AN OVERVIEW CHILD DEVELOPMENT



Twentieth-century Spanish-born American philosopher George Santayana once reflected, "Children are on a different plane. They belong to a generation and way of feeling properly their own." Let's explorer what that plane is like.

EXPLORING WHAT DEVELOPMENT IS

 Why study children's development? As a teacher, you will be responsible for a new wave of children each year in your classroom. The more you learn about children's development, the more you can understand at what level it is appropriate to teach them. Just what do psychologists mean when they speak of a person's "development"? **Development** is the pattern of biological, cognitive, and socio emotional changes that begins at conception and continues through the life span. Most development involves growth, although it also eventually involves decay (dying).

PROCESSES AND PERIODS

• The pattern of child development is complex because it is the product of several processes: biological, cognitive, and socio emotional. Development also can be described in terms of periods.

Biological, Cognitive, and Socio emotional Processes

• Biological processes produce changes in the child's body and underlie brain development, height and weight gains, motor skills, and puberty's hormonal changes. Genetic inheritance plays a large part.

COGNITIVE PROCESSES

• Cognitive processes involve changes in the child's thinking, intelligence, and language. Cognitive developmental processes enable a growing child to memorize a poem, figure out how to solve a math problem, come up with a creative strategy, or speak meaningfully connected sentences.

SOCIO-EMOTIONAL PROCESSES

• Socio-emotional processes involve changes in the child's relationships with other people, changes in emotion, and changes in personality. Parents' nurturance toward their child, a boy's aggressive attack on a peer, a girl's development of assertiveness, and an adolescent's feelings of joy after getting good grades all reflect socioemotional processes in development.

CONTINUED

 Biological, cognitive, and socio-emotional processes are inextricably intertwined (Diamond, Casey, &Munakata, 2011). Consider a child smiling in response to a parent's touch. This response depends on biological processes (the physical nature of touch and responsiveness to it), cognitive processes (the ability to understand intentional acts), and socioemotional processes (the act of smiling oft en reflects a positive emotional feeling, and smiling helps to connect us in positive ways with other human beings). Two rapidly emerging fields further explore this connection across biological, cognitive, and socio-emotional processes:

Developmental cognitive neuroscience

• Developmental cognitive neuroscience, which explores links between development, cognitive processes, and the brain (Diamond, Casey, &Munakato, 2011; Nelson, 2011), For example, later in this chapter you will learn about connections between developmental changes in regions of the brain and children's thinking.

Developmental social neuroscience

• Developmental social neuroscience, which examines connections between socio-emotional processes, development, and the brain (Bell, Greene, & Wolfe, 2010; de Haan& Gunnar, 2009). For example, later in this chapter you will read about developmental changes in the brain and adolescents' decision making and risktaking behavior.

PERIODS OF DEVELOPMENT

• **Periods of Development For** the purposes of organization and understanding, we commonly describe development in terms of periods. In the most widely used system of classification, the developmental periods are infancy, early childhood, middle and late childhood, adolescence, early adulthood, middle adulthood, and late adulthood.

Prenatal period (conception to birth)



Infancy (birth to 18–24 months)



Early childhood (2-5 years)



Middle and late childhood (6–11 years)



Adolescence (10–12 to 18–21 years)



Biological Processes

Cognitive Processes Socioemotional Processes

INFANCY

• Infancy extends from birth to 18 to 24 months. It is a time of extreme dependence on adults. Many activities are just beginning, such as language development, symbolic thought, sensor motor coordination, and social learning.

EARLY CHILDHOOD

• Early childhood (sometimes called the preschool years) extends from the end of infancy to about 5 years. During this period, children become more self-sufficient, develop school readiness skills (such as learning to follow instructions and identify letters), and spend many hours with peers. First grade typically marks the end of early childhood.

MIDDLE AND LATE CHILDHOOD

• Middle and late childhood (sometimes called the elementary school years) extends from about 6 to 11 years of age. Children master the fundamental skills of reading, writing, and math, achievement becomes a more central theme, and self-control increases. In this period, children interact more with the wider social world beyond their family.

ADOLESCENCE

• Adolescence involves the transition from childhood to adulthood. It begins around ages 10 to 12 and ends around 18 to 21. Adolescence starts with rapid physical changes, including height and weight gains and development of sexual functions. Adolescents intensely pursue independence and seek their own identity. Their thought becomes more abstract, logical, and idealistic.

CONTINUED

 Adult developmental periods have been described, but we have confined our discussion to the periods most relevant for children's and adolescents' education. The child and adolescent periods of human development are shown in Figure 2.1 along with the processes of development (biological, cognitive, and socio emotional). The interplay of these processes produces the periods of human development.