What Teachers Need to Know About Learner Diversity

This evening’s school board meeting of the Brownwood Consolidated School District has one agenda item: the district budget. Brownwood’s tax base has been slowly but steadily eroding over the past decade. To compound the problem, the state has been reimbursing the district less and less for its pupil expenditures. Consequently, the school trustees are caught in a familiar dilemma: maintaining quality of education without raising taxes.

The first two hours of the meeting are taken up with citizen comment on the proposed budget. Speakers address such choices as cutting funds for the gifted and talented education program (GATE), closing the alternative learning center for children with emotional and behavior problems (ALC), eliminating the positions of several counselors and school psychologists, and delaying the renovation of the high school gym.
Now it is time for the school board members to begin discussion on the budget. The chairperson recognizes Mr. O’Neill.

**Mr. O’Neill:** In general I support the idea of mainstreaming, but I just don’t see how we can close down the ALC. It would be too disruptive to the education of the regular kids to have these kinds of behavior problems in the regular classroom.

**Mr. Stover:** Most of the kids in the ALC stay there forever. As long as the place exists, the individual learning needs of these children will continue to be unmet. They belong in the regular classroom, where they can learn in a natural environment.

**Ms. Toomey:** I was a teacher—and you wouldn’t say that if you had to manage a class of 35 kids, even one of whom was disrupting the class. We have a responsibility to the kids who want to learn, especially the gifted ones. With this proposal to cut our GATE program, we’ll be doing these kids a disservice.

**Ms. Maitland:** I agree with Mr. Stover. I’d like to see more rather than less diversity in the classroom. It seems as if we try too hard to homogenize the class. If the kid is gifted, we get him out. If she has learning or behavior problems, we get her out.

**Ms. Toomey:** But how can we afford to train teachers to deal with this diversity?

**Ms. Maitland:** The issue may not be to “deal” with diversity like we “deal” with a problem. I think diversity is an opportunity that we should make the most of.

Although the school setting has remained largely unchanged over the past 100 years, the major participants—your students—have not. The typical classroom of
today contains a more diverse group of learners than at any point in history. This diversity reflects not only the motivational and cognitive abilities that children bring to school but also the culture that accompanies them.

Added to this medley of cultures in our schools is an assortment of family patterns. In the near future, the majority of children entering school will live with only one parent at some time before their eighteenth birthday, leaving at least 4 million latchkey children of school age at home alone (Hodgkinson, 1988). Even in two-parent families, both parents are likely to be working full time.

The result of this diversity will be an ever-widening increase in the range of individual differences you will find in your classroom. This diversity, however, will be equaled by the diversity of opinion about how teachers should deal with it. There is no consensus in America regarding the goals of education in our culturally diverse, pluralistic society. Some educators view diversity as a problem whose solution lies in administrative arrangements to make classrooms more homogeneous. Others believe that the needs of certain cultural groups are so different from those of the majority that the solution is to create separate schools or curricula specific to particular cultures or genders.

In this section, our view of the goals of schooling will be similar to that of Ms. Maitland: Learner diversity is not an obstacle to be overcome; it is an opportunity to make your classroom a laboratory for living in a democratic society. We see nothing inherently disadvantageous about diversity. The teacher must simply recognize that some of the rules that apply to teaching in a culturally uniform, homogeneous classroom may not always apply to a culturally diverse, heterogeneous class.

Our purpose in the next three chapters is to provide you with a knowledge base for teaching heterogeneous groups of learners. We will conceptualize learner diversity as more than just cultural diversity. Learner diversity encompasses those
who differ not only in race, culture, and ethnicity, but also in intellectual abilities, academic achievement, and gender.

Chapter 14 describes several types of learners: those with specific learning or behavioral disabilities, those with specific physical and communication disabilities, and those who are gifted or talented. For each type of learner, we will focus on important issues related to assessment, intervention, and inclusion in regular classrooms.

Chapter 15 addresses cultural diversity, gender differences in achievement, and sex bias in teacher-pupil interactions. You will learn what many concerned educators are doing to inspire cultural diversity, eliminate cultural and gender stereotypes, and promote a nonsexist curriculum.

Finally, Chapter 16 addresses the family-school partnership. In this chapter, we will learn about a systems-ecological perspective on family-school partnerships and the many ways the classroom teacher can promote this partnership. As we will see, meaningful parent participation is an essential ingredient of a successful classroom.

Let’s begin our look at these important issues by examining the diversity in learning ability you can expect to find in your classroom.
Chapter 14
Teaching Exceptional and At-Risk Learners

This chapter will help you answer the following questions about your learners:

- Will children with severe learning disabilities or mental retardation be in my classroom?
- What instructional arrangements are needed to meet the needs of both exceptional and nonexceptional learners?
- How can schools provide a normal school environment for children with disabilities?
- How can I explain to parents why their learning disabled child isn’t achieving up to potential?
- How can I recognize ADHD in a learner?
- What can I do in my classroom to help learners with ADHD?
- How can I identify and assist learners with physical or communication disabilities?
- What specific skills will I need for teaching exceptional learners?
- What activities and experiences will enhance the educational opportunities of a gifted or talented learner?

In this chapter you will also learn the meanings of these terms:

accelerated curriculum
adaptive behavior
The faculty members of Fawkes Middle School are milling around the library following a presentation by a state education official, “New Directions in Educating Exceptional Learners.” The official, Dr. Bell, has spoken about current practices in the classification and placement of children with physical and learning disabilities, behavior disorders, mental retardation, and the gifted and talented. He has told them that they can expect the inclusion of many of these exceptional learners in their regular
classrooms. The teachers, especially those in regular education, have immediately grasped the significance of his message. A glance around the library shows faces with expressions of concern, frustration, and determination. Let’s listen to what some of the teachers are saying.

**Art:** So does this mean that I’ll have to teach kids with severe learning disabilities or mental retardation?

**Stu:** No one expects that. But some of the kids we’re now labeling and placing in special classes could benefit from being in our regular classes. That’s what Dr. Bell was saying.

**Art:** Do you think we’ll get the support we’ll need to teach these kids?

Near the windows several reading teachers are clustered with Jeri, one of the special education teachers.

**Terry:** How do you feel, Jeri, about losing your job in the resource room?

**Jeri:** I think Dr. Bell is right. I’d rather work with these kids in their regular classes. It makes them feel too different to leave their regular classes, and I’m not sure what’s gained by it.

**Mario:** But they are different. Look at the slow ones. Are we doing them a favor by leaving them in the regular class? How are they going to get the help they need?

**Gail:** They may not be getting all the help they need now. If the research Dr. Bell cited is correct, some of the labeling and placement we’re doing now isn’t having the effects we expected. So maybe we need to include them in our regular classes.

**Mario:** But a lot of teachers don’t know much about special ed kids and will need special training.
Jeri: I do the same types of things with these kids as any regular teacher. And I’d rather do it in a regular classroom than in a room that doesn’t allow for peer interaction.

Gail: Jeri’s right. There are ways of organizing a class and directing the work of individual learners that could help us adapt to the change. That was the other half of what Dr. Bell was saying. We have new methods and materials that weren’t around when a lot of these learners were in special classes.

With the passage of Public Law 94-142 in 1975, learners with disabilities acquired the right to be educated with their nondisabled peers. This law, which requires the public schools to educate learners with disabilities in the least restrictive environment conducive to their development, has come to be known as mainstreaming.

We will begin our discussion of the exceptional learner with a brief history of the mainstreaming movement. In particular, we will focus on some of the important legal developments that have contributed to it. Then we will narrow our focus to five categories of exceptional learners: those with mental retardation, those with learning disabilities, those with behavioral disorders, those with sensory and communication disorders, and those who are gifted and talented. For each group we will discuss their assessment, classification, and placement, and we will provide guidelines to help you meet their needs in your classroom. Let’s begin with a portrait of Mike, one of the exceptional learners you are likely to meet in your classroom.
Mike, a fifth-grader, is one of the more puzzling individuals to his regular and special education teachers. He looks and speaks just like everyone else outside the classroom, but inside he’s withdrawn and easily frustrated.

He starts off his school day by coming to homeroom class. But at the beginning of first period, Mike leaves for the resource room for reading, language, and math. Most of his mornings are spent in a special room with other learners who practice remedial skills, which typically are taught to learners two or three years younger. This is Mike’s third year in a resource room, and sometimes he wonders when he’s going to be learning the same things his fifth-grade friends are learning. Mike has an average IQ, but he can’t seem to make quick enough progress in the regular classroom. One day he seems to learn a new skill; the next day he forgets it.

There are about 17 other learners in the resource room. Some are learning disabled, some have behavior problems, and others are simply labeled slow learners. One teacher and an aide teach them, mostly with individual worksheets and handouts. Theirs is a difficult assignment. There are frequent disruptions in the resource room as kids come and go in the middle of periods. Mike finds it hard to pay attention. Because of the large number of students, he receives only about 10 to 15 minutes of help from his teacher; the rest of the time he spends working through assignments on his own.

He returns to his regular class for physical education followed by lunch. Then he has social studies, science, and fine arts with the regular learners. In his regular classes, Mike’s differences stand out. Since he doesn’t read and write as well as the others, he’s not asked to do what they do during
science and social studies. Some of the time he spends completing special worksheets given him by the resource teacher; at other times he just daydreams.

The System of Special Education

Although Mike is considered exceptional, his education is not. His classroom and educational plan are typical of those of many students with learning disabilities. Mike spends nearly half the school day away from his peers. Although individual learners spend different amounts of time in the regular classroom, the system of offering services to learners with disabilities remains largely segregated. It is often referred to as the dual or two-level system: one educational program for regular learners, another for learners with disabilities. In this dual system, special education has its own administration, teachers, budget, psychologists, curriculum, and grading system.

The Regular Education Initiative (Inclusion)

The **Regular Education Initiative (REI)**, which Dr. Bell was explaining to the faculty of Fawkes Middle School, represents an attempt to end this dual system (Miller, 1990; Robinson, 1990). It advocates a partnership between regular and special educators in which learners with disabilities would receive individualized services in the regular classroom without the requirement of labeling or special classifications. Figure 14.1 depicts the continuum of special education services, ranging from total exclusion from the regular classroom on one end and total inclusion in the regular classroom on the other. The REI represents the inclusion pole of the continuum, in which the learner is educated with peers in the regular classroom for the entire day.
Advocates of REI (Anderegg & Vergason, 1988; Forest & Pierpoint, 1992; Gersten & Woodward, 1990; Robinson, 1990; Wang, Walberg, & Reynolds, 1992) make these arguments:

• Special education has become a depository for learners who may be difficult to teach but not truly disabled.

• Despite public laws requiring education in the “least restrictive environment,” the present system of special education unintentionally imposes barriers to full integration in school and community life.

• The criteria for being placed in a special education category are vague and inconsistently applied. Often the same learner may be declared eligible or ineligible for individualized services depending on who did the assessment.

• African American, Hispanic, Native American, and learners of lower socioeconomic status are often overrepresented in special education programs.

• Typically, the curriculum of pull-out programs is poorly integrated with that of the regular classroom. Thus, students in resource classrooms may not learn the academic or social skills they need when they return to the regular classroom.

The REI is not without its critics, however, even among those who advocate mainstreaming (Kaufman, 1989; Schumaker & Deshler, 1988; Wood, 1992). These critics make the following arguments:

• The rights of learners with disabilities, as presently constituted, are protected by law. But these rights could be jeopardized if labels and categories pertaining to learner disabilities were eliminated. For example,
a school district could decide to allot a disproportionate amount of its special services funds to learners other than the disabled.

- Many teachers lack the training and skills to educate diverse groups of learners in their classrooms. Many may also lack the required commitment.

- Behavior problems could increase as learners who need more individualized attention fail to receive it. This would lead to increased numbers of learners being labeled as having behavior problems.

- Regular learners may not be prepared to accept peers with disabilities in their classrooms. This could perpetuate feelings of rejection and lower self-esteem in disabled learners.

As both sides debate the Regular Education Initiative, many public schools across America are beginning to initiate or are being required to develop some form of REI. Since you are likely to become a part of this initiative, you will need to be informed about it and prepared to implement it. Let’s begin with a brief history of mainstreaming to better understand the learners who are its focus.

A Brief History of Mainstreaming

The rights of learners with disabilities to an appropriate education has long been an issue for educators and psychologists (Wood, 1992), but not until the 1960s did concerns for protecting these rights receive national attention.

This attention can be attributed in part to the civil rights movement of the 1950s and 1960s, whose objective was equal educational opportunity across racial boundaries. This was achieved in 1954 with the landmark U.S. Supreme Court decision *Brown v. Board of Education of Topeka*, which codified the right of African Americans to be educated alongside whites. This case created a precedent
for other litigation dealing with the constitutionally protected rights of all learners to equal educational opportunities. Just as “separate but equal” treatment for African American learners was rejected in the public schools, so was “separate but equal” treatment rejected for learners with disabilities. By the close of the 1950s, advocates for these learners began lobbying for national legislation requiring training for special education personnel. This legislation came with the Elementary and Secondary Education Act of 1965 and its various amendments in 1970, which provided federal funds for disabled learners and recognized disabled children as a special needs population.

There are two important results of these and subsequent laws for disabled learners: (1) They clearly established the right to humane treatment and educational opportunities for the disabled; and (2) they required that such learners be identified or classified as disabled in order to qualify for funds to pay for these services. This classification requirement has become a major cause of concern among psychologists, educators, and parents.

From about 1967 through the early 1970s, several major lawsuits brought about by dissatisfied parents of disabled learners further heightened concern for the rights of exceptional children. Thus, from 1950 to 1975, federal legislation and court decisions constructed a legal and educational framework for the treatment of learners with disabilities in public schools. However, there was no single federal mandate that parents could turn to to activate the rights of disabled children. They and their advocacy groups had to sift through many court decisions and federal laws to learn what different learners with different disabilities were entitled to. The need for a major, all-encompassing federal mandate was finally met when President Gerald Ford signed Public Law 94-142, the Education for All Handicapped Children Act, on November 29, 1975.
Public Law 94-142, the Education for All Handicapped Children Act of 1975

Public Law (PL) 94-142 is universally regarded as a landmark piece of education law, as significant for public school education as the 1954 *Brown v. Board of Education of Topeka* decision. It accomplished the following:

- It guaranteed that all children who required special education would receive it.
- It assured fairness in how learners with disabilities would be assessed and educated.
- It established standards of accountability for appropriate services at all levels of government.
- It provided federal funds to assist state and local governments to meet provisions of the law.

These goals were accomplished through five major components of the law that affect the identification of learners with disabilities, where they will be educated, and how instruction will be delivered. Let’s examine some of the more important aspects of these components to better understand the law and the dual system of education that it began.

Major Components of PL 94-142

The Right to a Free Appropriate Public Education (FAPE). Prior to this law, parents had to pay for private services for their disabled children. As a result, many learners went without needed services. With the passage of PL 94-142, learners with disabilities between the ages of 6 and 21 were guaranteed free and appropriate educational services in public schools.
Nondiscriminatory Evaluation Procedures. As we saw in Chapter 11, the early tests of learning ability reflected various forms of bias. PL 94-142 provided specific guidelines for the reliability and validity of tests used to assess learners with disabilities as well as for the training of personnel who would administer these tests.

Procedural Due Process. Parents of exceptional children, whose lawsuits in the 1960s and 1970s began the movement toward equal educational opportunity, could not be ignored in the educational assessment and placement process. With PL 94-142, they acquired the right to:

- determine whether their child should be evaluated for special services
- determine whether their child should be placed in a special education program, and also to withdraw this permission at any time
- examine and challenge the confidential records of their child
- request an independent evaluation of their child’s performance from professionals outside the public school setting
- disagree with a school district’s decision that either qualifies a child for special education or finds the child ineligible for services. In such cases, both the parents and the school can present evidence, call witnesses, and have lawyers present. Both parties also have the right to appeal.

An Individualized Education Plan (IEP) for Each Learner. The **individualized education plan (IEP)** is a written educational plan, revised annually, that provides a detailed road map to the kinds of services a child will receive and how these services will be evaluated. It includes:

- individualized goals and objectives with timelines
- a description of the child’s current skill level with respect to the above
• a description of the services to be received in order to achieve the goals and objectives.

The requirement that the child be educated in his or her least restrictive environment is the most debated aspect of PL 94-142. **Least restrictive environment** refers to the objective of maintaining the greatest degree of freedom; self-determination; dignity; and integrity of body, mind, and spirit for the individual while he or she participates in treatment or receives services. Figure 14.2 portrays the concept of least restricted environment (LRE) as it applies to school learners.

The school committee that designs an exceptional learner’s IEP has wide latitude in constructing the least restrictive environment. Public Law 94-142 requires that the committee first consider quadrant A for all learners. If this committee (which includes regular classroom teachers, special education teachers, a school administrator, a school psychologist, the parent, and sometimes the learners themselves) rules out these LREs, it next considers quadrant B, followed by quadrants C and D. However, state education agencies and local school districts increasingly encourage or require schools to provide most services in quadrants A and B of the LREs.

**Legislation Since PL 94-142**

Since 1975, three other legislative mandates have influenced the education of individuals with disabilities.

• PL 99-457, Education of the Handicapped Act Amendments of 1986. This law expanded the provisions of PL 94-142 to include learners with disabilities between ages 3 and 5. In addition, it extended services to infants and toddlers with disabilities and their families.
• PL 101-336, The Americans with Disabilities Act of 1990. This law protects the rights of all individuals with disabilities by:
  
  Prohibiting employment discrimination.
  
  Requiring that individuals with handicaps have access to appropriate transportation.
  
  Requiring ramps for wheelchairs and removal of barriers to the access of public institutions by persons with handicaps.
  
  Requiring telephone companies to assist the visually and hearing impaired.

• Education of the Handicapped Act Amendments of 1990. This act added “autism” and “traumatic brain injury” to the list of handicapping conditions that receive services under PL 94-142. In addition, it requires IEPs to provide for “transition services,” which spell out the precise process by which learners return to their LREs. Finally, it changed the way we refer to exceptional learners: not as “handicapped children” but as “children with disabilities.”

The Principle of Normalization

Underlying this nearly two-decade legal struggle to protect the rights of exceptional learners is a principle called normalization. This principle provides the standards by which current services for learners with disabilities are to be provided. In essence, it states that such learners are entitled to programs that allow them to experience the respect and dignity to which any person in our society is entitled.

Normalization requires that programs for exceptional learners reflect the culture of which these learners are a part. This applies both to what the program achieves for the learners (social skills, academic skills, personal appearance, and
so on) and how it does it (physical setting, method of grouping learners, activities provided, staff serving the program, language used to describe the program). Five dimensions encompass the major themes of normalization as they apply to public school learners with disabilities (Gardner & Chapman, 1985, 1990): regular school participation, regular class participation, skill enhancement, image enhancement, and autonomy and empowerment (see Figure 14.3). Let’s take a closer look at each of these.

Regular School Participation

According to the principle of normalization, all learners—regardless of disability—should have the opportunity to participate in the routine life of the school. Learners in wheelchairs should be able to attend basketball games. Individuals with mental retardation should be able to attend school dances and other social events. Learners who are excluded from the regular classroom for severely disruptive behavior may still be allowed to have some access to their peers, for example, to eat in the cafeteria and attend assemblies.

Regular Class Participation

As discussed in our analysis of the least restrictive environment, this dimension emphasizes the importance of allowing learners with disabilities to have opportunities to develop normal social relationships with a regular classroom of peers.

Skill Enhancement

The focus of special education programs should be to teach individuals skills that will make their lives as normal as possible. Learners classified as severely emotionally disturbed (SED) who lack social skills should be taught them as part
of their IEP. Behavior modification programs should spend as much time teaching
learners appropriate behaviors as they spend on reacting to inappropriate ones.
Learners who have difficulty spelling, writing, or reading should be taught to
master these skills in ways that do not label or stigmatize.

For example, it violates the principle of normalization not to teach
handwriting skills to a learner who finds this particularly difficult, assuming
the learner has the physical capability to write. Likewise, individuals with
mental retardation who lack skills in toileting, dressing, feeding, using
public transportation, or crossing streets should be taught these skills and
not be left dependent on others to handle these aspects of life.

Image Enhancement

Special education programs violate the principle of normalization when they
engage in practices that reinforce stereotypes about individuals with mental
retardation, learning disabilities, or emotional disturbance. Common examples are:

- referring to exceptional children using stereotypic labeling, such as “MR,”
  “LD,” “ED,” or derogatory phrases
- using signs in the school such as “resource room,” “alternative learning
  center,” “remedial reading,” or “adaptive PE instructor,” which can
  stigmatize or psychologically separate students from their peers
- using educational activities and materials that are inappropriate for the
  chronological age of the learner; for example, using toys and other
  materials that are usually used exclusively by toddlers and preschoolers
  with older children with mental retardation.
Autonomy and Empowerment

As much as possible, individuals with disabilities should be given as many of the same choices as their nondisabled peers with respect to what they do, when and where they do it, with whom, for how long, and in what way. This dimension, when practical, reminds educators to transfer power and control to persons with disabilities and to encourage their participation in the regular classroom and the development of their educational program.

Special Class Versus Regular Class Placement

Concerns about how “special” special education is have never been as prominent as they are today (Hilliard, 1992; Kavale, 1990; Skrtic, 1991). Some educators believe that special education as it is now practiced violates principles of normalization and should turn more toward mainstreaming most learners (Skrtic, 1991). Others have suggested that minority learners are overrepresented in programs for the mentally retarded and learning disabled, and underserved in programs for the academically gifted. Still others have asked whether special education has achieved its intended effects. We might ask whether learners with specific learning disabilities, mental retardation, or emotional disturbance would have been better off had they been left in their regular classes.

Kavale (1990) refers to this as the efficacy question. Research investigating the efficacy question by Carlberg and Kavale (1980) and Kavale (1990) fails to find an advantage for exceptional learners as a result of special class placement. Learners who were two or three years behind their peers in reading or math achievement before being placed in special education classes gained no ground on their peers after two, three, or more years of special education.

Furthermore, special education students classified as having mild mental retardation (IQs of 50 to 70) or as slow learners (IQs of 70 to 90) not only failed
to gain ground in math or reading achievement, but actually lost some ground. In other words, for these groups of learners, special class placement resulted in fewer gains than if they had been left in their regular classes. Keogh (1988), Hallahan, Keller, McKinney, Lloyd, and Bryon (1988), Hilliard (1992), Lipsky and Gartner (1989), and Skrtic (1991) all conclude that special class placement does not have a direct instructional benefit on exceptional learners. Advocates of the Regular Education Initiative have examined these data and concluded that there is little justification for special class placement for large numbers of the learners who are now in special classes (Pugack & Lilly, 1984; Skrtic, 1991; Stainback & Stainback, 1984; Wang, Reynolds, & Walberg, 1982; Wang, Walberg, & Reynolds, 1992).

Understanding Exceptional Learners

Over the past decade there has been some debate over the most appropriate expressions to use when describing learners with disabilities (Wood, 1992). Clinical psychologists and physicians traditionally have had the greatest impact on special education terminology. Thus expressions such as “mentally retarded,” “learning disabled,” “emotionally disturbed,” and “physically handicapped” reflect a perspective often referred to as the “medical” or “pathological” model. In other words, the professionals who use such terms tend to view the problem as existing within the person.

How Should We Refer to Learners with Disabilities?

Until recently, legislation governing services for exceptional learners has reflected primarily this medical model. PL 94-142, for example, requires that school psychologists and educational diagnosticians assign labels such as “mentally retarded” or “learning disabled” as a condition for receiving special education
services. The primacy of the medical model, however, is diminishing because of concerns that such a perspective runs contrary to the principle of normalization. Recall that one of the themes of this principle is that of image enhancement. Many advocates of learners with disabilities believe that current classifications stigmatize learners and encourage stereotypic thinking about them (Wang, Walberg, & Reynolds, 1992).

Recent legislation reflects a concern for image enhancement. As we saw above, Education of the Handicapped Act Amendments of 1990 changed the way we refer to exceptional learners from “handicapped children” to “children with disabilities.” Such expressions, and others like them (for example, learners with mental retardation, children with attention-deficit disorder, learners with visual impairment), are attempts to affirm that exceptional learners are people first, who incidentally have certain physical, cognitive, or emotional characteristics.

Let’s look now at some of the learners whose mastery of important educational skills is sufficiently below “normal” or below expectations to identify them as having a specific learning or behavior disability.

Students with Mental Retardation

Less than three decades ago, some psychologists, psychiatrists, educators, and policy makers believed that children with mental retardation could not profit from schooling (Cipiani, 1991). Such children were often confined to large institutions, where they received strictly custodial care. With the passage of PL 94-142, even learners with severe mental retardation have the right to an education in the least restrictive environment.

But there are obstacles in the way of providing education for students with mental retardation. Some of them are due to a lack of knowledge about the best ways to teach these learners, while others are due to misinformation and
stereotypes pertaining to individuals with mental retardation (Jacobson, 1991). Since you will probably teach and interact with children who have some form of mental retardation, it is important that you know about them. In this section, we will investigate (1) the more common causes of mental retardation, (2) problems encountered in the attempt to classify learners with mental retardation, (3) the learning needs of these children, and (4) challenges that confront teachers because of the unique communication problems experienced by students with mental retardation.

The Definition of Mental Retardation

PL 94-142 defines mental retardation in this way:

Significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior manifested during the developmental period, which adversely affects the child’s educational performance.

Mental retardation is generally considered to be a developmental disability that occurs between conception and the eighteenth year. Presently, a normal individual who suffered severe brain damage after the nineteenth birthday would not be considered to have mental retardation—even if he or she displayed many of the same cognitive deficits as individuals with mental retardation before this age.

The most widely accepted method for diagnosing mental retardation today is based on performances on standardized ability, achievement, and adaptive behavior tests. Tests of adaptive behavior measure the extent to which a person has learned the skills that most of us learn without need for formal instruction: personal care, feeding, toileting, language, pedestrian skills, social skills, use of leisure time, and so forth.
To be diagnosed as having mental retardation, a person must score below 70 on an individually administered IQ test and show significant deficits on measures of achievement and adaptive behavior during the developmental period. Most states rely more on the IQ score in diagnosing mental retardation than on measures of adaptive behavior (Morgenstern & Klass, 1991). In other words, mental retardation primarily is defined in terms of a score on a standardized test of ability. Knowing that a child has mental retardation indicates that he or she scored far below average on a standardized ability test. This diagnosis does not reveal what caused the condition, the person’s learning needs, what skills the person has and lacks, or how to teach him or her.

The Causes of Mental Retardation

The causes of mental retardation are many and varied, but they can be categorized as (1) genetic disorders, (2) chromosomal disorders, (3) prenatal complications, (4) infections, and (5) social and environmental factors. The first four causes usually adversely affect brain development by causing premature closure of the skull bones, abnormalities in the formation of certain brain structures, or biochemical disorders that affect brain nourishment. Social and environmental factors, which account for approximately 75 percent of all cases of mental retardation, can be traced to psychological and social deprivation in infancy and early childhood (Menke, McClead, & Hansen, 1991). The myth that most school learners with mental retardation are brain injured has been a major obstacle in the way of setting higher expectations and developing instructional programs for them.
Issues in the Educational Classification of Learners with Mental Retardation

Throughout most of this century, school learners with mental retardation have been classified according to certain diagnostic categories. Table 14.1 shows the classification system recommended by the American Psychiatric Association (APA, 1994), and Table 14.2 shows the system used in most school settings. These classification systems have several features in common.

• The lower the IQ, the more likely the individual will have other disabilities, such as hearing and vision problems, as well as a general lack of muscular coordination.

• Learners are classified on the basis of IQ tests and not specific learning deficits or weaknesses.

• Information is not provided about how individuals should or can be taught.

Currently, many professionals prefer a system of classification that categorizes learners with mental retardation on the basis of skills they need to learn rather than their deficits. These are called noncategorical approaches (Cipiani, 1991). For example, compare the following definition of mental retardation with that on page 476:

Mental retardation refers to the need for specific training of the skills that most people acquire incidentally and that enable individuals to live in the community without supervision. (Dever, 1990, p. 149)

This definition avoids labeling, setting limits on learning, or focusing exclusively on what the person cannot do. Rather, it specifies that persons with mental retardation are those who must be taught to do things that most of us learn naturally as we grow and develop. It provides general direction to what must be
taught (for example, skills that allow one to live without supervision) and implies not only that individuals with mental retardation can learn, but also that the limits of their skill attainment may be unknown. Finally, it places some of the responsibility for seeing that learners with mental retardation acquire necessary life skills with public education.

Learning Needs of Students with Mental Retardation

Only 15 years ago, many learners with low IQs were considered uneducable (Restak, 1975; Sinclair & Forness, 1983). In other words, it was not worth teaching them fundamental academic skills. Table 14.3 displays the chronological age, IQ, and grade-equivalent reading scores of six learners who were enrolled in an early education program from the time they were 18 months old. As can be seen, all learners earned grade-equivalent reading scores on the Wide Range Achievement Test (WRAT) that indicate substantial learning of basic reading skills (Rynders & Horrobin, 1990). Project EDGE at the University of Minnesota (Rynders & Horrobin, 1980) and the Portsmouth Project (Buckley, 1987) present similar data showing that learners with Down’s syndrome and even those with IQs below 50 can learn to read with comprehension.

These data and the work of educators like Dever, Donnellan, and LaVigna (1990), and Donnellan, LaVigna, Negri-Shoultz, and Fassbender (1988) are convincing evidence that the possible level of skill attainment for any person with retardation is unknown. It is clear that such persons can learn, but we do not yet know how much. Given this fact, Dever specifies five principles as guides for instructional programs for children with retardation (Dever, 1990). These are explained in the accompanying box, Meeting the Learning Needs of Students with Mental Retardation.
Students with Learning Disabilities

We began this chapter by describing Mike, a fifth-grader with learning disabilities. Why can’t students like Mike, who has normal cognitive ability, learn basic math or reading skills as quickly as other learners his age? Since about 1970, the answer to this question has been that he has a specific learning disability. But what exactly does it mean to have a specific learning disability? Here’s how PL 94-142 defines it:

A disorder in one or more of the basic psychological processes involved in understanding or using language, spoken or written, that manifests itself in the imperfect ability to listen, speak, read, write, spell, or do mathematical calculations; the term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia; the term does not include children who have learning problems that are primarily the result of visual, hearing, or motor handicaps, of mental retardation, or of environmental, cultural, or economic disadvantage.

Notice that this definition is derived from a medical or pathological perspective. In other words, the underlying cause of the child’s inability to master reading, writing, or language is to be found with the child—a “disorder of the basic psychological processes.” Second, it suggests that the learning failure is not influenced by economic or social conditions, educational disadvantage, or insufficient instruction, nor to such factors as mental retardation, emotional disturbance, or physical disabilities. Thus, this definition directs the school psychologist or educational diagnostician to search primarily within the individual for the source of the learning problem and only secondarily to develop an academic program or instructional procedures to remediate the problem.
(Weisberg, 1990). Let’s examine more closely how psychologists assess a child for learning disabilities.

Assessing Learning Disabilities

Public Law 94-142 guarantees that each student believed to have a learning disability will receive fair, objective assessment by trained examiners before being diagnosed as learning disabled. The diagnostic process involves the use of standardized IQ and achievement tests to confirm the presence of a learning disability. We studied standardized ability tests in Chapter 11. Let’s now examine some of the more important characteristics of standardized achievement tests for assessing learning disabilities.

Standardized Achievement Tests. Standardized achievement tests have nearly all the characteristics of standardized ability or IQ tests: professional item development, standardization, norms, reliability, and validity. They differ from IQ tests primarily in terms of the test content.

There are standardized achievement tests for nearly every academic area taught in grades K through 12: reading, math, handwriting, biology, algebra, geography, and so forth. Since the overwhelming majority of students with learning disabilities experience problems in math, reading, or both areas, standardized reading and math tests are the principal instruments for assessing learning disabilities.

One of the goals of constructing these tests is to develop questions that cover the most important math and reading skills across a given grade level. Thus a fourth-grade reading or math test must be comprehensive enough to allow adequate assessment of what a fourth-grader knows, yet short enough to be administered in about an hour. It also must contain questions that any school
across the country is likely to include in its fourth-grade math or reading curriculum.

As we learned in Chapter 11, scores on standardized tests are interpreted with the use of norms: percentile ranks, standard scores, and grade- or age-equivalent scores. For example, if Mike was making normal progress and was given a standardized math test in November of his fifth grade, his grade placement would be represented by 5.3: fifth grade/third month of the school year. A grade-equivalent score of 5.3 means that Mike got as many items correct as did the average child in the fifth grade, third month of school in the standardization sample. Had Mike earned that score, we would have no concerns about his ability to learn math. But if Mike had earned a grade-equivalent score of 2.3, his performance would have been typical of a learner in November of the second grade. His math skills would be three years below what we would expect, given his current grade level.

The Assessment Process. Why is Mike doing so poorly in reading and math? His teacher observes that he attends school regularly and seems to be trying to learn. He appears to have normal cognitive ability. To determine whether Mike has a specific disability that qualifies him for special services, his teacher refers him to a school psychologist.

To rule out environment or other psychological conditions as factors in the learning problem, the psychologist conducts interviews with present and former teachers, reviews records, and may even observe Mike in class. She then gives Mike a battery of tests, which include an individually administered IQ test; standardized reading, language, and math achievement tests; tests of vision, hearing, and perceptual abilities; and perhaps a personality test to determine
whether Mike has a psychological problem. This assessment process takes about three weeks.

Following these tests, a psychological evaluation is written and presented to a committee, which must decide whether Mike qualifies for special education services under PL 94-142.

Mike’s evaluation is typical of that used to determine the presence of a learning disability. Two points are worth noting. First, evidence of a learning disability may not be observed during the assessment process. Mike’s teacher referred him for evaluation because he noticed that he was not doing well in class and scored low on a group achievement test. But during the evaluation process, the psychologist may not test Mike to determine the cognitive processes or strategies he uses to learn. Second, the effects of prior schooling on Mike’s learning problem also may not be known. Mike’s present problems could be attributed to inadequate or insufficient instruction in an earlier grade. Since the assessment process does not involve actually teaching Mike a math or reading skill he has not learned, we do not know whether Mike’s learning problem is a result of earlier circumstances.

The IQ–Achievement Discrepancy

Since a specific learning disability cannot be directly seen or measured, its presence must be inferred. The logic behind this inference is as follows:

1. Children should achieve in school at a level consistent with their abilities. If they have an IQ within normal range, their academic achievement should be there as well. Figure 14.4 shows this condition.

2. If a child’s IQ is within normal range and his or her achievement is not, then the discrepancy is due either to a specific learning disability or to some other factor, such as inadequate instruction or lack of prior
instruction, cultural differences, vision or hearing problems, or emotional disturbance. Figure 14.5 shows this condition.

3. By confirming that a child has a normal IQ and that achievement is below normal, and by ruling out factors such as environmental deprivation or emotional disturbance, the presence of a specific learning disability is confirmed.

Thus the presence of a specific learning disability is confirmed by a significant **IQ–achievement discrepancy**. Since IQ and standardized achievement tests report performance in terms of similar norms (usually percentile ranks and standard scores), performance on one test can be compared with performance on the other to determine the size of the discrepancy between aptitude and achievement.

Summary

Earlier we asked what it means to have a specific learning disability. As we found out, it means that a learner’s score on a standardized achievement test is significantly below what you would predict, given his or her IQ score, and that this discrepancy cannot be attributed to environmental factors or physical and emotional problems. Diagnosis of a child as learning disabled indicates a need for special education services. Given that the child has normal cognitive abilities but a specific learning deficit, the goal of these services is to remediate the deficit and help the learner make up ground that he or she has lost in math or reading achievement. Before this can be done, some other questions must be answered:

- What specific information, intellectual skills, or cognitive strategies does the learner lack that may explain why he or she is failing to master math or reading skills?
• What are the critical knowledge, intellectual skills, and learning strategies that the learner must be taught to help him or her to read, calculate, or solve math problems at or above grade level?

• What is the most appropriate way to sequence instructional objectives and design instructional strategies to help the learner return to grade level?

We will return to these questions when we present guidelines for teaching the exceptional learner. Before we do, let’s look at another group of learners whom you may also find in your classroom.

Students with Behavioral Disorders

As a teacher, you will have to deal with a wide range of learning, behavioral, and psychological problems. Some of these were discussed in Part III when we studied classroom management. At that time, we distinguished behavior problems arising out of group dynamics from those arising out of a failure to meet an individual learner’s needs for recognition, power, and achievement. The problems we were referring to in those chapters were not serious. They were the normal psychological challenges that many learners experience in the course of growing up: doubts about friendships and self-esteem, sadness over the loss of a friend, poor grades, arguments with classmates over who gets what privilege, worries about tests. These are not pathologies or persistent behavioral problems.

But there is another category of behavior problems, called *behavioral disorders*, that are more intense and persistent, usually lasting six months or longer. They include depression, attention deficit disorders, the effects of child abuse, and conduct disorders. These disorders genuinely place learners at risk for serious psychological harm, school failure, and life-long disturbances. Their symptoms, when looked at in isolation, often appear no different from the more transitory behavior problems we discussed in
Chapter 9. The fact that many behavioral disorders and mild behavior problems look the same in the classroom can be confusing to the teacher who must decide whether professional help may be needed.

There are different theoretical perspectives and approaches to treating behavioral disorders. School psychologists trained in the behavioral science tradition (Chapter 4) have a different perspective from those trained in the cognitive tradition (Chapters 5 and 6). Developmental psychologists assert that many behavior and psychological problems cannot be explained in terms of any single perspective. Rather, the root of these problems is often as complex as the learners themselves. These developmental psychologists point out that chronic problems have both historical and developmental roots.

The majority of learners you teach will not have these disorders, but you will encounter learners who do. Bee (1995) estimates that 3 to 5 percent of learners ages 0 to 18 experience attention deficit disorder, 5 to 7 percent experience conduct disorder (such as serious aggression), and 2 to 10 percent experience severe depression. In other words, 14 to 20 percent of learners experience some form of behavioral disorder during their school-age years (Brandenberg, Freedman, & Silver, 1990). The majority of these learners can benefit from special help in school or from a community or social service agency. In this section, we will promote an understanding of these problems by discussing the nature and causes of attention deficit hyperactivity disorder (ADHD).

Attention Deficit Hyperactivity Disorder

Todd is a 10-year-old who never seems to settle down. When he’s asked to sit quietly and read, he wriggles and squirms in his seat. Although he reads at an appropriate grade level, he can’t seem to focus on assigned tasks. During seatwork, he appears distracted. During formal lessons, he calls out
without raising his hand, makes inappropriate comments, or seems unaware of what is going on around him. Since kindergarten, his teachers have made similar comments on his evaluation forms: “can’t seem to focus”; “disruptive”; “bright but uncooperative.”

Once learners like Todd were described as “hyperactive,” or “fidgety,” or “distractible.” They were at risk of being labeled troublemakers because their behavior so often disrupted classroom routine. Today the descriptors used for Todd have been superseded by the term **attention deficit hyperactivity disorder**, or ADHD. Learners with ADHD have short attention spans, are easily distracted, and have heightened levels of physical activity. However, many learners display all these symptoms, yet do not have ADHD (Deutsch & Kinsbourne, 1990). Thus, immediately describing a learner’s overactive, restless, inattentive behavior as “hyperactive” or as a sign of ADHD is fraught with problems.

We can better appreciate the problems in diagnosing hyperactivity or ADHD by studying Table 14.4, which lists the hallmarks of ADHD used by psychologists as an aid to diagnosis. However, a problem with this approach to diagnosis is that it is based on quantitative deviations from an unspecified norm. “Often,” for example, is a relative term. Shifting from one activity to another six times in one hour might be considered “often” in one class but not in another. Therefore, your judgment may be influenced by the behavioral norms of your class.

Similarly, your judgment about how often is “often” is influenced by age. “Often loses things” means one thing in a class of 5-year-olds and another in a class of 9-year-olds. We also know that as normal children get older, parents and teachers report declines in attention, declines in impulse control, and increased restlessness.

Moreover, we know that the symptoms of ADHD increase following certain traumatic experiences. These increases often last beyond six months but then
subside with proper intervention (Davidson & Baum, 1990; Deutsch & Kinsbourne, 1990). Thus many transitory problems may be mistakenly diagnosed as ADHD.

Further complicating the diagnosis of ADHD is the fact that quantitative criteria fail to convey the qualitative aspects of the behavior of hyperactive children. Whalen and Henker (1985) and Whalen and colleagues (1979) have completed numerous studies of hyperactive children that show that their overall activity levels do not differ significantly from those of their peers. Rather, the qualitative aspects of their behavior—intensity, severity, inappropriateness—are what generally catch the teacher’s eye. Lists like those in Table 14.4 fail to consider these features of hyperactive behavior.

Yet it is precisely these factors that appear to best distinguish learners with ADHD from their peers. Were you to view a videotape of a classroom that included an ADHD learner who had not been brought to your attention, you probably would recognize him or her because of inattention, impulsiveness, and frequency of social behavior inappropriate to the time and setting. Let’s examine some of these signs of ADHD and the research that supports them.

Recognizing ADHD

Developmental psychologists identify four hallmarks or primary symptoms of ADHD: (1) inability to sustain attention, (2) impulsivity, (3) hyperactivity, and (4) deficits in rule-governed behavior.

Inability to Sustain Attention. In comparison to their classmates, learners with ADHD have difficulty staying with or completing an activity over a period of time. This difficulty isn’t as evident during activities such as watching TV or playing video games as it is during dull, boring, effortful, and repetitive tasks.
such as copying from a blackboard, doing practice worksheets, listening to a speaker, or silent reading. In other words, it occurs during many common classroom activities.

Studies of hyperactive learners show that this problem, an attention deficit, isn’t necessarily one of distractibility, although that is commonly assumed. In other words, the problem of sustained attention is not so much being drawn off task by irrelevant sounds, sights, or movements that may occur during an activity (called overselective attention). Rather, learners with ADHD become more easily bored and disinterested in activities in comparison with their classmates (Douglas, 1983; Ross & Ross, 1982).

Impulsivity. Psychologists define impulsivity as the failure to stop and think before responding to a task (Braswell & Bloomquist, 1991). Rather than ask themselves “What am I supposed to do?” or “What is the best plan?” before starting on a new task or answering a question, learners with ADHD more typically jump in and start writing or answering with no plan in mind.

There is some debate among developmental psychologists as to whether impulsivity is a genuine component or primary symptom of ADHD separate from either activity level or attention (Achenbach & Edelbrock, 1983; Milich & Kramer, 1985). Some psychologists (Barkley, 1989) suggest that impulsivity is just one more facet of the problem of sustaining attention. Nevertheless, the consensus is that impulsivity is a useful concept for describing some of the qualitative aspects of the behavior of hyperactive learners.

Hyperactivity. Current research calls into question the notion that overactivity or hyperactivity is the most significant feature of ADHD (Barkley, 1990). Although numerous studies have demonstrated that ADHD learners are more active or
restless than other children (Barkley & Cunningham, 1979; Porino et al., 1983),
many studies fail to show this (Firestone & Martin, 1979; Sandberg, Rutter, &
Taylor, 1978; Shaffer, McNamara, & Pincus, 1974; Whalen et al., 1979). Despite
the lack of consensus on the importance of activity level in diagnosing ADHD,
hyperactivity continues to remain one of the primary symptoms of the disorder.

Deficits in Rule-Governed Behavior. In Chapter 9 we discussed the importance of
rules in classroom management. Rule-governed behavior in the classroom has
three aspects: immediate compliance with requests; persistence in continuing
assigned tasks; and use of problem-solving strategies to cope with unfamiliar
situations. Barkley (1990) believes that learners with ADHD have particular
problems with the second aspect of rule-governed behavior, persistence. His
research indicates that many ADHD learners are initially compliant but have
difficulty maintaining this compliance.

Barkley makes the point that the problems hyperactive learners have with
sustaining attention may be better viewed as problems with rule-governed
behavior. In other words, hyperactive learners have particular difficulty sustaining
attention to rules and less difficulty sustaining attention during situations in which
there are few rules. That is, hyperactive learners do not behave differently from
nonhyperactive learners at lunchtime, recess, on the playground, or in other low-
demand settings. Rather, their attention deficits become pronounced in settings of
high demand with many rules, such as the classroom.

Barkley believes that ADHD learners are more contingency-shaped than rule-
governed. In other words, the expectation of reward or fear of punishment has a
greater effect on their behavior than the stimulus control typically exerted by rules
or requests.
Prevalence and Risk Potential for ADHD

Exact figures on the percentage of learners who have ADHD are difficult to obtain. Information from parents and teachers is a prime source determining the frequency of this disorder. However, the data from these sources are not as objective as researchers would like. Nevertheless, most studies conclude that 3 to 5 percent of the school-age population has ADHD (Barkley, 1990, Ross & Ross, 1982). Boys are nearly twice as likely as girls to have ADHD: 5 to 7 percent of boys versus 2 to 4 percent of girls have been diagnosed.

What can teachers do to improve the behavior of the ADHD school-age learner? Research by Barkley (1990) offers some hints. The accompanying box, Teaching Learners with ADHD, provides some specific guidelines, based on the research we described above about the difficulty ADHD learners have in maintaining compliance over time.

Students with Communication Disabilities

Another category of learners with special needs that you may encounter in your classroom is composed of those with disabilities involving communication. As with other learners we have considered in this chapter, such students should be part of regular classes whenever possible, and teachers should focus on students’ specific learning needs, not on their disabilities.

Because spoken language is so central to all facets of human experience, and to education in particular, learners with communication disabilities require your patience and care. A communication disability is an impairment that involves speech, language, vision, or hearing. It is important to remember that speech and language are not the same thing, although the terms are commonly used interchangeably. Educational psychologists use the term speech to refer to the
production of sounds. Disabilities that involve speech include problems with
producing particular sounds or with vocal pitch patterns. *Language* disabilities,
which involve impairment of the ability to understand or communicate, are
typically much more severe than speech disabilities. You are therefore more likely
to teach learners with speech disabilities in your regular classroom.

Speech Disabilities

Speech disabilities can take many forms. Young children commonly distort, omit,
or substitute one sound for another (for example, “sreight train” rather than
“freight train”). Some speech sounds, such as *r, l, and s*, are difficult for many
children. Such *articulation* difficulties are common in the early years but
commonly disappear after grade 2 or 3. Therefore, speech therapists often delay
working with a child until after that time. However, you should make sure that
such articulation problems are neither keeping children from being understood nor
making them the butt of teasing. Children who experience social isolation as a
result of articulation disorders should be referred for speech therapy.

*Stuttering* is a less common but more distressing disability that involves the
repetition of the first sound of a word (“Cccccccome here”) or sometimes the
inability to make any sound at all. Learners who stutter may have difficulty with
particular sounds, or they may have difficulty only when they feel anxiety.

A third type of speech disability involves problems with the voice. Learners
who have such *voice disabilities* may speak in an unusually high-pitched tone or in
a monotone (a monotonous, single-pitched speech) or may speak too softly to be
heard.

Classroom teachers should remember that speech disabilities are common in
young children, but that they generally rectify themselves over time. You can best
assist learners with speech disabilities in the following ways:
• Provide a role model to other children for acceptance of the disability; avoid display impatience or irritation toward the learner.
• Avoid finishing a learner’s sentences, and do not allow other learners to do so.
• Avoid correcting a learner’s articulation in the presence of peers.
• Avoid putting learners with speech disabilities into high-pressure situations that may exacerbate the difficulty.

Language Disabilities

Language disabilities are problems with the ability either to understand language (receptive language disability) or to express one’s ideas in language (expressive language disability). A learner whose native language is not English but who has difficulty communicating his or her ideas in English does not have a language disability (see Chapter 2). Such a learner simply needs additional assistance in learning English.

You should suspect a language disability in a child who seldom speaks, who uses very few words or only very short sentences, or who relies almost solely on gestures to communicate. Language disabilities may arise from physical problems, such as hearing disorders, from mental retardation, or from a learning disability. Children who are neglected, or whose home environments do not include rich verbal experiences, may come to school with seeming language disabilities. Such children’s language skills usually can catch up with those of their peers if they are given sufficient verbal experiences. All children who are suspected of having language disabilities should be referred to a psychologist or language specialist.

Visual and Hearing Disabilities
The great majority of visual disabilities can be corrected with prescription lenses. In fact, only 1 out of every 1,000 children has a visual disability so severe that his or her educational needs cannot be met in a regular class. Most of the learners who need special services for their visual impairments can read with the aid of large-print books or magnifying glasses. A smaller group of students, those classified as educationally blind, must use hearing and touch rather than vision as primary learning tools (Kirk, Gallagher, & Anastasiow, 1993).

A hearing disability may range from a mild impairment to profound deafness. Learners with mild hearing impairments may need no more assistance than a seat at the front of the room; those with profound deafness, on the other hand, may communicate entirely in sign language. Approximately 3 or 4 learners in 1,000 have partial hearing impairments. Such students, whose disabilities may range from mild to moderate, are likely to be part of your regular classroom. Those with profound disabilities are unlikely to be mainstreamed unless they have received special training in communication skills.

Guidelines for Better Special Education

While the Regular Education Initiative (REI) continues to gain prominence, many educators and policy makers conclude that some form of special education classification and placement will always be necessary (Case, 1992; Villa & Thousand, 1992). The real issue, therefore, may be how to adapt the current special education system to make it more responsive to the need for academic achievement and normalization. Here are some of the steps school districts across the country have taken to adapt their schools and classrooms to the needs of mainstreamed learners.

1. Classify exceptional learners in terms of instructional needs—not cognitive deficits. The Winooski School District in Vermont no longer assigns
special education labels to students, staff, materials, rooms, instructional procedures, or behavior management practices. When classifications are used for learners, they are based strictly on current educational needs (Dever, 1990). Thus, such classifications may only be relevant for a brief time. Learners are not blind, deaf, mentally retarded, learning disabled, or emotionally disturbed. Instead, they are learners who require intensive instruction in mobility, pedestrian skills, signing, reading recognition, money management, housekeeping, word recognition, or social skills. In the Winooski School District, programs—rather than children—have labels (Villa & Thousand, 1992).

2. Assess learning environments—not psychological processes. In the Minneapolis Public Schools, school psychologists are spending more time assessing the adequacy of instructional environments and less time testing for the hypothesized inadequacies of exceptional learners (Ysseldyke & Marston, 1990). They spend more time in classrooms evaluating how well teachers teach and model appropriate behavior rather than taking children out of classrooms to measure IQ.

Weisberg (1990) asserts that the key to discovering why certain students do not learn specific skills, and understanding what must be done to teach them, lies in a logical analysis of program design and teacher presentation procedure. In the former case, he advocates that exceptional learners be taught learning strategies (see Chapters 5 and 6) continuously, that skills be sequenced in such a way that learners acquire preskills before being asked to apply them, that easier skills be taught before harder ones, and that easily confused strategies and skills be separated. For the latter, Weisberg emphasizes the importance of assessing how well teachers secure and maintain attention; monitor, correct, and diagnose errors; provide practice and review; and program for generalization and transfer.
3. **The key need for exceptional learners is the need for faultless instruction.** Dever (1990) reminds us that lack of skills and low achievement are the symptoms that lead teachers to refer their learners for special education services. Assuming that all students can learn, then the focus of special education should be on designing instructional programs to help exceptional learners acquire skills. Although many of these learners will have needs for social, psychological, nutritional, and health services, the justification for special education services should be in terms of instructional needs. Moreover, skill learning should be the principal criterion by which the effectiveness of special education is judged.

4. **Set up teaching teams to help all learners.** The Edmunds School District in Lynnwood, Washington, believed that the various categorical program regulations were a major hurdle to improving the achievements of low-achieving learners and those traditionally served by special education programs (Fink, 1992). Job titles like special education teacher, chapter 1 reading teacher, or adaptive PE teacher no longer exist. In their place are learning support teams, which collaborate in regular classrooms. They provide instruction to those students making the slowest progress by offering small-group or one-to-one instruction without regard for labels or classifications. They also help to adapt the regular classroom for learners who are making rapid progress.

5. **Prepare regular education students for mainstreaming.** School districts like Winooski and Edmunds make special efforts to help regular learners work cooperatively with special students. Following suggestions by Wood and Reeves (1989), they help regular students to understand the nature of disabling conditions through special instructional units and simulation activities. One elementary school teacher prepared her class to accept a learner with physical handicaps by having them construct puppets portraying themselves. She constructed a puppet
personifying the new classmate. Students’ puppets asked the teacher’s puppet questions like “Can I help you?” and “Can you play with the rest of the class?”

We turn now to an examination of our final group of exceptional learners, the gifted and talented. We will examine issues related to their assessment, classification, and placement and provide guidelines for teaching the gifted and talented in your classroom.

Gifted and Talented Learners

A student who reads rapidly, comprehends quickly, has an exceptional memory, is imaginative and creative, has a long attention span, and is comfortable with abstract ideas is described with words like “bright,” “exceptional,” “gifted,” or “talented.” Not all schools have programs or classes for the learning needs of the gifted and talented. However, awareness is growing that gifted and talented students are an important natural resource that must be encouraged, activated, directed, and fully developed.

The size and scope of most specialized school programs, such as those for other groups of exceptional learners, make programs for the gifted look pale by comparison. But teaching the gifted remains an important objective of virtually every school. Because of their importance to your school’s objectives and because of the distribution of gifted and talented learners across every social class, community, and type of school, you should be aware of the needs of these exceptional learners. In this section we will identify the characteristics that make students gifted and talented and some of the ways you can plan your teaching to meet their learning needs.
Defining Giftedness

Because of the different ways in which gifted students are identified, the words *gifted* and *talented* often represent considerable diversity in ability and learning style. No single standard or definition of giftedness has been agreed on. However, the Gifted and Talented Act of 1978 provides a broad definition:

Gifted and talented children means children, and whenever applicable youth, who are identified at the preschool, elementary, or secondary level as possessing demonstrated or potential abilities that give evidence of high performance capability in areas such as intellectual, creative, specific academics, or leadership abilities, or in the performing and visual arts, and who by reason thereof require services or activities not ordinarily provided by the school. (Public Law 95-561, Section 902)

While a consensus exists as to which general abilities and behaviors compose giftedness, there is considerable variation in how to measure both the degree of ability and the proper combination of abilities that represent giftedness. The following are some of the most important behavioral elements from which an individual school district’s definition of giftedness is likely to be composed.

Intelligence. Among the characteristics of giftedness is general **intelligence**. We noted in Chapter 5 that ability in a specific area is more predictive of future productivity and accomplishments (in that area) than is general intelligence (Gardner & Hatch, 1989; Sternberg, 1989). Nevertheless, many formulae for defining giftedness include general as well as specific measures of intelligence. This is particularly true in the elementary grades, where it is believed that learners are still developing their specialized intellectual capacities. The emphasis on general intelligence for aiding identification of giftedness at the elementary level is also a function of the difficulty of measuring specific abilities at that age.
At the junior high and secondary levels, measures of specific intelligence are more likely to be substituted for general intelligence. The most common are verbal and mathematical abilities, scores for which can be derived from most general IQ tests. For example, a sufficiently high score on verbal intelligence could qualify a learner for gifted English but not for gifted math, and vice versa. Also, increasingly specific signs of intelligence, such as “linguistic intelligence,” or “logical-mathematical intelligence” are being substituted for general IQ, when suitable forms of assessment, such as work samples, are available.

How high must a student score on tests of general or specific intelligence to be considered gifted? This depends on the school district’s criteria. Recall from Chapter 11 that intelligence is distributed in a normal or bell-shaped distribution. Most individuals score in or near the middle of the distribution, which represents an IQ score of 100. From the shape of this curve, we also know that less than 1 percent of the population will attain an IQ score of 145 or higher, 2 to 3 percent an IQ score of 130 or higher, and approximately 16 percent an IQ score of 115 or higher.

Although these percentages vary slightly depending on the test, they are often used as a general guideline in selecting gifted learners. An IQ score of about 130 or higher generally makes one eligible for gifted instruction (Colangelo & Davis, 1991). However, because giftedness almost always is defined in conjunction with at least several other behaviors, in practice, admission to gifted programs and classes usually is far less restrictive. It is not uncommon to accept learners with scores below 130 as eligible for gifted instruction, especially when work samples, such as student portfolios indicating high degrees of specific intelligence, are available. In some cases, tested IQ may not be considered at all, in which case the learner must exhibit unusual ability in one or more other areas.
Because IQ tests rely on standard language usage that predominates in the middle class, a school district with a high concentration of lower-socioeconomic students may not require a high level of tested intelligence (at least not as measured by standardized tests). In most cases, however, specific and general intelligence are among several behaviors that constitute giftedness.

Achievement. Another behavior frequently used to determine giftedness is the learner’s achievement, usually in the area for which gifted instruction is being considered. Achievement is measured by yearly standardized tests that cover areas such as math, social studies, reading comprehension, vocabulary, and science. Cutoff scores in the form of percentile ranks are determined in each subject area, with a percentile score of 90 to 95 representing a typical cutoff. Although cutoff percentiles differ among school districts, a cutoff percentile of 90 means that a learner is eligible for gifted instruction if his or her score on the appropriate subscale of a standardized achievement test is higher than the scores of 90 percent of all those who took the test.

Creativity. In addition to intelligence and achievement, indices of creativity often are considered in selecting gifted learners. Inclusion of this behavioral dimension has broadened the definition of this type of learner. However, not all gifted learners are talented, nor are all talented learners gifted. The phrase “gifted and talented,” which is widely used, can mean talented but not gifted, gifted but not talented, mostly talented with some giftedness, mostly gifted with some talent, or both gifted and talented.

These alternative categorizations are made possible by inclusion of creativity indices in the eligibility standards. Because creative behaviors generally are considered in selecting gifted students, this type of learner more appropriately
might be called gifted and/or talented. Some observable signs of creativity used to classify a learner as gifted include:

- applying abstract principles to the solution of problems
- being curious and inquisitive
- giving uncommon or unusual responses
- showing imagination
- posing original solutions to problems
- discriminating between major and minor events
- seeing relationships among dissimilar objects.

In identifying the gifted and talented learner, the creative component usually is composed of recommendations from teachers based on these and other observable signs of creativity—for example, from a learner’s portfolio and performance assessments, (see Chapter 13), or from a rating scale used to identify creative students, such as that shown in Table 14.5. Studies with children of normal intelligence have shown a modest relationship between intelligence and creativity (Torrance, 1981).

Task Persistence. A fourth behavior sometimes used in selecting gifted and talented learners involves recommendations from teachers and other knowledgeable sources concerning a learner’s task persistence. This behavior is difficult to evaluate, but it often is considered indispensable for satisfactory achievement in a gifted and talented program, because both the quantity and the quality of the work expected are likely to be considerably above that in the regular classroom. Obviously this trait alone would not be sufficient for qualifying a learner for gifted instruction, but if such instruction is indeed geared to the
extremely able student, students will need unusual levels of task persistence to succeed. Behaviors teachers look for in determining task persistence include:

- ability to devise organized approaches to learning
- ability to concentrate on detail
- self-imposed high standards
- persistence in achieving personal goals
- willingness to evaluate own performance, and ability to do so
- sense of responsibility
- high level of energy, particularly in academic tasks.

In evaluating these behaviors, parents and teachers play the greatest role in influencing a child’s eligibility for gifted instruction. By providing testimony about the ability of a child to work hard, accept additional responsibility, and live with increased performance and grading expectations, teachers and parents can provide data that the learner can profit from gifted instruction.

Present Trends in Gifted Education

In Chapter 11 we learned that there is little evidence to support the claim that homogeneously grouped—or tracked—classes increase overall school achievement relative to heterogeneously grouped classes (Kerchoff, 1986; Slavin, 1991). However, this research excluded gifted learners, who represent the top 3 to 5 percent of the school population. Research tends to support programs and classes specifically targeted to the gifted and talented when they are allowed to pursue an accelerated curriculum. In an accelerated curriculum, gifted students can skip a grade or take advanced courses, such as advanced placement (AP) courses for college credit (Slavin, 1990a). Other gifted and talented programs that simply
enrich—or add to—existing curricula by allowing students to pursue games and simulations to promote creativity and problem solving, conduct individual investigations, or simply use computers or other technology tend to be less successful in increasing the achievement of these learners (Kulik & Kulik, 1984). Gifted and talented programs that are exclusively enrichment programs have been criticized for providing few activities that would not benefit all learners. Their primary advantage tends to be that they provide beneficial opportunities for learners who can master the regular curriculum rapidly enough to take advantage of them.

This has led to the increasing popularity of magnet schools, whose primary purpose is to provide curricula in specialized areas—such as science, language arts, and the creative arts—to a broad range of students whose interests and abilities qualify them. Some magnet schools are within a school, thereby promoting heterogeneous interactions among learners while providing advanced and accelerated coursework leading to college credit and/or early high school graduation to those who can master the curriculum more quickly. The magnet school concept, as well as other alternatives, such as advanced placement credits and early graduation, that move the gifted learner more rapidly through the school curriculum, are increasingly coming to define programs for the gifted and talented.

Instructional Strategies for Gifted and Talented Learners

You may consider one of your students gifted as a result of her previous assignment to gifted classes, or you may arrive at this conclusion from an independent assessment of the student’s intelligence, achievement, creativity, and task persistence. In either case, there are several methods for managing and teaching the gifted learner in the regular classroom. The accompanying box,
*Teaching the Gifted and Talented Learner,* suggests some of the ways you can plan your teaching to meet such students’ needs.

Summing Up

This chapter introduced you to teaching exceptional learners. Its main points were these:

- The Regular Education Initiative (REI) represents a partnership between regular and special educators in which learners with disabilities receive individualized services in the regular classroom without the requirement of labeling or special classifications.
- The need for a major, all-encompassing federal mandate for the public schools to educate the disabled learner in the least restricted environment was met by Public Law 94-142, Education for All Handicapped Children Act of 1975.
- The medical or pathological model of handicapping conditions assigned labels, such as “mentally retarded” or “learning disabled,” as a condition for receiving special education services. The model currently embraced by many professionals is a system of classification that categorizes learners on the skills they need rather than on their deficits.
- The principle of normalization states that exceptional learners are entitled to programs that allow them to experience respect and dignity. This includes regular school participation, regular class participation, skill enhancement, image enhancement, autonomy, and empowerment.
- In order for a child to be diagnosed as having mental retardation, he or she must score below 70 on an individually administered IQ test and show significant deficits on measures of achievement and adaptive behavior, between the time of conception and his or her eighteenth year.
• An alternative to the present-day system of determining retardation is to categorize learners with mental retardation based on the skills they need to learn rather than on their deficits. In this manner, mental retardation would refer to the need for specific training that would allow individuals to live in the community without supervision.

• Assessing students with learning disabilities is a complicated process that includes intelligence and achievement tests. The presence of a learning disability is confirmed by an IQ–achievement discrepancy.

• Attention deficit hyperactivity disorder (ADHD) is a behavior disorder characterized by a short attention span, impulsivity, heightened physical activity, and deficits in rule-governed behavior (such as compliance, tracking, and problem solving). Most studies conclude that 3 to 5 percent of the school-age population has ADHD, with boys nearly twice as likely as girls to have ADHD.

• The effects of ADHD can be minimized in the classroom by avoiding unnecessary demands, continuously monitoring the behavior of the ADHD learner, and maintaining a high rate of instructional feedback and reinforcement.

• Your goal for students with communications disorders is to identify them and make sure they receive appropriate instructional resources.

• Some of the criteria most often used for selecting students for gifted and talented programs are intelligence, achievement, creativity, and task persistence.
For Discussion and Practice

1. Describe some of the apparent contradictions in Mike’s behavior that make him a puzzle to his regular and special education teachers. What would be your initial reaction if Mike were in your class?

*2. In your own words describe the Regular Education Initiative and how it is likely to change your classroom in the future.

*3. Describe the concept of mainstreaming and cite some of the legislation that has brought it to prominence.

*4. Describe the purpose of an individualized educational plan (IEP). What kinds of information must it contain?

*5. Describe four possible educational environments for learners with disabilities and give some examples of the types of services that would be provided within each. Which of these environments do you feel is most relevant to your classroom?

*6. In your own words, describe the principle of normalization. What are some of the themes it represents?

*7. Explain how standardized ability and achievement tests are used in the classification of learners with certain disabilities.

*8. How would a school psychologist most likely answer a teacher’s questioning “Why is Mike (as described in this chapter) doing so poorly, when he attends school regularly and seems to be trying to learn?” What might be some additional questions that might get at the reason for Mike’s problem?

*9. What is the most widely accepted method for diagnosing mental retardation? How low must someone’s score on an IQ test be to indicate some degree of mental retardation?
10. What early signs, if taken together, might signal the onset of ADHD in an early elementary school learner?

11. What would you do in your classroom to improve the behavior of an ADHD learner?

12. What is a communication disability? What are some specific things you would look for in your learners in diagnosing a communication disability?

13. From your own experience, what are some qualities you would associate with a gifted person? How well do they match the four characteristics described in this chapter?

14. Describe one trend in gifted education that is supported by research.

Suggested Readings


those interested in the assessment, treatment, and prevention of mental retardation and social policy regarding it.


**Mainstreaming.** An approach to educating learners with developmental disabilities that seeks to maximize opportunities for interaction with nondisabled peers.

**Regular Education Initiative (REI).** The mainstreaming of learners with disabilities into regular classrooms where those learners receive individualized services.

Will children with severe learning disabilities or mental retardation be in my classroom?

**Figure 14.1**
The continuum of special education services.
**Public Law 94-142.** The Education for All Handicapped Children Act of 1975, which guaranteed that all children who needed special education would receive a free individualized education plan, assured instructional fairness for learners with disabilities, established procedural due process, and provided federal funding to meet the provisions of the law.

**Individualized education plan (IEP).** A written educational plan, revised annually, that provides a detailed road map of the kinds of services a child will receive and how those services will be evaluated.

**Least restrictive environment.** According to Public Law 94-142, the environment that maintains “the greatest degree of freedom, self-determination, dignity, and integrity of body, mind, and spirit for the individual while he or she participates in treatment or receives services.”

What instructional arrangements are needed to meet the needs of both exceptional and nonexceptional learners?

**Figure 14.2**
Alternative educational environments for learners with disabilities.

**Normalization.** The principle that learners are entitled to programs that allow them to experience the respect and dignity to which any person in their culture or society is entitled.

**Figure 14.3**
Dimensions of normalization.
How can schools provide a normal school environment for children with disabilities?

Learners with disabilities should learn in settings that allow them to experience age-appropriate peer relationships and to be treated with dignity and respect.

What specific skills will I need for teaching exceptional learners with mental retardation?

**Mental retardation.** A developmental disability characterized by significantly below-average intellectual functioning and significantly below-average adaptive behavior.

**Adaptive behavior.** Skills that most people learn without formal instruction, such as personal care, feeding, and social skills.

Table 14.1

<table>
<thead>
<tr>
<th><strong>IQ Range</strong></th>
<th><strong>Severity</strong></th>
<th><strong>Expectations</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>50 or 55–70</td>
<td>Mild</td>
<td>Educable—can learn basic academic skills</td>
</tr>
<tr>
<td>30–49</td>
<td>Moderate</td>
<td>Can be trained to learn basic daily living skills</td>
</tr>
<tr>
<td>20–29</td>
<td>Severe</td>
<td>Can learn some basic living skills but never be fully independent</td>
</tr>
<tr>
<td>Under 20</td>
<td>Profound</td>
<td>Will always require full-time care and constant supervision</td>
</tr>
</tbody>
</table>
Table 14.2

**Classification of Mental Retardation Used in Most School Settings**

<table>
<thead>
<tr>
<th>IQ Range</th>
<th>Severity</th>
<th>Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>50–70</td>
<td>Educable</td>
<td>Can learn some basic academic skills</td>
</tr>
<tr>
<td>30–49</td>
<td>Trainable</td>
<td>Can learn self-help skills and routine work skills</td>
</tr>
<tr>
<td>Below 30</td>
<td>Severe</td>
<td>Will always require full-time supervision and care</td>
</tr>
</tbody>
</table>

Focus on

Anne M. Donnellan, University of Wisconsin-Madison

After receiving a psychology degree from Queens College in 1969, I moved to San Diego, no job prospect in sight, but armed with optimism born of ignorance and a knowledge of operant conditioning. I opened a preschool for children labeled “autistic” in 1970 when almost nothing was known about their learning. I began a relentless search for information and understanding that still continues. Two major convictions drove me forward in this research: Then and now people with communication and behavior challenges rarely receive the respect and care that are every citizen’s right, and little is truly “known” about these individuals compared to what is presumed or assumed to be true. That my work on analyzing the communicative functions of behavior is heralded as groundbreaking leaves me feeling both honored and sad. People with disabilities ought not to have had to prove they had a need and desire to communicate.
Communication and relationships are essential to being human. In the late sixties behavioral control techniques were being researched in laboratories as political freedom was being sought on the streets and campuses. The interplay of these concepts affected the direction of my research. These experiences left me ever more committed to the belief that both power and responsibility lie within the individual rather than in the institution or a technology.

Growing up in an immigrant family I learned vivid firsthand accounts of the evils of colonialism which shaped my philosophy regarding hierarchies in both personal and cultural ways, and led me to a sharper perception of the perspectives of people whose lives are controlled by others. It remains a regret that my first contribution to the field—demonstrating and arguing that the use of coercion to control behaviors of vulnerable people who cannot give clear consent is unnecessary, inherently dangerous, wrong and inevitably doomed to fail—continues to be a subject of controversy. Aversive control in as well as outside the classroom ought to be relegated to an historical footnote.

Presently my research focuses on the impact of movement disturbances on learners’ ability to communicate. It is becoming clear to me that our construct of retardation has been based on some assumptions that cannot be supported by fact, and that we have only begun to recognize the fundamental importance of communication to the demonstration of competence. A century of mental mismeasurement misled us into believing that there are people whose minds fail to develop. Instead, Vygotsky’s notion that a child with an impediment does not fail to develop but develops differently seems more apt.
As evidence mounts of unsuspected competencies masked by communication problems, teachers will find themselves on the front lines in another battle for civil rights—the right not to remain silent, and the right not to be excluded from full citizenship because of policies and regulations that deny access to experience and expression to those learners who must communicate in augmented ways. Research in communication is undergoing a veritable explosion today. Teachers need to be aware of current research and methods for teaching a population of special learners whose disabilities require them to communicate in nontraditional ways. But, also, a lesson in history for those of us who support an empirical approach to knowledge is that we should examine our assumptions as carefully as we review our data.

Table 14.3

IQ and Reading Data from the University of Washington Experimental Education Unit Project: Data from the Du Vergeas' Follow-Up Study

<table>
<thead>
<tr>
<th>Child</th>
<th>Age</th>
<th>IQ</th>
<th>in Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14.10</td>
<td>43</td>
<td>2.2</td>
</tr>
<tr>
<td>2</td>
<td>14.3</td>
<td>59</td>
<td>4.1</td>
</tr>
<tr>
<td>3</td>
<td>15.0</td>
<td>45</td>
<td>3.8</td>
</tr>
<tr>
<td>4</td>
<td>13.6</td>
<td>52</td>
<td>6.9</td>
</tr>
<tr>
<td>5</td>
<td>14.8</td>
<td>46</td>
<td>2.5</td>
</tr>
<tr>
<td>6</td>
<td>14.3</td>
<td>53</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Learners with mental retardation can learn a variety of skills that eventually allow them to achieve independence from caregiver supervision. Carefully designed instruction and training are the primary needs of persons with mental retardation.

**Learning disability.** Any learning disorder presumed to be the cause of a learner achieving significantly below what his or her IQ predicts.

Applying Your Knowledge:

**Meeting the Learning Needs of Students with Mental Retardation**

**Principle 1. Instruction Is the Central Need of Individuals with Mental Retardation.** Individual educational programs for individuals with mental retardation, regardless of the degree of retardation, should primarily focus on instructional goals and objectives—not on medical, psychological, or social goals and service objectives.

The failure of learners with mental retardation to acquire skills should lead to improved instructional programs. Weisberg (1990) makes the point that learners with mental retardation primarily require efficient and effective educational programs and instructional procedures. He stresses that the expert practice of instruction for learners with mental retardation is no different from that for learners with normal abilities, except that it must be practiced with far greater precision. Instructional programs for students with mental retardation should focus on:

- maintaining learner attention
• introducing concepts in a logical sequence
• using a variety of examples
• providing immediate feedback.

**Principle 2. The Goal of All Instruction Should Be Independence.** Dever proposes the following definition of independence:

Independence is exhibiting behavior patterns appropriate to the behavior settings normally frequented by others of the individual’s age and social status in such a manner that the individual is not seen as requiring assistance because of his/her behavior. (Dever, 1990, p. 151)

Thus the goals of instructional programs for those with mental retardation should focus on development of the skills that enable these persons to meet this definition of independence. Such programs should allow students to:
• go where their peers go
• participate in ordinary school activities
• fit in with other learners in terms of dress and behavior.

**Principle 3. The Amount and Intensity of Instruction Required to Make Learners Independent Should Be the Basis by Which Severity of Mental Retardation Is Defined.** The determinant of the level of retardation should be the amount of instructional effort required to eliminate the term “retarded” from the words we use to describe a person. Therefore, instructional programs should:
• refer to learners by functional abilities rather than IQ level
• keep records of time spent and materials used for each learner.
Principle 4. Independence Should Be the Aim of Instruction for All Learners with Mental Retardation, Despite the Fact That Some Will Never Achieve It.

Decisions not to teach skills to certain individuals with mental retardation are often based on notions of “inability to learn.” We now know that such individuals can learn. Nevertheless, we also know that some individuals with mental retardation are disabled to such a degree that they will always require some level of supervision. When schools decide not to teach some things to some learners, such decisions should be based on:

- available resources
- possible benefit to the learners
- the wishes of parents and learners.

Principle 5. Instructional Priority Should Be Assigned to Communication Training. Children with mental retardation have significant communication deficits. They must learn to communicate if they are to gain access to desired activities and objects, get a teacher’s attention, or make their needs and desires known (Donnellan, LaVigna, Negri-Shoultz, & Fassbender, 1988; Donnellan, Mirenda, Mesaros, & Fassbender, 1984).

Durand (1988, 1990) demonstrated that behaviors such as aggression, tantrums, throwing objects, and self-injury become more frequent and more intense as the tasks given to learners with mental retardation get more difficult. When simpler tasks are substituted, behavior problems decrease significantly. In other words, problem behaviors can serve a communicative function. Simply punishing or ignoring these behaviors is thus ineffective. The following specific strategies (based on Donnellan et al., 1988, and the techniques discussed in Chapter 9) will help learners expand their communication skills:

- teach students appropriate ways to make their needs known
- reinforce only appropriate behavior
• seek medical or psychological help for learners who need relief of pain or other symptoms.

Before an educational program is developed for learners with disabilities, learners first receive a comprehensive individualized assessment in all relevant intellectual, physical, and personal-social domains.

How can I explain to parents why their learning disabled child isn’t achieving up to potential?

**IQ–achievement discrepancy.** An achievement level different from what would be predicted given a learner’s score on an ability test.

**Figure 14.4**
Percentile ranks indicating that the child is performing consistently with his or her abilities. No learning disability is present.

**Figure 14.]5**
Percentile ranks showing an IQ–achievement discrepancy. A specific learning disability may be present.

**Attention deficit hyperactivity disorder (ADHD).** A disorder that has its onset before age 7, lasts at least six months, and is characterized by an inability to sustain attention, impulsivity, hyperactivity, and deficits in rule-governed behavior.
Table 14.4

Diagnostic Criteria for Attention-Deficit/Hyperactivity Disorder

I. Either (A) or (B):

A. six (or more) of the following symptoms of inattention have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:

*Inattention*

1. often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities
2. often has difficulty sustaining attention in tasks or play activities
3. often does not seem to listen when spoken to directly
4. often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions)
5. often has difficulty organizing tasks and activities
6. often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework)
7. often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools)
8. is often easily distracted by extraneous stimuli
9. is often forgetful in daily activities
B. six (or more) of the following symptoms of *hyperactivity-impulsivity* have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:

*Hyperactivity*
1. often fidgets with hands or feet or squirms in seat
2. often leaves seat in classroom or in other situations in which remaining seated is expected
3. often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness)
4. often has difficulty playing or engaging in leisure activities quietly
5. is often “on the go” or often acts as if “driven by a motor”
6. often talks excessively

*Impulsivity*
7. often blurts out answers before questions have been completed
8. often has difficulty awaiting turn
9. often interrupts or intrudes on others (e.g., butts into conversations or games)

II. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age 7 years.

III. Some impairment from the symptoms is present in two or more settings (e.g., at school [or work] and at home).

IV. There must be clear evidence of clinically significant impairment in social, academic, or occupational functioning.
V. The symptoms do not occur exclusively during the course of a Pervasive Developmental Disorder, Schizophrenia, or other Psychotic Disorder and are not better accounted for by another mental disorder (e.g., Mood Disorder, Anxiety Disorder, Dissociative Disorder, or a Personality Disorder).


How can I recognize ADHD in a learner?

Attention deficit. Difficulty staying with or completing an activity over a period of time; becoming easily bored and uninterested in activities relative to others.

Impulsivity. A failure to stop and think before responding to a task.

Research suggests that learners with ADHD have difficulty sustaining attention to tasks and learn better in environments that provide immediate consequences for behavior.

Hyperactivity. A greatly increased rate of activity and/or restlessness.
Applying Your Knowledge:

Teaching Learners with ADHD

**Minimize Extraneous Demands.** The more rules, demands, and requests in a classroom, the more likely the symptoms of ADHD will appear (Barkley, 1990). Children with ADHD learn best in classrooms where there are only necessary rules, where children are allowed frequent choices, and where the teacher does not continually make unnecessary demands.

**Provide Continuous Monitoring.** Once instructions are given to ADHD children, attention deficits are less likely to occur if the teacher monitors what they are doing and repeats instructions when called for (Douglas, 1980, 1983). A key symptom of ADHD is sustained noncompliance with instructions. This problem can be minimized if, after giving instructions, the teacher continuously monitors the children’s activities.

**Maintain a High Rate of Instructional Feedback and Reinforcement.** Barkley (1990) maintains that ADHD learners have deficits in rule-governed behavior and are better controlled by consequences of behavior than by antecedents. His research and that of others (Douglas & Parry, 1983; O’Leary, 1980; Wielkiewicz, 1992) reports sizable reductions in ADHD symptoms in classrooms where there are high rates of both feedback on performance and positive reinforcement.

What can I do in my classroom to help learners with ADHD?

How can I identify and assist learners with physical or communication disabilities?

**Communication disability.** An impairment that involves speech, language, vision, or hearing.
**Visual disability.** An inability to see well that cannot be corrected with eyeglasses.

**Hearing disability.** An inability to hear well; may range from mild disability to total deafness.

**Gifted and talented.** Children and youth who are identified as possessing abilities that offer evidence of high performance in areas such as intelligence, achievement, creativity, and task persistence.

A variety of abilities should be included under the definition of gifted in addition to intellectual abilities. Among them are creative abilities, leadership abilities, social aptitudes, and specific skills in the cultural arts.

**Intelligence.** A global trait signifying an individual’s overall ability to adapt to and succeed in his or her environment.

**Task persistence.** An attribute usually determined by such characteristics as a learner’s ability to concentrate on detail, impose high standards on herself or himself, persist in achieving personal goals, evaluate personal performance, and devote a high level of energy to academic tasks.
Table 14.5

Rating Scale for Identifying Creative Students

<table>
<thead>
<tr>
<th>Trait</th>
<th>Rating (Circle One Number)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ability to concentrate</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>2. Ability to defer judgment</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. Above-average IQ</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4. Adaptability</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5. Aesthetic appreciation</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6. Attraction to the complex and mysterious</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7. Curiosity</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8. Delight in beauty of theory</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>9. Delight in invention for its own sake</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>10. Desire to share products and ideas</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>11. Eagerness to resolve disorder</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>12. Extensive knowledge background</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>13. Flexibility</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>14. Good memory, attention to detail</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>15. High energy level, enthusiasm</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>16. Humor (perhaps bizarre)</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>17. Imagination, insight</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>18. Independence</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>19. Internal locus of control and evaluation</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>20. Inventiveness</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
## Rating (Circle One Number)*

<table>
<thead>
<tr>
<th>Trait</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Lack of tolerance for boredom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Need for supportive climate</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Nonconformism</td>
<td></td>
<td></td>
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<tr>
<td>24. Openness to experience</td>
<td></td>
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<tr>
<td>25. Playfulness</td>
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<tr>
<td>26. Willingness to take risks</td>
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<tr>
<td>27. Self-confidence</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>28. Sense of identity as originator</td>
<td></td>
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<td></td>
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<tr>
<td>29. Sense of mission</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Sensitivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. Ability to see that solutions generate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>new problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. Spontaneity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. Commitment to task</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. Tolerance for ambiguity and conflict</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. Willingness to face social ostracism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. Willingness to daydream and fantasize</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Rating Scale: 1 Not present; 2 Minimally present; 3 Somewhat present; 4 Moderately present; 5 Strongly present.

**Source:** From Sattler, 1988.

**Accelerated curriculum.** Programs for the gifted and talented that offer advanced courses and/or grade skipping.
Applying Your Knowledge:

Teaching the Gifted and Talented Learner

**Pose Challenging Problems.** Gifted learners benefit from the freedom to independently explore issues and ideas of concern to them. You can give them this opportunity by posing challenging questions and problems. Focus the problem so the learner must make key decisions about what is important for a solution (e.g., what references, materials, documents, and equipment will be needed). This feeling of responsibility and control over the inquiry is essential if the learner is to see it as truly his or her own. Throughout the inquiry, let learners feel your support, encouragement, and availability to provide additional references and materials relevant to the directions they wish to explore.

**Plan Instruction Involving Group Activities.** Gifted students are among the most capable of picking up ideas from others and creating from them new and unusual variations. Brainstorming sessions, group discussions, panels, peer interviews, teams, and debates are among the ways you can involve gifted learners with the whole class. When carefully organized, these activities can create a “snowballing” of ideas that can turn initially rough ideas about a problem into polished and elegant solutions in which the whole class participates.
**Include Real-Life Problems that Require Problem Solving.** Let your gifted students become actual investigators in solving real-world dilemmas in a content area. This will force them to place newly acquired knowledge and understandings in a practical perspective and to increase the problem-solving challenge. Ask them pointed questions that do not have readily available answers: “How would you reduce world tensions among the superpowers?” “How would you eliminate acid rain?” “How could we harvest the seas?” “How could life be sustained on the moon?” Make clear that their inquiry into the nature of a problem should incorporate the same methods used by the professionals—scientists, engineers, political scientists—who must answer these questions in daily life. Require actual library or laboratory research that produces not just opinions, but objective evidence and a product or answer leading to a possible solution.

**Draw Out Knowledge and Understanding.** Since gifted learners tend to be verbally fluent, it can be difficult to determine whether an articulate response substitutes superficiality and glibness for an in-depth understanding. Such responses may even be purposefully composed to intimidate the listener, whether teacher or classmate. Testing and questioning the gifted, therefore, should draw out the knowledge and understanding that lie within, to separate superficiality from in-depth understanding. Use authentic or performance assessments (Chapter 13) to make your gifted learners go beyond knowing and remembering facts, to explain the reasons behind their answers, to put together the known facts into something new, to judge the outcome of their own inquiry, and to create a product that results from these activities.

What activities and experiences will enhance the educational opportunities of a gifted or talented learner?
Questions marked with an asterisk are answered in the appendix.