Chapter 11
Planning for the Body:
Physical/Motor Development

Children are the picture of movement, spending the greatest portion of their days in physical activity.

Learning Through Movement

- The beginning of life is an astounding time of movement and motor proficiency
- Brain research shows that the greatest portion of a child’s day should be spent in physical activity
- Motor abilities are integrated with other areas such as cognitive development
- Perceptual motor development is crucial in any quality program
- A child’s learning and cognitive development are affected by his or her physical growth and development

Physical Growth/Motor Development

- Physical growth
  - New behavior is possible through physical change
  - Growth determines the child’s experience
  - Growth changes the way people respond to the child
  - A child’s self-concept is profoundly related to his or her physical development

Learning Through Movement: Program Needs

- Enhances children’s ability to:
  - Solve problems
  - Exercise divergent thinking
  - Respond at their own age and developmental levels
  - Learn to cooperate with others
  - Become more aware of others’ viewpoints and ideas
  - Share and take turns
  - Be self-expressive
  - Be creative
  - Gain confidence
  - Develop strong muscles
  - Refine motor skills

Physical Development

- An infant’s body, nervous system, and sensory system grow and develop during the first year of life
- Growth occurs in a cephalocaudal, or head-to-foot, direction: the upper body parts develop before the lower body parts
Physical Development

Infants

- At birth, the head is the most fully developed part of the body, making up one-fourth of the newborn’s total body length
- In a newborn, the legs account for one-fourth of the body length
- In a one-year-old, the head is one-fifth of the total length

Physical Development (cont.)

- Is proximodistal, going from the center outward
- Examples: The head and trunk are more fully developed than the arms and legs, the arms and legs are more fully developed than the hands and feet, and the hands and feet are more fully developed than the fingers and toes

Physical Development (cont.)

- Including children with special needs
  - Provide opportunities for all children to grow and develop physically
  - Adapt teaching strategies to enhance participation
  - Modify activities and the environment, including the playground
  - Stress gross motor and fine motor skills for all

Gender and Cultural Differences

- Boys have more muscle tissue
- Girls mature earlier, and their growth is more regular
- Girls have an edge on fine motor skills, boys on gross motor skills
- Even though the rate of growth may differ, the sequence is the same
- Some research indicates that African American children can walk earlier and are taller
- Asian infants tend to develop earlier but are smaller than Euro-American babies
- Always keep in mind wide differences in growth patterns of all children, regardless of gender and ethnicity

Motor Development

- The process of change in motor behavior is brought about by the interaction between heredity and environment
  - Maturation
  - Prior experiences
  - New motor activities
- It follows a developmental sequence
Motor Development (cont.)

- **Gross motor development**
  - Movement so the large parts of the body can creep, crawl, walk, roll, run, bounce, throw, or hop
  - Includes strength, coordination, and balance
- **Fine motor development**
  - Small muscles of the hand and feet requiring dexterity and manipulative skills to grasp, reach, bang, etc.
- **Perceptual motor development**
  - Involves processing information through the senses and motor movement

Perceptual Motor Development

- **Spatial awareness**
  - Body’s relation in space
- **Temporal awareness**
  - Time structure, such as rhythm or timing, that lets the child coordinate body parts
- **Sensory awareness**
  - Visual awareness to discriminate shape, color, size, etc.
  - Auditory awareness
  - Understand and carry out verbal instructions and discriminate sounds

Physical/Motor Skills in Early Childhood

- **Locomotor**
  - Change of location of the body and includes such skills as walking, running, leaping, jumping, climbing, hopping, skipping, galloping, sliding, and bicycling
- **Nonlocomotor**
  - Any movements that require some degree of balancing, such as turning, twisting, pushing, bending, stretching, pulling, swinging, rolling, and dodging
- **Manipulation**
  - Operation and control of limited precise movements of the small muscles, such as throwing, catching, reaching, bouncing, striking, kicking, cutting, sewing

Physical/Motor Skills (cont.)

- **Learning motor skills by making comparisons between past experiences and new actions**
  - Memory of motor movement and the experience children have to recall and rehearse their skills are important
  - Practicing motor skills is important through play as well as self-help skills
  - Learn simple skills before more complex skills
  - Children need feedback that is both intrinsic and extrinsic
  - A wide range of developmental levels makes it necessary to have a variety of experiences and equipment
Role of the Teacher

- Consideration to take as you plan for physical/motor development
  - Childhood obesity
- Dramatic rise in obesity in young children underscores the need for regular exercise in quality programs

Role of the Teacher (cont.)

- The image of the physical self is an important part of the self-concept; how people feel about themselves is, in part, based on their view of their bodies; provide physical opportunities for success
- Encourage a variety of physical play activities
  - Time for active play indoors and outdoors
  - Use a variety of activities to stimulate development
  - Select age-appropriate equipment and materials
  - Give children opportunities to repeat, practice, and refine their motor skills

Sex-Role Stereotyping

- Sex-role stereotyping must be handled cautiously
  - Ask yourself and honestly answer the sex-role stereotyping questions in Chapter 11
  - Ensure a safe yet challenging environment in which equipment is safe and appropriate and promotes growth
  - Make the playground an environment to promote physical fitness

Curriculum Planning for Physical/Motor Development

- In the classroom setting, include both fine and gross motor activities in learning centers; be creative
  - Indoor areas are good for fine motor tasks such as using crayons, scissors, and hole punches, as well as for perceptual motor tasks such as manipulative activities; large blocks and large paintbrushes can help gross motor skills
  - Outdoor areas can include not only equipment and a space for running and swinging, but sand, water, and painting areas for perceptual motor and manipulative skills as well
  - Transition and group times—such as with fingerplays, songs, getting in and out of coats and jackets, and using scarves—are great for both fine and gross motor activities
Curriculum Planning for Physical/Motor Development (cont.)

• Focus on fine, gross, and perceptual motor skills for all children
• Eye-hand coordination, such as with stringing beads, is helpful; there are many eye-hand coordination activities
• Walking on a balance beam is suitable for both indoors and outdoors and fosters motor development; Figure 11.9 provides a list of additional games, toys, and activities for specific skills and ages
• It is sometimes fun and creative to use themes—such as circus, outer space, etc.—in your activities; it is also easy to include multicultural games

Young children spend most of their days using their bodies to play and learn. Planning for the physical self is challenging and fun.