CHAPTER REVIEW

Key Terms

epigenetic principle The notion that a child’s personality develops through a series of genetically predetermined stages that interact with social interactions in the child’s environment.

role confusion Uncertainty as to what behaviors will elicit a favorable reaction from others.

psychosocial moratorium A period of identity development marked by a delay of commitment, ideally a time of adventure and exploration having a positive, or at least neutral, impact on the individual and society.

identity statuses A style of approach that adolescents adopt to deal with such identity-related issues as career goal, gender-role orientation, and religious beliefs. James Marcia identified four identity statuses: identity diffusion, moratorium, foreclosure, and identity achievement.

organization The tendency to systematize and combine processes into coherent general systems.

adaptation The process, described by Piaget, of creating a good fit or match between one’s conception of reality and one’s real-life experiences.

scheme An organized pattern of behavior or thought that children formulate as they interact with their environment, parents, teachers, and age-mates.

assimilation The process of fitting new experience into an existing scheme.

accommodation The process of creating a new scheme to fit a new experience.

equilibration The tendency to organize schemes to allow better understanding of experiences.

constructing knowledge The view that meaningful learning is the active creation of knowledge structures rather than a mere transferring of objective knowledge from one person to another.

conservation The recognition that certain properties stay the same despite a change in appearance or positions.

perceptual centration The tendency to focus attention on only one characteristic of an object or aspect of a problem or event at a time.

decentration The ability to think of more than one quality of an object or problem at a time.

irreversibility The inability of a young child to mentally reverse physical or mental processes, such as pouring water from a tall, thin glass back into a short, squat one.

egoceentrism Difficulty in taking another person’s point of view, a characteristic typical of young children.

CHAPTER SUMMARY

LO1 Explain how social interactions influence the development of one’s personality, especially with regard to one’s personal sense of industry and identity.

- Erikson’s theory of psychosocial development covers the life span, describes people as playing an active role in their own psychological development as opposed to passively responding to external forces, and emphasizes the role of cultural norms and goals.
- Erikson’s theory describes eight stages, from birth through old age. The stages that deal with the personality development of school-age children are initiative versus guilt (4 to 5 years), industry versus inferiority (6 to 11 years), and identity versus role confusion (12 to 18 years).
- Forcing students to compete with one another for grades is likely to have a negative effect on their sense of industry.
- Individuals with a strong sense of identity are comfortable with their physical selves, have a sense of purpose and direction, and know they will be recognized and accepted.
- When faced with making an occupational choice, some adolescents declare a psychosocial moratorium.
- Erikson’s observations about identity were extended by Marcia, who described four identity statuses: identity diffusion, moratorium, foreclosure, and identity achievement.
- Erikson’s theory has been criticized for its heavy reliance on his personal perspectives and experiences.

LO2 Provide examples of how Jean Piaget’s stage theory of cognitive development can be used to guide learning experiences in and out of the classroom.

- Piaget believed that individuals inherit two basic intellectual tendencies: organization (the tendency to combine mental processes into more general systems) and adaptation (the tendency to adjust to the environment).
- Adaptation occurs through the processes of assimilation (fitting an experience into an existing scheme) and accommodation (changing a scheme or creating a new one to incorporate a new experience).
- A scheme is an organized pattern of behavior or thought that guides what we see, think, and do.
- Equilibration is the process of trying to organize a system of schemes that allows us to adapt to current environmental conditions. Equilibration is produced in response to a state of disequilibrium.
- Piaget concluded on the basis of his studies that schemes evolve through four stages: sensorimotor (birth to 2 years), preoperational (2 to 7 years), concrete operational (7 to 11 years), and formal operational (11 years and older).
- In the preoperational stage, the child masters symbol systems but cannot manipulate symbols logically.
- In the concrete operational stage, the child is capable of logical thinking, but only with ideas with which he has had firsthand experience.
- During the formal operational stage, the individual is capable of hypothetical reasoning, dealing with abstractions, and engaging in mental manipulations. Although some adolescents are capable of formal operational reasoning, adolescent egocentrism restricts its range and power.
- Piaget believed that social interactions among peers on the same level of development would do more to stimulate cognitive development than would social interactions between children and adults because interactions among intellectual equals are more likely to lead to fruitful discussions, analyses, and debates.
- Systematic instruction may have modest positive effects on the rate of cognitive development as long as the schemes that will govern the next stage have already begun to develop.
- Piaget’s theory has been criticized for underestimating children’s abilities, for overestimating the capability of adolescents to engage in formal operational thinking, for vague explanations of how individuals move from stage to stage, and for not addressing cultural differences.
adolescent egocentrism The introspective, inward turning of a high school student’s newly developed powers of thought, with a tendency to project one’s self-analysis onto others.

spontaneous concepts A term coined by Russian psychologist Lev Vygotsky to denote the facts, concepts, and rules that young children acquire as a natural consequence of engaging in everyday activities.

scientific concepts Vygotsky term for psychological tools as language, formulas, rules, and symbols that allow one to manipulate one’s environment consciously and systematically.

empirical learning The use of noticeable characteristics of objects and events to form spontaneous concepts; a form of learning typical of young children.

theoretical learning Learning how to use psychological tools across a range of settings and problem types to acquire new knowledge and skills.

zone of proximal development (ZPD) Vygotsky’s term for the difference between what a child can do on his or her own and what the child can accomplish with some assistance.

scaffolding Supporting learning during its early phases through such techniques as demonstrating how tasks should be accomplished, giving hints to the correct solution to a problem or answer to a question, and providing leading questions. As students become more capable of working independently, these supports are withdrawn.

microworlds Computer scenarios intended to foster cognitive development and overcome misconceptions by allowing students the chance to explore relationships among variables for concepts and build personal models of how things work.

microcomputer-based laboratories Microcomputers with attached sensors and probes that can quickly represent such data as temperature or speed in multiple ways in order to help students explore concepts, test hypotheses, and repair scientific misconceptions.

multiuser virtual environments Online virtual worlds in which several people work together to solve various types of problems; one example is Quest Atlantis.

telementoring The use of networking technologies by experts, mentors, instructors, and peers to demonstrate ideas, pose questions, offer insights, and provide relevant information that can help learners build new knowledge and effectively participate in a learning community.

morality of constraint Piaget’s term for the moral thinking of children up to age 10 or so, in which they hold sacred rules that permit no exceptions and make no allowance for intentions. Also called moral realism.

morality of cooperation Piaget’s term for the moral thinking of children age 11 or older, based on flexible rules and considerations of intent. Also called moral relativism.

CHAPTER SUMMARY — CONTINUED

L03 Explain how Lev Vygotsky’s sociocultural theory of cognitive development connects social interaction in classrooms to the cognitive capacities of learners.

- Vygotsky believed that cognitive development is shaped both by the interactions children have with others, particularly adults, and by historical cultural forces. Parents and teachers help children acquire those psychological tools (such as language skills, concepts, and procedures) that their culture has come to value.
- For Vygotsky, social interactions between children and more intellectually advanced individuals, such as peers, older siblings, and adults, are primarily responsible for advances in cognitive development, provided that those interactions are based on mediation of external behaviors into internal signs.
- Vygotsky believed that cognitive development is aided by explicitly teaching students how to use cognitive tools to acquire basic concepts and by teaching within a student’s zone of proximal development.

L04 Provide examples of how technology can encourage cognitive development by challenging current conceptions and encouraging collaborative interactions.

- Technology consistent with Piaget’s view of cognitive development helps students explore and construct knowledge, formulate concrete representations of abstract ideas, and understand the ideas of others.
- Technology consistent with Vygotsky’s view of cognitive development provides virtual environments that play the role of an expert tutor who provides a high degree of support and structure that is gradually withdrawn (scaffolding), provide online mentoring, and allow students to engage in highly sophisticated virtual environments that allow interaction with other students.

L05 Explain how cognitive development influences moral thinking and moral behavior.

- Piaget identified two types of moral reasoning in children: morality of constraint (rules are inflexible and external) and morality of cooperation (rules are flexible and internal).
- Structured discussions based on moral dilemmas may have some positive effects on the rate of development of moral reasoning.
- Kohlberg’s theory has been criticized because it is not applicable to other cultures, because its promise that moral development can be accelerated through direct instruction has received only limited support, because Kohlberg’s moral dilemmas are not relevant to everyday social settings, because the theory relies too much on macromoral issues, and because it ignores the effect of characteristics other than moral reasoning on moral behavior.
- Gilligan maintains that Erikson’s theory of identity development and Kohlberg’s theory of moral development more accurately describe male development than female development.
- Noddings care theory emphasizes the critical nature of caring relationships, in which each person feels that she or he is cared for by the other.
- Character education programs are often based on assumptions that are not supported by research on learning.

REFLECTION QUESTIONS

1. What strategies can I incorporate into my teaching that will create an environment that supports the cognitive development of my students?

2. What can I do to accurately assess my students’ current cognitive level as well as their cognitive potential?