, and change the output mode.

Homework Adjustments. A staple of the education diet is homework. The research literature generally supports the value of homework in achievement and learning good work habits. When this conclusion is combined with the reform literature supporting increased use to enhance quality, it is apparent that students with special needs must be able to respond effectively, especially as they spend more time in inclusive settings. Prior to the early 1990s, fewer than a dozen articles and only a handful of papers were published on the topic; since that time, increased interest in this topic has emerged, and a much larger research base now exists on this topic.

Although homework presents special problems for students with disabilities and their families, intervention efforts can result in beneficial outcomes. The following suggestions (adapted from Patton, 1994) provide direction for developing and implementing homework practices, including making adaptations for learners with special needs:

- Assign homework from the beginning of the year—Getting students accustomed to the routine of having homework is best accomplished by assigning it early and continuing with it on a regular basis.
- Establish a class routine for homework—If the homework process is to run efficiently, adequate time must be allocated to assign, collect, and evaluate homework. Teachers need to have a reasonable amount of time to inform students of their assignments.
- Communicate consequences—Students need to know the procedures that are expected of them as well as the consequences of violating these procedures. Logical consequences for non-completion of assignments should be determined beforehand.
- Minimize demands on teacher time—Homework is only one of many duties that teachers must manage. Therefore, any mechanism created to handle homework must demonstrate efficiency. If individualized assignments are indicated, they can be provided by adapting the general assignment rather than developing completely different activities.
- Present instructions clearly—A thorough explanation of a homework assignment should include (a) the purpose, (b) directions for completing the assignment, (c) an estimate of how long the assignment should take, (d) a note when due, (e) the format to be used, (f) the materials needed to complete the assignment, and (g) how it will be evaluated. Teachers also should query students to determine whether they understand what is assigned or let them begin working on it in class.
- Use assignment books—Homework assignment books can help compensate for organizational difficulties. Typically, the students will write their assignments in these books, and the teachers can initial the books before the students leave the class, confirming that the correct assignment has been recorded. Folders also can be used to provide a quick and simple way for the teacher to evaluate completion of the assignment, thus underscoring the importance of turning in assignments on time.

- Evaluate assignments—Homework that is collected, evaluated, and used to determine a grade is more meaningful to students and has a positive effect on achievement. The challenge is to find ways to manage this aspect of the homework process efficiently, such as through the use of assignments that can be evaluated through peer grading or self-correction techniques or by paraeducators.
- Help students recognize the purpose and relevance of the assignment—The major reasons for homework are practice opportunities, completion of unfinished work, preparation for future course activities or upcoming tests, and extension. Homework is best used for proficiency, generalization, or maintenance types of learning activities. Guided by a clear purpose for giving homework, teachers should also identify specific objectives for each assignment and inform students of these objectives when an assignment is introduced. Further, teachers should show students how a particular assignment relates to their scholastic or non-academic lives.
- Adapt assignments—As more students face the challenges of completing homework assignments in general education, practical ways to adapt assignments must be identified. Options to be considered include shorter assignments, extended timelines, alternative evaluation techniques (i.e., based on effort, not accuracy), fewer assignments, extra-credit opportunities, alternative response formats, and group assignments.



ENHANCEDetext video example 3.3 Watch this video to learn more

Watch this video to learn more about developing classroom adaptations.



- Develop self-regulation skills—A significant outcome of a successful homework system is the students' taking responsibility for outside class aspects of their own learning. Teachers should help students understand that the effort they put forth can lead to academic success.
- Consider student preferences—It is beneficial to consider students' views on homework practices. A number of studies address the issue of student preferences (e.g., Nelson, Epstein, Bursuck, Jayanthi, & Sawyer, 1998).

• Communicate with parents—If a smooth school–home communication system is operating, this suggestion is moot because many ongoing opportunities to share views on homework exist. Nevertheless, parents should be contacted regarding homework to request their views and to be informed of their child's school-based performance.

Testing Adjustments. Another area of critical importance is classroom testing. Adaptation options include the following:

- Test preparation (study guides)
- Test construction (space, number of questions)
- Test administration time
- Form of response (oral, written)
- Site of testing (distraction-free)
- Forms of feedback
- Curriculum modification
- Use of portfolios
- Use of checklists
- Development of shared grading approaches between general and special educators

Polloway, Bursuck, Jayanthi, Epstein, and Nelson (1996) identified the testing adaptations that teachers indicated were most helpful to students. They provided a list of the most helpful adaptations. The top five are as follows:

- Give extra help preparing for tests.
- Give individual help with directions during tests.
- Read test questions to students.
- Simplify wording of the test questions.
- Give practice questions as a study guide. (p. 140)

Grading Adjustments. Along with testing and homework, grading is one of the most discussed topics related to students with special needs. Grading is a required form of student evaluation and record keeping and an integral part of our educational system. This topic is particularly noteworthy when students with special needs are in general education classes.

Grading issues have become more significant for students with disabilities given increased school inclusion. Salend (2005) stressed the role of communication in the grading process, particularly as related to the usage of differentiated instructional

strategies in inclusive settings. The special education teacher generally needs to provide a clear description of an individual student's strengths, weaknesses, capabilities, and needs, thus giving the classroom teacher additional data on which to base a letter grade evaluation. The solution that emphasizes cooperative efforts is the one most likely to succeed.

To facilitate this process, teachers should jointly consider possible adaptations that will be effective and also be deemed acceptable by general education teachers (Polloway, Bursuck, et al., 1996). Grading adaptations may include the following:

- Altering grading criteria (e.g., variant weights for assignments, individualized contracts)
- Supplementing letter and number grades with additional information (e.g., comments, portfolio)
- Providing alternatives to number or letter grades (e.g., checklists) (Munk & Bursuck, 2001)

More comprehensive lists of grading adaptations is provided by Munk and Bursuck (2004). An interesting perspective was provided in research by Nelson, Jayanthi, Epstein, and Bursuck (2000). They noted that middle school students preferred these adaptations:

- Open notes
- Multiple choice over short answer/essay
- Simplified words in questions
- Open-book tests
- Practice questions

On the other hand, middle school students least preferred the following practices:

- Teacher reading questions aloud
- Tests with fewer items than others
- Tests covering less material for some students
- Teaching of test-taking strategies

To implement an effective grading intervention, teachers may wish to use the concept of personalized grading plans (PGPs) (Munk & Bursuck, 2001, 2004). Munk and Bursuck (2001) described the implementation of the PGP model as follows:

During Stage 1, the student, parents, and teachers identify . . . what purpose they believe the grade should meet. During the second stage, the student, parents, and teachers review their school's grading policy and a menu of possible grading adaptations.

During the third stage . . . the student, parents, and the teachers meet together to review their perceived purposes for a report card grade, and identify one or more mutually agreed upon purposes that will be used to steer selection of a specific adaptation. In Stage 4, the team collaborates to implement the PGP. Stage 5 involves evaluating the effects of the PGP on the student's grade(s), the student's and parent's satisfaction with the accuracy and meaning of the grade, and the teachers' perceptions of the accuracy and usefulness of the PGP. (p. 212)

The following summative recommendations on grading are adapted from Smith, Polloway, Doughty, Patton, and Dowdy (2016) and Polloway, Bursuck, and Epstein (2001):

- Plan for general and special education teachers to meet regularly to discuss individual student progress.
- Use cooperative grading agreements (e.g., grades for language arts might reflect performance in both the general education classroom and the resource room).
- Emphasize the acquisition of new skills as a basis for grades assigned to provide a perspective on the student's relative academic gains.
- Investigate alternatives for assessing what has been learned (e.g., oral examinations for poor readers in a science class).
- Use narrative reports as a portion of or adjunct to report card grades. Such reports can include comments on specific objectives within the student's IEP.



Check Your Understanding 3.3 Click here to gauge your understanding of the concepts in this section.

COLLABORATIVE ARRANGEMENTS WITHIN AND OUTSIDE OF SCHOOL

As noted earlier, the emphasis in education on providing the vast majority of students with access to the general education curriculum and doing so within the general education classroom whenever possible. As a consequence, special educators must operate as part of a team in many aspects of his or her role, including screening, making assessments, planning individual programs, developing

placement options, providing direct or indirect support, and monitoring success. Teachers must work with many others to operationalize the required aspects of all initiatives or changes in effect within the instructional program. Through collaboration, the learning needs of students are assessed and then subsequently addressed. Educators work collaboratively using their unique resources and special expertise (Hoover & Patton, in press).

Working with General Education Teachers

General education personnel at all K–12 levels are important partners in many different types of collaboration. The particular configuration of the special and general education interaction may vary, depending on which student or program situations exist. A key form of collaboration is cooperative teaching, or co-teaching, in which special education teachers work alongside general education teachers and provide effective instruction in inclusive classroom environments. As Murawski and Lochner (2011) noted, "If educators with varying areas of expertise and frames of reference are able to come together and collaborate on a daily basis in the same classroom, all students will benefit more: socially, behaviorally, perhaps most importantly, academically" (pp. 174).

Several different variations of the co-teaching model exist. At the core, general education and special education teachers are working together; however, the way they function within the classroom differs according to the structure of the co-teaching arrangement. Four co-teaching options (Thousand, Villa, & Nevin, 2007) include the following:

- Supportive teaching—One teacher is the primary instructor—the other teacher moves around the classroom and provides support to students.
- Parallel teaching—Teachers work with separate groups of students within the same classroom space.
- Complementary teaching—The teacher with expertise takes the lead, and the other teacher provides ancillary instructional functions, such paraphrasing, modeling, or emphasizing key points.
- Team teaching—Teachers simultaneously deliver a lesson or activity.

Several barriers or challenges may interfere with establishing effective collaborative relationships between special and general education teachers (see Table 3-2). These challenges can be addressed by effective cooperative work and advocacy to enhance the educational programs of all students.

Consulting with Other School Professionals

As noted in the section of this chapter dealing with the changing role of special education teachers, the need to be a good collaborator was emphasized. In addition to working with general education teachers, special education teachers need to be

TABLE 3-2 Challenges in school collaboration

- · Lack of administrative support and encouragement of collaborative activities
- Attitudinal issues
- · Teacher's focus on the class as a whole rather than on individual learning needs
- Required coverage of content standards overlaid with needs for curricular accommodations
- Insufficient preparation or confidence to differentiate instruction for diverse learners, especially those with extreme behavioral
 events
- Lack of funds needed to directly support all students needing individualized help
- Insufficient time allocated for real collaborative efforts to work
- · Intensification of teachers' daily challenges when students with exceptionalities are included within a full class load
- · Lack of real assistance due to the caseloads among special educators and delays with referrals
- Absence of an efficient and effective pre-referral system that would assist general education teachers with students prior
 to an official referral and eligibility determination
- · Students' lack of self-determination/self-advocacy and other collaborative skills

prepared to work with a host of other professionals at their schools. Some of the other professionals with whom special education teachers are likely to work include speech and language pathologists, occupational therapists, physical therapists, school psychologists, diagnosticians, school counselors, school nurses, and a range of other outside-of-school professionals.

One of the key reasons why it is important to know how to work with other professionals results from the fact that many students with special needs require related services to allow them to benefit from their educational experience. The expertise that these other professionals provide can be extremely important to ensuring that a student receives an appropriate education. As a result, special education teachers should be familiar with the backgrounds, skill sets, and rules that these professionals play in the school system. Moreover, special education teachers must develop collaborative skill sets that maximize the interaction among these various professionals.

Working with Paraeducators

Paraeducators are school employees who contribute to providing appropriate services to students with special needs. These individuals may also be referred to as educational assistants, teacher aides, or instructional assistants. As Gerlach (2015) points out, these individuals "work under the direction of certified licensed staff members to help provide instructional and other services to students and their families" (p. 9).

Special education teachers who work with students with more significant support needs are likely to have the additional responsibilities of "planning, scheduling and directing the work of paraeducators" (Gerlach, 2015, p. 45). Some of the major responsibilities that a teacher will have in working with paraeducators include the following:

- Establishing and clarifying roles
- Planning the tasks that paraeducators will perform
- Developing schedules for paraeducators
- Delegating responsibilities
- Monitoring the day-to-day performance and providing feedback
- Coaching and mentoring
- Maintaining effective communication (Gerlach, 2015, p. 46)

Partnerships with Families

Collaboration is not just a priority consideration within schools. It is also important in terms of working with the parents and families of students with special needs. Since the advent of P.L. 94-142 in 1975, parents have always been encouraged to participate in the special education process and are equal members of the IEP team. However, the amount and quality of this participation have 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 their 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.

As noted, parents are key contributors to the development of their child's IEP. In addition, they have the right to challenge or appeal any decision related to any aspect of the special education process. IDEA also encourages efforts to increase student involvement in the decision-making processes related to their education, especially as related to transition planning. Further, parents have the right to educational records, the right to obtain an independent educational evaluation, the right to request a due process hearing, the right to appeal decisions, and the right to initiate civil action when appealing a final hearing decision.

Successful home-school collaborative partnerships are characterized by the following attributes (Wehmeyer, Morningstar, & Husted, 1999):

- Prompt honest, open sharing of information, impressions, and judgments
- Two-way sharing of information without fear of being negatively judged
- Mutual respect for each other's expertise and sensitivity to new areas of learning
- Shared goals, planning, and decision making

A key element of home–school communication is the meeting or conference, whether formal or informal. Some specific suggestions for teachers are identified in Table 3-3. Effective collaborative programs with parents and families represent yet another key aspect of the professional role of special educators.

TABLE 3–3 Principles of effective meetings with families

- Prepare for the meeting by discussing the meeting with parents well in advance, agreeing mutually on a time and location for the
 meeting, organizing your notes, reviewing pertinent information, and planning an agenda—with input from the family and student
 when possible.
- Create a positive atmosphere, agree on the purpose of the meeting, employ good communication skills, take notes of what is being discussed, and end the meeting with a positive statement and appreciation to the family members for coming.
- · Be honest and direct.
- Avoid technical terms.
- · Be clear and concise.
- Do not speculate about issues for which you have no information. Discuss only what you know and about which you have data (i.e., what you can document).
- After the meeting, organize your notes for future reference, initiate action on any items requiring attention, determine when
 a follow-up meeting is needed, and send out a summary of the meeting.



Check Your Understanding 3.4 Click here to gauge your understanding of the concepts in this section.

4

Strategies for Classroom Management and Positive Behavior Support

LEARNING OUTCOMES

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

- **4.1** Identify the essential factors and programs that establish a positive and successful school climate.
- **4.2** Identify the key factors related to a well-organized and well-managed classroom, including research-based behavioral interventions that enhance appropriate classroom behavior.
- **4.3** Discuss the student diversity considerations that relate to classroom management and supports.

ne of the most important issues for teachers is managing their classroom and providing interventions for students who need particular support for appropriate behavior. These issues have been compounded by years of public concern as teachers and school administrators have had to confront the threats regarding school safety and effectiveness. Coupled with the growing diversity of learners and the complexity of working toward meeting the demands of federal legislation, teachers and educational leaders are challenged with the task of thinking about school behavior and classroom management in different ways (Lewis, Mitchell, Trussell, & Newcomer, 2015).

Since the 1980s prominent researchers have recognized the need to focus on a non-aversive school environment to support the quality of every student's life as well as their academic and social experiences. This focus has been termed positive behavior support (PBS) (e.g., Dunlap, Kincaid, Horner, Knoster, & Bradshaw, 2014). Historically, PBS is "characterized as a multicomponent process that is guided by the values of the individual, his or her family, and the organizational and community context in which support is provided" (Dunlap et al., 2014, p. 134). The positive approach was implemented to reduce target behaviors that interrupted the learning environment of the student(s). It includes assessing and redesigning the school and classroom environment, teaching social skills, and reinforcing desirable behaviors while intervening on disruptive behaviors.