CHAPTER 4

Normal and Exceptional Development

OBJECTIVES

After reading this chapter, you should be able to:

✔ describe types of children referred to as typical, atypical, developmentally delayed, at risk, and gifted.
✔ provide three reasons to justify this statement: To work effectively with children who have developmental problems or special talents, teachers need a thorough knowledge of normal growth and development.
✔ distinguish between developmental sequences and developmental milestones; give examples of each in motor, social, cognitive, and language development.
✔ describe biological and environmental factors that can put infants and young children at developmental risk.
✔ define giftedness in young children and explain the factors that contribute to giftedness.

KEY TERMS

at risk
attachment process
atypical development
autonomy
bodily kinesthetic
cardiac problem
chromosomal disorders
developmental continuum
developmental milestones
dysfluency
exceptional children
neural
neuroscientists
normal (typical) development
pathologist
people-first language
reciprocity
resilience
respiratory distress syndrome (RDS)
savant
sensorimotor
synapse
vulnerability
INTRODUCTION

Jeremy is by far the biggest boy in the first grade. He looks like an eight-year-old, yet behaves like the young six-year-old that he is.

Aki, by age three, was fluent in three languages; by age five, she was reading words and phrases in two languages. She was also producing clay figures and paintings more typical of a second grader than a preschooler.

The twins Jennifer and Jeffrey began talking at eighteen months. At the same time, they developed a private language of their own, incomprehensible to others.

Each of the children in the introduction can be viewed as normal, yet each is also atypical, different from others of the same age. This is true of all young children: alike in many ways, different in others. Children with differences that alter their development often are referred to as “exceptional” or “atypical.” The many ways that exceptional children are like other children tend to be overlooked.

Such perceptions are undergoing change, however, especially in light of recent findings of developmental pathologists (Cohen & Cicchetti, 2006). They argue that both typical and atypical development emerge from the same basic processes, that we need to learn how to respond to the diverging developmental pathways among children of essentially the same age. When working with infants and children, one must keep two significant principles in mind:

1. First, a child is above all else a child, regardless of how smart or delayed or troubled that child may be.
2. Second, every child is unique, different, and therefore exceptional in one or more ways.

In small, close-knit societies, the fact that some children are different is seldom an issue. Not so in societies like ours. Historically, the philosophy has been to keep these individuals apart from the rest of society, to exclude them from most mainstream experiences. Times have changed, however, as we discussed in Section I of this text.

Even so, the underlying issue of distinguishing between those children said to be developing normally and those who are developing atypically continues to plague us. Developmental specialists, teachers, administrators, and policymakers interpret these concepts differently. Definitions of normalcy and exceptionality vary also among physicians, psychologists, and all other professionals associated with the growth and development of young children (Bee & Boyd, 2009).

Lawyers, for example, use their own guidelines to define blindness, while educators use different guidelines. There is little consensus across professions as to which individuals are to be classified as developmentally disabled, who are the gifted and talented, or who are truly normal. The result is confusion for
everyone. Confusion increases when everyday words take on connotations. For example, it is argued that *typical* is a more appropriate word than *normal* when describing development. In this text, those common words and others, such as *disabled* and *exceptional*, are used interchangeably.

This chapter will provide practical definitions of typical development and atypical development. Typical development will be discussed first. The rationale is obvious: To work effectively with infants and children with atypical development, teachers must have a thorough knowledge of normal growth and development. The main goal of all early childhood programs should be the improvement of each child’s overall development. A parallel goal is the prevention or lessening of developmental problems. Thurman and Widerstrom (1990) advise: “To improve the development of children with special needs we must understand normal development, including the problems that may occur in normal developmental patterns” (p. 11).

**WHAT IS NORMAL, OR TYPICAL, DEVELOPMENT?**

*Normal,* or *typical,* development implies an ongoing process of growing, changing, and acquiring a range of complex skills. Beginning in earliest infancy, the process moves along a *developmental continuum* according to a predictable pattern common to most children of the same age. However, the term *normal development* has long been the subject of dispute. What is normal for one child may be quite abnormal for another. For example, many teachers expect children to make eye contact when spoken to, perhaps failing to understand that in the child’s own community, children are considered disrespectful if they look directly at the adult who is speaking to them.
In addition to culturally defined differences, there are individual differences among children. No two children grow and develop at the same rate, even within the same family. Some children walk at eight months, others not until eighteen months. Most children begin walking somewhere between those ages. All children within this range, and even a little on either side of it, are normal with respect to walking. Typical development shows great variation and significant differences among children.

**Developmental Sequences**

Despite these variations, certain principles serve as guidelines. For example, sequences of normal development are predictable. These predictions are based on detailed observations of hundreds of children at various ages. Early childhood teachers (and experienced parents) know that each typically developing child can be expected to progress, step by step, toward mastery of each developmental skill in every area of development.

In this process, individual differences emerge. Each child will accomplish the specific steps, but will do so at his or her own rate. Furthermore, no matter how quickly or slowly a child is developing, each preceding step is usually accomplished before practice on the next begins: Most babies roll over before they sit, sit before they stand, and stand before they walk.

Exceptions are common. Most infants crawl before they walk, but some do not; and a few move about by sitting up and hitching forward with one foot. Others lie flat on their back and push with both feet. Such methods of getting about are appropriate, though atypical. Rarely is developmental progress smooth; irregularities and slowdowns are common. Progress in one skill area may actually slow or stop while the child is trying to learn a new skill in a different area of development. For example, the infant who talked early may quit talking for a time while learning to walk. Some children even regress—fall back—under certain conditions (the three-year-old who temporarily loses bladder control with the arrival of a new baby).

**Developmental Milestones**

Regardless of the many variations, children acquire specific skills in a fairly predictable order. These significant junctures often are referred to as developmental milestones. A child who is seriously delayed in reaching one or more of these milestones needs attention from his or her pediatrician and possibly further screening and assessment depending on the significance of the delay.

A brief overview of common milestones follows. More detailed profiles are given in the chapters on physical, cognitive, language, and social development. For a comprehensive account of developmental areas, see Appendix B for a skill profile for age 0-72 months or see Allen and Marotz (2009).

**Infancy**

It was once thought that eating and sleeping were about all the newborn could do. Little or nothing was thought to be going on in the brain. Research has
Within the first days—even hours—of birth, experience begins to influence development. Many of today’s neuroscientists report that stimulation from even the earliest experiences dramatically increases the number of synapses that develop in the brain. This neural activity enables the child to engage in increasingly complex learning, a signal that healthy development is in progress. From everyday observation of very young babies, we also know how quickly they begin to react to their immediate surroundings. They follow a moving object with their eyes. They turn their heads in response to a loud noise. They make a face if they taste something unpleasant. They synchronize their body movements in response to changes in the voice of the person speaking to them. For example, when the voice speeds up, the baby’s arms and legs flail about rapidly; when the voice slows, the baby’s movements also slow. From earliest infancy, the human face (especially that of the mother or major caregiver) is of great interest to the baby. A very young infant tries to imitate facial expressions: sticking out its tongue, pursing its lips, opening its eyes wider when the caregiver makes such faces (Meltzoff & Moore, 1983, 1997).

Between four and ten weeks, babies begin social or responsive smiling. The social smile is a major developmental milestone. Absence of social smiling in a twelve- to sixteen-week-old may signal a potentially serious developmental problem.

At two or three months, the infant begins to make social sounds. These sounds, mostly cooing and gurgling, are labeled “social” for two reasons. First, they are made in response to the voice of the person talking to the baby. Second, when initiated by the infant, the sounds may capture and hold the attention of a nearby adult, who usually responds vocally. Thus, the infant learns that he or she can make things happen and can get people to respond. Such reciprocity,

neuroscientists
those who study the brain and the nervous system
synapse
the contact point between two nerve cells in the brain and nervous system
neural
involving the nerves and nervous system
reciprocity
the “give-and-take” interactions between a child and others
or “give and take,” is essential to the attachment process. It also is a major step toward language and social development.

Reciprocity between the infant and others demonstrates the basic need of infants to have responsive caregivers if they are to develop well. Given a responsive environment, the infant soon is smiling readily and discovers, with delight, that most people smile back. Infants three and four months old also are smiling at objects and even at their own noises and actions.

In addition to smiling, developing infants reach for an object and sometimes manage—usually accidentally—to touch it or make it move. Reaching is a significant milestone, a sign that eye–hand coordination is developing. By five or six months, most infants show trunk control and can roll over. At seven months, many are sitting, some with support, others without. At nine months, a few infants are walking; many more are crawling or showing readiness to crawl.

Cruising (walking while holding on to a low table or other piece of furniture) comes next. Walking often begins at about twelve months, though there are great differences among children. Beginning to walk anywhere between eight and eighteen to twenty months is considered typical.

The baby’s cognitive development is closely interwoven with motor development. Most child development textbooks present motor, cognitive, social, and language development separately. In real life, however, all developmental areas are interrelated. In early years, language, cognitive, and social skills are intertwined and mutually supportive. Furthermore, all three depend on sound motor skills.

The importance of motor skills to healthy development cannot be overemphasized. Piaget began to analyze this relationship more than fifty years ago. He described the first twenty-four months of life as the sensorimotor stage: the infant learns by poking, patting, touching, banging, and tasting whatever comes within reach. The older infant is on the move every waking moment, crawling and toddling about, and so experiencing the environment. This early exploring is the foundation for sound cognitive development and intellectual functioning.

attachment process
building positive and trusting bonds between individuals, usually infant and parent or major caregiver

sensorimotor
Piaget’s term for the first major stage of cognitive development from birth to about eighteen months; infant moves from reflexive to voluntary behavior

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Toddlerhood
Between eighteen and thirty months, most children are moving about freely. Walking becomes well established during these months, and many children are running skillfully. Most learn to climb stairs but do not yet use alternating feet. Toilet training may or may not be accomplished. Toddlers also work hard at trying to feed and undress themselves, with varying degrees of success.

Toddlers are usually friendly toward others, eager for adult attention, and are becoming less wary of strangers. They are curious about people and whatever is going on, and so must be watched constantly. Property rights come into play; many a red-faced toddler can be heard shrieking, “Mine!” while clutching a chosen toy. Toddlers tend to play alone, although they often watch other children intently and imitate them.

The latter part of toddlerhood can become a major challenge for both child and parent or caregiver. The two-year-old’s continuing dependence on adults conflicts with a developmental drive for independence. The result? The toddler’s unwillingness to accept limits may lead to tantrums and to the adult’s viewing the child as “impossible.” Cooperation occurs more frequently as the child develops functional language and basic reasoning skills.

The preschool years
Between three and six years of age, basic motor skills are perfected. The typical child learns to run, jump, and climb. Skill in manipulating objects and tools such as paintbrushes, pencils, and crayons grows day by day.

Creativity and imagination color everything from role playing to telling tall tales. Vocabulary and concept development occur rapidly. The result is a dramatic increase in the ability to express ideas, make judgments, solve problems, and plan ahead. All of these combine to allow the child increasing breadth of movement and thought. This, in turn, leads to increasing independence, and yet, preschool children tend to frequently touch base with important adults.

During the preschool years physical growth is slower, resulting in a reduced need for food. Many parents and caregivers are not aware of this biological shift. They think the child is not well or has become a “picky” eater. They may try to force the child to eat more than he or she needs. Serious conflict can result, creating an unhappy effect on the parent–child or caregiver–child relationship.

Language skills are developing rapidly during the preschool years. It is not unusual, however, for children who were talking well to become less fluent for a while. They may go through a period of stammering or stuttering—a normal developmental irregularity. Usually, this early dysfluency disappears unless there is adult pressure to “slow down” or “say it right.” Most children are talking freely by six years of age. At this time, a vocabulary of 2,500 words is not uncommon, with the child using most of the grammatical forms of the native language.

The preschool child is beginning to understand that he or she is a separate person with a separate identity. This sense of self-directing individuality is the essence of autonomy. Toward the end of the preschool years, most children are sharing and taking turns (at least some of the time). Children who have been in group care much of their lives may demonstrate these social skills considerably earlier.

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dysfluency
hesitations, repetitions, omissions, or extra sounds in speech patterns

autonomy
self-direction; independence
preschool children usually are beginning to show empathy, that is, an understanding of how another person feels. The notion of “best friends” is taking hold, too.

The primary-school years

Children at this stage are becoming amazingly competent. They can take care of most of their personal needs: dressing, bathing, eating, getting ready for bed, even grooming. Dawdling is still an issue between many a parent and child. In most cases, the dawdling lessens with a developing awareness of time and the consequences of being late. In fact, fear of being late promotes a general anxiety about school in many children.

Learning to read is the major developmental task. It requires:

- learning to sit still for longer periods of time.
- learning to listen attentively.
- learning both to recognize and discriminate (tell the difference between) letter sounds and letter shapes.

Skills in manipulating objects such as paint brushes, pencils, markers, and crayons improve every day during the preschool years.

Circle time is the most challenging time of the preschool day for Lisa, a recent college graduate who is new to early childhood education. She struggles with keeping the children engaged and sitting cross legged for the thirty-minute daily circle. Some of the preschoolers roll around on the floor, while others can’t keep their hands to themselves. Based upon what you know about typical child development, what suggestions would you give Lisa regarding circle time?
Reversal of letter shapes and sounds is a common irregularity. It tends to disappear spontaneously, although a few children may need special help. What is remarkable is that most children do acquire complex literacy skills and are soon taking their ability to read for granted.

Having friends and being sought out as a friend is important. “Best friends” are seen as desirable but tend to come and go easily. By seven or eight, most children enjoy group and team activities. Again, allegiances may be short-lived.

What about a child who is developing typically in some areas but has a delay or disability in another area? What about children with physical problems who cannot walk, let alone run and jump and climb? Many of these children are developing typically otherwise, and they may even be gifted in language, intellectual, or artistic development. Let us next look at these children and others with developmental differences.

**WHAT IS ATYPICAL OR EXCEPTIONAL DEVELOPMENT?**

Classifying children as “exceptional,” or “developing atypically,” presents ongoing problems. At one time, the term exceptional was all-inclusive, referring to children with the mildest of speech differences to those who were outstandingly brilliant (but different) as in the case of so-called savants.

In the 1960s, children who were noticeably different—either physically or mentally—were referred to as “crippled” or “retarded.” Society provided “homes for crippled children” and “institutions for the feeble-minded”—common terms in those days. Years later, terms that covered a broader but more individualized range of disabilities came into use. Behavior disordered, learning disabled, mentally deficient, along with handicapped, deviant, and so on, were common. Individual identities were locked into their differences: he’s Down syndrome; she’s autistic. Now we vigorously oppose such terms when describing a given individual.

For example, statements such as “She is a learning-disabled child” highlight the problem rather than the child. By contrast, “The child has a learning disability” puts the focus on the child. If we put the person before the disability, our statements define what the person has, not what the person is (Snow, 2009). This word order and terminology are referred to as **people-first language**.

**The people-first approach** highlights a fundamental assumption of inclusion: All children are children and our practices should reflect that reality (Wolery & Wilbers, 1994). Figure 4-1 provides examples of how to use person-first language (Snow, 2009). It should be noted, however, that the appropriateness of terms and the way individuals are described will continue to change over time. It is important for individuals in the field of education to remain aware of such changes throughout their career.

**Developmental Disabilities and Delays**

Early childhood educators were among the first to argue against the word handicapped. The term was virtually written out of the early intervention segment
of PL 99–457. In its stead, the law uses terms such as *developmental delay* and *developmental disability*. The change in terminology promotes the concept that young children with atypical characteristics resemble all children in their *potential* for growth and development. It also emphasizes that many young children who are atypical in one way or another resemble other children more than they differ from them. With few exceptions, all children go through the same sequence of development, although at different rates.

Many infants and young children who start out with serious delays overcome them if they receive appropriate early intervention services. Low-birth-weight infants, who may also be premature, are a good example. With adequate care, by age five most are looking like and performing like all other five-year-olds.

### Examples of People First Language

*BY KATHIE SNOW; VISIT WWW.DISABILITYISNATURAL.COM TO SEE THE COMPLETE ARTICLE*

Remember: a disability descriptor is simply a medical diagnosis; People First Language respectfully puts the person before the disability; and a person with a disability is more like people without disabilities than different!

**SAY:**
- People with disabilities.
- He has a cognitive disability/diagnosis.
- She has autism (or a diagnosis of...).
- He has Down syndrome (or a diagnosis of...).
- She has a learning disability (diagnosis).
- He has a physical disability (diagnosis).
- She's of short stature/she's a little person.
- He has a mental health condition/diagnosis.
- She uses a wheelchair/mobility chair.
- He receives special ed services.
- She has a developmental delay.
- Children without disabilities.
- Communicates with her eyes/device/etc.
- Customer
- Congenital disability
- Brain injury
- Accessible parking, hotel room, etc.
- She needs... or she uses...

**INSTEAD OF:**
- The handicapped or disabled.
- He's mentally retarded.
- She's autistic.
- He's Down's; a mongoloid.
- She's learning disabled.
- He's a quadriplegic/is crippled.
- She's a dwarf/midget.
- He's emotionally disturbed/mentally ill.
- She's confined to/is wheelchair bound.
- He's in special ed.
- She's developmentally delayed.
- Normal or healthy kids.
- Is non-verbal.
- Client, consumer, recipient, etc.
- Birth defect
- Brain damaged
- Handicapped parking, hotel room, etc.
- She has problems with...has special needs.

*Keep thinking—there are many other descriptors we need to change!*

Excerpted from Kathie’s People First Language article, available at www.disabilityisnatural.com.
Some impairments, even though serious, may never interfere with developmental progress. The condition may continue, but the child and family find ways to compensate and to function normally despite it.

_Bret was born with one short arm and malformed hand. At preschool, Bret could do as well as any other child with puzzles, form boards, or block building. In kindergarten, he was among the first to learn to tie shoes. By seventh grade, he was a champion soccer player._

The diagnosis of _developmental delay_ varies from profession to profession. Delay, as used in this text, is said to exist when _a child is performing like a child of a much younger age who is typically developing_, as in the following example.

_As a three-year-old, Josh was just beginning to put two-word sentences together. However, he had moved steadily through the earlier speech and language milestones. Clinical assessment indicated a language delay: language would continue to develop, but on a somewhat later schedule than was typical. This prediction proved correct. By fourth grade, Josh was using language as ably as his classmates._

**CHILDREN AT DEVELOPMENTAL RISK**

Many infants and young children are said to be _at risk_ or _at high risk_. This means there is reason to believe serious problems are likely to develop. An important fact needs to be emphasized, however: Many infants and children at risk for developmental problems _have the potential for healthy development_.

Many young children who start out with serious delays overcome them if they receive appropriate services.
They have a good chance of overcoming initial setbacks with early intervention services, including medical treatment, ample nurturance, and family support.

Although risk factors often occur together, they can be grouped into two major categories: biological and environmental. Infants and children whose systems have undergone accident, injury, or severe stress suffer biological risk factors. The incident may have occurred before, during, or following birth. For example, a newborn with respiratory distress syndrome (RDS) is at risk but likely to recover if given immediate treatment. Similarly, premature birth or low birth weight (5.12 pounds/2500 grams or less) are risk factors that require immediate, intensive intervention. Without such intervention, many infants suffer severe developmental problems.

Other biological risk factors include genetic and chromosomal disorders, such as Down syndrome and Fragile X syndrome. Heart defects are present in about 45 percent of infants born with Down syndrome. Without correction, many of these children will die of cardiac problems during infancy or early childhood. Biological risk factors will be discussed further in Chapter 5.

The term environmental risk factors refers to things in the child’s everyday world that have a negative effect on development. Poverty produces many kinds of risk conditions. However, poverty is not the only environmental situation that puts infants and young children at risk. Other conditions include child abuse and neglect, unfit living conditions created by addicted or diseased family members, religious or cultural beliefs that prohibit urgently needed medical treatment or surgery, and lack of access to medical care (as when families live in remote mountain or rural areas).
Resilience and vulnerability

Biology and environment (nature/nurture) may not interact in the same way for every child. The degree of inborn resilience or vulnerability appears to make a difference. Horowitz (1990) concludes that given a facilitative environment, vulnerable children often have a good developmental outcome. Resilient children in a poor environment also may do quite well because they learn to use the resources available to them. However, the vulnerable child raised in an unfavorable environment is in double jeopardy and is almost sure to be in developmental trouble.

Children with Special Gifts and Talents

Children are described as gifted or talented or both when they do exceptionally well in one or more areas of development. They often are a good fit with the concept of multiple intelligences. Gardner (2006) theorizes eight types of intelligence: linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, interpersonal, intrapersonal, and naturalist. These gifted or talented children’s accomplishments seem to appear spontaneously, as a part of their own unique development. It is unlikely that these early and outstanding abilities emerge because of special training or parental pressure. Parents of especially bright or talented children often are surprised when told of their child’s remarkable abilities (Robinson, 1981).

Gifted and talented students may be at risk if they do not receive adequate services to meet their needs. However, unlike the Individuals with Disabilities Education Improvement Act (IDEA), federal legislation does not require specific services for gifted and talented students. The programs that do exist vary and are determined at the state and local levels.
Characteristics of young gifted children

The characteristics that identify young gifted children appear to be a combination of advanced verbal skills, curiosity, and the ability to concentrate, learn rapidly, and enjoy problem solving. In addition, researchers have identified the following characteristics (Clark, 2007; Coleman & Cross, 2005; Renzulli et al., 2002; Roedell, 1980; Rogers, 2001):

- detailed memory
- large vocabulary and experimentation with new words
- invention of songs, stories, and rhymes; play with the sound and rhythm of words
- asking intelligent questions
- learning information quickly
- use of logic in arriving at commonsense answers
- a broad base of knowledge—a large quantity of information
- understanding of abstract concepts such as time, family relationships, cause and effect, and connections between past and present
- complex classification and discrimination skills; spontaneous grouping of items such as toy cars, boats, airplanes, and trucks; arranging objects according to size and color
- finding and solving difficult and unusual problems
- curiosity, wanting to learn
- absorption in particular topics, such as dinosaurs, astronomy, animals, mechanical objects
- good orientation skills and sense of spatial relationships

Many students with impairments have high potential for both intellectual and creative achievement.
awareness of what is new and different in the environment: rearrangement of equipment, a teacher’s new hairstyle
awareness of the feelings of others; commenting when a teacher is not feeling well or another child appears withdrawn

Gifted minority-language children
It should be noted that most of the clues to giftedness are related—directly or indirectly—to language. Bright children from minority cultures and different ethnic backgrounds often are not recognized because they lack middle-class language skills. Most procedures to identify gifted and talented students were developed for use with middle-class students who are native English speakers (Cohen, 1990). The over-reliance on standardized testing, a narrow definition of giftedness, and the policies and procedures that guide local and state programs also have led to the under-identification of gifted children from culturally/linguistically diverse and/or economically disadvantaged families as well as gifted children with disabilities (Coleman, 2003). Other influences work against the identification of gifted minority preschoolers. Karnes and Johnson (1989) note several discriminatory factors in our social-educational system:

- a prevalent attitude that giftedness does not exist among children from low-income backgrounds
- a definition of giftedness that reflects only the majority culture’s values
- the use of identification procedures that are unfavorable to low-income and minority children
- the provision of few opportunities for enhancing intellectual or artistic achievement in minority children

Clearly, there are gifted children in every ethnic and racial group at all socioeconomic levels. Appropriate preschool education for children without economic advantages is an important means of identifying and nurturing those with special gifts and talents (Stile & Kitano, 1991).

Children with developmental disabilities who are gifted
An often-overlooked fact is that a child with a disability may be gifted. A child with a learning disability may have superior intelligence or outstanding artistic or mechanical talents. The same is true of children with hearing impairments, cerebral palsy, or any other disability. The potential for intellectual or artistic giftedness in these children seldom receives much attention. Education tends to be narrowly focused on helping overcome physical or sensory deficits. Students with both a disability and giftedness may use their talent and or intelligence to compensate for their disability. This may make both their disability and their giftedness seem less extreme (Willard-Holt, 1999).

The importance of this recommendation is underscored by the following story, told by a teacher of four-year-olds in an inclusion preschool: Benjamin, blind since birth, had developed unusual and repetitive behaviors sometimes observed in young children who cannot see. His preschool teachers noted, however, that the strange behaviors stopped whenever there was music in the classroom. Benjamin appeared to listen intently and always asked for more. One teacher began sitting down with Benjamin with musical instruments: a ukulele, an autoharp, a recorder. After a brief period of experimentation, Benjamin would “find” tunes on the instruments.

Next the teacher took him to a classroom that had a piano. Again, with only limited exploration, Benjamin began to improvise simple tunes. The teacher shared these experiences with Benjamin’s parents, who were able to buy a piano. Benjamin spent hours at the piano and became an eager piano student. By age sixteen, he was regarded as a gifted young pianist.

Many young children with impairments have high potential for both intellectual and creative achievement. Karnes and Johnson (1989) argue that it is important for our nation to fund early intervention programs that provide training in identifying and nurturing young gifted children from every socioeconomic level. With appropriate learning opportunities, minority children and children with all kinds of impairments can be helped to realize their potential (Kirk & Gallagher, 2008).

SUMMARY

✔ The definition of “typical” or “atypical” development varies among communities, school districts, and professions. Typical development is a complex process and includes such a wide range of developmental skills. Guidelines are available, however. These include knowledge of developmental sequences, developmental milestones, and the interrelatedness of developmental areas.

✔ Deciding what is atypical development raises complex issues and is equally difficult. Therefore, a thorough knowledge of normal growth and development is necessary to understand and work with all children.

✔ Because young children constantly change, they should be thought of as having a developmental delay or difference—not a handicap. One reflection of this change in approach is the movement toward people-first language: giving the individual precedence over his or her disability.

✔ Children at developmental risk are likely to develop delays if they do not receive special services as early as possible. Risk factors—biological, environmental, or both—may occur prenatally, at birth, or during the early developmental years.

✔ Gifted and talented children are those with exceptionally advanced skills in one or more areas of development. Potentially gifted children from cultural minorities and low-income families often are not identified because of restricted learning opportunities and socially biased identification procedures.

✔ Many children with developmental disabilities also are gifted, but their potential may go unidentified because of cultural or educational biases.
STUDENT ACTIVITIES

1. Provide three justifications of the following statement: To work effectively with children who have developmental problems and special talents, teachers need a thorough knowledge of normal growth and development.

2. Think about a time a friend or classmate referred to someone as “retarded.” Given what you know about person-first language and sensitivity to others, how would you handle the situation if you were the teacher?

3. Observe a group of preschool children. Make two lists: 1) list examples of what you believe may be atypical development or behavior; 2) list any curriculum expectations that you feel are developmentally inappropriate.

4. Have you or any of your brothers, sisters, friends, or relatives been described as gifted or talented? Describe the exceptional characteristics that led to such a label.

REVIEW QUESTIONS

Define and give an example of each of the following terms

1. developmental milestone
2. developmental continuum
3. normal development
4. developmental delay
5. atypical development
6. biological risk
7. people-first language
8. nurturance
9. irreversible developmental problem
10. gifted child

MULTIPLE CHOICE

Circle the best answer

1. Normal development implies:
   a. beginning to walk between eight and twenty-two months of age.
   b. beginning to walk between six and eight months of age.
   c. beginning to walk after twenty-six months of age.

2. If a child’s appetite decreases during the early preschool years, parents and caregivers should:
   a. realize that this is developmentally normal.
   b. coax or bribe the child to eat more.
   c. scold the child for being a picky eater.

3. The least acceptable language is:
   a. She is a child with special needs.
   b. She is a child who has special needs.
   c. She is a special needs child.

4. Infants and children at high risk for developmental problems:
   a. are most frequently found among families living in poverty.
   b. have no potential for normal development.
   c. usually outgrow their problems.

5. Developmental delay means the child:
   a. is behind in all areas of development.
   b. can never catch up to children of the same age.
   c. is performing like a much younger child.

6. A young child with a hearing impairment who can run and jump as well as other children:
   a. does not need special services.
   b. may be gifted in some areas.
   c. should be enrolled in a school exclusively for children who are deaf.

7. The theory of multiple intelligences:
   a. is based solely on exceptional language skills.
   b. does not recognize spatial or kinesthetic skills as being related to intelligence.
   c. recognizes that advanced personal and social skills may be a sign of intelligence.

8. A potentially gifted child’s abilities:
   a. are likely to be genetic in origin and independent of environmental influence.
   b. can never be realized if the child has a developmental disability.
   c. may never be recognized in minority children because of low expectations.
HELPFUL WEBSITES

The Council for Exceptional Children (CEC)
http://www.cec.sped.org
CEC publishes Exceptional Children and Teaching Exceptional Children. Of particular interest to early childhood education is one of CEC’s affiliate groups: the Division for Early Childhood Education. (A number of other divisions also focus to some extent on issues related to young children.)

Disability Is Natural
http://www.disabilityisnatural.com/
This website provides commonsense articles about the importance of thinking differently about individuals with disabilities. The focus is on person-first language and developing an inclusive society.

KidSource
http://www.kidsource.com
KidSource is operated by a group of parents who want to make a positive and lasting difference in the lives of parents and children. They created an online community that shares the same values and goals in raising, educating, and providing for children. The site is designed so that parents and caregivers who want to take greater responsibility for their children’s health and education have the right information and resources to do so. This site contain numerous articles on education topics, including several on educating gifted and talented students. Articles are rated using an easy-to-follow system that aids in selection.

National Association for the Education of Young Children (NAEYC)
http://www.naeyc.org
NAEYC’s website includes a resource catalog, professional development materials, and links to related sites. Of note is the NAEYC position statement on standardized testing of young children age three through eight (adopted in 1987 by NAEYC).

The Society for Research in Child Development (SRCD)
http://www.srcd.org
SCRD is an interdisciplinary organization that publishes the journal Child Development, as well as monographs, abstracts, and bibliographies.

The Early Childhood Education CourseMate website for this text offers many helpful resources. Go to www.CengageBrain.com to preview this chapter’s Concept Maps and Chapter Themes.